

## The New IMA List of Minerals – A Work in Progress – Updated: November 2018

In the following pages of this document a comprehensive list of all valid mineral species is presented. The list is distributed (for terms and conditions see below) *via* the web site of the Commission on New Minerals, Nomenclature and Classification of the International Mineralogical Association, which is the organization in charge for approval of new minerals, and more in general for all issues related to the status of mineral species. The list, which will be updated on a regular basis, is intended as the primary and official source on minerals.

### Explanation of column headings:

*Name:* it is the presently accepted mineral name (and in the table, minerals are sorted by name).

*CNMMN/CNMNC approved formula:* it is the chemical formula of the mineral.

*IMA status:* A = approved (it applies to minerals approved after the establishment of the IMA in 1958); G = grandfathered (it applies to minerals discovered before the birth of IMA, and generally considered as valid species); Rd = redefined (it applies to existing minerals which were redefined during the IMA era); Rn = renamed (it applies to existing minerals which were renamed during the IMA era); Q = questionable (it applies to poorly characterized minerals, whose validity could be doubtful).

*IMA No. / Year:* for approved minerals the IMA No. is given: it has the form XXXX-YYY, where XXXX is the year and YYY a sequential number; for grandfathered minerals the year of the original description is given. In some cases, typically for Rd and Rn minerals, the year may be followed by s.p. (special procedure): it refers to the year in which a specific action (redefinition and/or renaming) took place, and was approved by IMA. This may be related to the approval of a report by a dedicated subcommittee on a given group of minerals.

*Country:* it is the country in which the mineral was discovered for the first time (according to the national boundaries as of today).

*First reference:* it is the original reference for each mineral.

*Second reference:* it is the most recent or most complete reference for each mineral, possibly including a crystal structure study.

**Caveat (IMPORTANT):** the list includes selected information on the **5413** currently valid species; inevitably there will be mistakes in it. We will be grateful to all those who will point out errors of any kind, including typos. Please email your corrections to [marco.pasero@unipi.it](mailto:marco.pasero@unipi.it).

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| Name            | CNMMN/CNMNC approved formula   | IMA Status | IMA No. / Year | Country             | First reference  | Second reference  |
|-----------------|--|------------|----------------|---------------------|--|---|
| Abellaite       | NaPb <sub>2</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH)   | A          | 2014-111       | Spain               | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 915  |   |
| Abelsonite      | NiC <sub>31</sub> H <sub>32</sub> N <sub>4</sub>   | A          | 1975-013       | USA                 | <i>American Mineralogist</i> <b>63</b> (1978), 930   | <i>American Mineralogist</i> <b>102</b> (2017), 1129                                    |
| Abenakiite-(Ce) | Na <sub>26</sub> Ce <sub>6</sub> (Si <sub>6</sub> O <sub>18</sub> )(PO <sub>4</sub> ) <sub>6</sub> (CO <sub>3</sub> ) <sub>6</sub> (SO <sub>2</sub> )O | A          | 1991-054       | Canada              | <i>Canadian Mineralogist</i> <b>32</b> (1994), 843   |   |
| Abernathyite    | K(UO <sub>2</sub> )(AsO <sub>4</sub> )·3H <sub>2</sub> O   | G          | 1956           | USA                 | <i>American Mineralogist</i> <b>41</b> (1956), 82  | <i>American Mineralogist</i> <b>49</b> (1964), 1578                                     |
| Abhurite        | Sn <sup>2+</sup> <sub>21</sub> O <sub>6</sub> (OH) <sub>14</sub> Cl <sub>16</sub>  | A          | 1983-061       | Saudi Arabia        | <i>Canadian Mineralogist</i> <b>23</b> (1985), 233   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 659                                      |
| Abramovite      | Pb <sub>2</sub> SnInBiS <sub>7</sub>   | A          | 2006-016       | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(5)</b> (2007), 45   |   |
| Abswurbachite   | Cu <sup>2+</sup> Mn <sup>3+</sup> <sub>6</sub> O <sub>8</sub> (SiO <sub>4</sub> )  | A          | 1990-007       | Greece              | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>163</b> (1991), 117  |   |
| Abuite          | CaAl <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>2</sub>   | A          | 2014-084       | Japan               | <i>Journal of Mineralogical and Petrological Sciences</i> <b>112</b> (2017), 109   |   |
| Acanthite       | Ag <sub>2</sub> S  | G          | 1855           | Czech Republic      | <i>Annalen der Physik und Chemie</i> <b>95</b> (1855), 462   | <i>Zeitschrift für Kristallographie</i> <b>110</b> (1958), 136                          |
| Acetamide       | CH <sub>3</sub> CONH <sub>2</sub>  | A          | 1974-039       | Ukraine             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 326  | <i>Journal of Physical Chemistry</i> <b>96</b> (1992), 668                              |
| Achalaite       | Fe <sup>2+</sup> TiNb <sub>2</sub> O <sub>8</sub>  | A          | 2013-103       | Argentina           | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1043  |   |
| Achávalite      | FeSe   | Rn         | 1939           | Argentina           | <i>Boletín de la Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba</i> <b>2</b> (1939), 73            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1972), 276                           |
| Achyrophanite   | (K,Na) <sub>3</sub> (Fe <sup>3+</sup> ,Ti,Al,Mg) <sub>5</sub> O <sub>2</sub> (AsO <sub>4</sub> ) <sub>5</sub>  | A          | 2018-011       | Russia              | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Acmonidesite    | (NH <sub>4</sub> ,K,Pb) <sub>8</sub> NaFe <sup>2+</sup> <sub>4</sub> (SO <sub>4</sub> ) <sub>5</sub> Cl <sub>8</sub>                                   | A          | 2013-068       | Italy               | CNMNC Newsletter 18 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 3249   | <a href="https://doi.org/10.1180/mgm.2018.115">https://doi.org/10.1180/mgm.2018.115</a> |
| Actinolite      | □Ca <sub>2</sub> (Mg <sub>4.5-2.5</sub> Fe <sup>2+</sup> <sub>0.5-2.5</sub> )Si <sub>8</sub> O <sub>22</sub> (OH) <sub>2</sub>                         | Rd         | 2012 s.p.      | unknown             | <i>Elements of Mineralogy</i> , 2nd ed., vol. 1. Elmsly, London (1794), 167  | <i>American Mineralogist</i> <b>83</b> (1998), 458                                      |
| Acuminite       | SrAlF <sub>4</sub> (OH)·H <sub>2</sub> O   | A          | 1986-038       | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 502  | <i>Zeitschrift für Kristallographie</i> <b>194</b> (1991), 221                          |
| Adachiite       | CaFe <sup>2+</sup> <sub>3</sub> Al <sub>6</sub> (Si <sub>5</sub> AlO <sub>18</sub> )(BO <sub>3</sub> ) <sub>3</sub> (OH) <sub>3</sub> (OH)             | A          | 2012-101       | Japan               | <i>Journal of Mineralogical and Petrological Sciences</i> <b>109</b> (2014), 74  |   |
| Adamite         | Zn <sub>2</sub> (AsO <sub>4</sub> )(OH)  | G          | 1866           | Chile               | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>62</b> (1866), 692                                       | <i>American Mineralogist</i> <b>61</b> (1976), 979                                      |
| Adamsite-(Y)    | NaY(CO <sub>3</sub> ) <sub>2</sub> ·6H <sub>2</sub> O  | A          | 1999-020       | Canada              | <i>Canadian Mineralogist</i> <b>38</b> (2000), 1457  |   |
| Addischoffite   | Ca <sub>2</sub> Al <sub>6</sub> Al <sub>6</sub> O <sub>20</sub>  | A          | 2015-006       | Algeria (meteorite) | <i>American Mineralogist</i> <b>102</b> (2017), 1556   |   |
| Adelite         | CaMg(AsO <sub>4</sub> )(OH)  | G          | 1891           | Sweden              | <i>Geologiska Föreningen i Stockholm Förhandlingar</i> <b>13</b> (1891), 781   | Experimental Mineralogy, Petrology and Geochemistry Meeting (2002), 30 (abstr.)         |
| Admontite       | MgB <sub>6</sub> O <sub>10</sub> ·7H <sub>2</sub> O  | A          | 1978-012       | Austria             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 69   | <i>Crystal Structure Communications</i> <b>5</b> (1976), 433                            |
| Adolfpaterait   | K(UO <sub>2</sub> )(SO <sub>4</sub> )(OH)(H <sub>2</sub> O)  | A          | 2011-042       | Czech Republic      | <i>American Mineralogist</i> <b>97</b> (2012), 447   |   |

|                  |  |    |           |                     |   |   |
|------------------|--|----|-----------|---------------------|---|---|
| Adranosite       | $(\text{NH}_4)_4\text{NaAl}_2(\text{SO}_4)_4\text{Cl}(\text{OH})_2$  | A  | 2008-057  | Italy               | <i>Canadian Mineralogist</i> <b>48</b> (2010), 315  |   |
| Adranosite-(Fe)  | $(\text{NH}_4)_4\text{NaFe}_2(\text{SO}_4)_4\text{Cl}(\text{OH})_2$  | A  | 2011-006  | Italy               | <i>Canadian Mineralogist</i> <b>51</b> (2013), 57   |   |
| Adrianite        | $\text{Ca}_{12}(\text{Al}_4\text{Mg}_3\text{Si}_7)\text{O}_{32}\text{Cl}_6$  | A  | 2014-028  | Mexico (meteorite)  | <i>American Mineralogist</i> <b>103</b> (2018), 1329  |   |
| Aegirine         | $\text{NaFe}^{3+}\text{Si}_2\text{O}_6$  | A  | 1998 s.p. | Norway              | <i>Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefaktenkunde</i> (1835), 184         | <i>American Mineralogist</i> <b>93</b> (2008), 1829                                     |
| Aegirine-augite  | $(\text{Ca},\text{Na})(\text{Fe}^{3+},\text{Mg},\text{Fe}^{2+})\text{Si}_2\text{O}_6$  | Rd | 1988 s.p. | Russia              | <i>Mikroskopische Physiographie der Petrographisch Wichtigen Mineralien</i> (1892) 510              |   |
| Aenigmatite      | $\text{Na}_4[\text{Fe}^{2+}_{10}\text{Ti}_2]\text{O}_4[\text{Si}_{12}\text{O}_{36}]$   | A  | 1967 s.p. | Denmark (Greenland) | <i>Berg- und Hüttenmännische Zeitung</i> <b>24</b> (1865), 397                                      | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 983                             |
| Aerinite         | $(\text{Ca},\text{Na})_6(\text{Fe}^{3+},\text{Fe}^{2+},\text{Mg},\text{Al})_4(\text{Al},\text{Mg})_6\text{Si}_{12}\text{O}_{36}(\text{OH})_{12}(\text{CO}_3) \cdot 12\text{H}_2\text{O}$ | Rd | 1988 s.p. | Spain               | <i>Neues Jahrbuch für Mineralogie</i> (1876), 352   | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 233                             |
| Aerugite         | $\text{Ni}_{8.5}(\text{AsO}_4)_2\text{As}^{5+}\text{O}_8$  | Rd | 1965 s.p. | Germany             | <i>Journal für Praktische Chemie</i> <b>75</b> (1858), 239  | <i>Acta Crystallographica</i> <b>B45</b> (1989), 201                                    |
| Aeschynite-(Ce)  | $(\text{Ce},\text{Ca},\text{Fe},\text{Th})(\text{Ti},\text{Nb})_2(\text{O},\text{OH})_6$   | Rn | 1987 s.p. | Russia              | <i>Jahres-Bericht über die Fortschritte der Physischen Wissenschaften</i> <b>9</b> (1830), 182      | <i>Doklady Akademii Nauk SSSR</i> <b>142</b> (1962), 181                                |
| Aeschynite-(Nd)  | $(\text{Nd},\text{Ln},\text{Ca})(\text{Ti},\text{Nb})_2(\text{O},\text{OH})_6$   | A  | 1987 s.p. | China               | <i>Scientia Geologica Sinica</i> (1982), 424  |   |
| Aeschynite-(Y)   | $(\text{Y},\text{Ln},\text{Ca},\text{Th})(\text{Ti},\text{Nb})_2(\text{O},\text{OH})_6$  | Rn | 1987 s.p. | Norway              | <i>Skrifter udgivne af Videnskabs-Selskabet i Christiania</i> <b>6</b> (1906), 1                    | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 1043                            |
| Afghanite        | $(\text{Na},\text{K})_{22}\text{Ca}_{10}(\text{Si}_{24}\text{Al}_{24})\text{O}_{96}(\text{SO}_4)_6\text{Cl}_6$   | A  | 1967-041  | Afghanistan         | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>91</b> (1968), 34  | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 21                               |
| Afmite           | $\text{Al}_3(\text{OH})_4(\text{H}_2\text{O})_3(\text{PO}_4)(\text{PO}_3\text{OH}) \cdot \text{H}_2\text{O}$   | A  | 2005-025a | France              | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 269   |   |
| Afwillite        | $\text{Ca}_3[\text{SiO}_4][\text{SiO}_2(\text{OH})_2] \cdot 2\text{H}_2\text{O}$   | G  | 1925      | South Africa        | <i>Mineralogical Magazine</i> <b>20</b> (1925), 277   | <i>Crystallography Reports</i> <b>54</b> (2009), 418                                    |
| Agaité           | $\text{Pb}_3\text{Cu}^{2+}\text{Te}^{6+}\text{O}_5(\text{OH})_2(\text{CO}_3)$  | A  | 2011-115  | USA                 | <i>American Mineralogist</i> <b>98</b> (2013), 512  |   |
| Agakhanovite-(Y) | $\text{YCa}\square_2\text{KBe}_3\text{Si}_{12}\text{O}_{30}$   | A  | 2013-090  | Norway              | <i>American Mineralogist</i> <b>99</b> (2014), 2084   |   |
| Agardite-(Ce)    | $\text{CeCu}^{2+}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 2003-030  | Germany             | <i>Aufschluss</i> <b>55</b> (2004), 17  | <i>Physics and Chemistry of Minerals</i> <b>45</b> (2018), 39                           |
| Agardite-(La)    | $\text{LaCu}^{2+}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 1980-092  | Greece              | <i>Lapis</i> <b>9</b> (1984), 22  |   |
| Agardite-(Nd)    | $\text{NdCu}^{2+}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 2010-056  | Greece              | <i>Journal of Geosciences</i> <b>57</b> (2011), 249   |   |
| Agardite-(Y)     | $\text{YCu}^{2+}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$   | A  | 1968-021  | Morocco             | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>92</b> (1969), 420 | <i>Acta Crystallographica</i> <b>E69</b> (2013), i61                                    |
| Agmantinite      | $\text{Ag}_2\text{MnSnS}_4$  | A  | 2014-083  | Peru                | <i>CNMNC Newsletter 23 - Mineralogical Magazine</i> <b>79</b> (2015), 51                            | <a href="https://doi.org/10.1180/mgm.2018.139">https://doi.org/10.1180/mgm.2018.139</a> |
| Agrellite        | $\text{NaCa}_2\text{Si}_4\text{O}_{10}\text{F}$  | A  | 1973-032  | Canada              | <i>Canadian Mineralogist</i> <b>14</b> (1976), 120  | <i>Crystallography Reports</i> <b>43</b> (1998), 589                                    |
| Agricolaite      | $\text{K}_4(\text{UO}_2)(\text{CO}_3)_3$   | A  | 2009-081  | Czech Republic      | <i>Mineralogy and Petrology</i> <b>103</b> (2011), 169  |   |
| Agrinierite      | $\text{K}_2\text{Ca}[(\text{UO}_2)_3\text{O}_3(\text{OH})_2]_2 \cdot 5\text{H}_2\text{O}$  | A  | 1971-046  | France              | <i>Mineralogical Magazine</i> <b>38</b> (1972), 781   | <i>American Mineralogist</i> <b>85</b> (2000), 1294                                     |
| Aguilarite       | $\text{Ag}_4\text{SeS}$  | G  | 1891      | Mexico              | <i>American Journal of Science, Ser. III</i> <b>41</b> (1891), 401                                  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 21                                      |
| Aheylite         | $\text{Fe}^{2+}\text{Al}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$  | A  | 1984-036  | Bolivia             | <i>Mineralogical Magazine</i> <b>62</b> (1998), 93  |   |

|                    |   |    |           |                       |  |   |
|--------------------|---|----|-----------|-----------------------|--|---|
| Ahlfeldite         | $\text{Ni}(\text{SeO}_3) \cdot 2\text{H}_2\text{O}$   | G  | 1935      | Bolivia               | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> <b>6</b> (1935), 277 | <i>Materials Research Bulletin</i> <b>40</b> (2005), 781                                  |
| Ahrensite          | $\text{SiFe}_2\text{O}_4$   | A  | 2013-028  | Morocco (meteorite)   | <i>Geochimica et Cosmochimica Acta</i> <b>184</b> (2016), 240                        |   |
| Aikinite           | $\text{CuPbBiS}_3$  | G  | 1843      | Russia                | Practical Mineralogy. Bailliere, London (1843), 127                                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 115                             |
| Aiolosite          | $\text{Na}_2(\text{Na}_2\text{Bi})(\text{SO}_4)_3\text{Cl}$   | A  | 2008-015  | Italy                 | <i>American Mineralogist</i> <b>95</b> (2010), 382                                   |   |
| Ajoite             | $\text{K}_3\text{Cu}^{2+}_{20}\text{Al}_3\text{Si}_{29}\text{O}_{76}(\text{OH})_{16} \cdot 8\text{H}_2\text{O}$ | A  | 1958      | USA                   | <i>American Mineralogist</i> <b>43</b> (1958), 1107                                  | <i>Proceedings of the National Academy of Sciences of the USA</i> <b>99</b> (2002), 11002 |
| Akaganeite         | $(\text{Fe}^{3+}, \text{Ni}^{2+})_8(\text{OH}, \text{O})_{16}\text{Cl}_{1.25} \cdot n\text{H}_2\text{O}$        | Rn | 1962-004  | Japan                 | <i>Mineralogical Magazine</i> <b>33</b> (1962), 270                                  | <i>American Mineralogist</i> <b>88</b> (2003), 782  |
| Akaogiite          | $\text{TiO}_2$  | A  | 2007-058  | Germany               | <i>American Mineralogist</i> <b>95</b> (2010), 892                                   |   |
| Akatoreite         | $\text{Mn}^{2+}_9\text{Al}_2\text{Si}_8\text{O}_{24}(\text{OH})_8$  | A  | 1969-015  | New Zealand           | <i>American Mineralogist</i> <b>56</b> (1971), 416                                   | <i>Canadian Mineralogist</i> <b>31</b> (1993), 321  |
| Akdalaite          | $(\text{Al}_2\text{O}_3)_5 \cdot \text{H}_2\text{O}$  | A  | 1969-002  | Kazakhstan            | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>99</b> (1970), 333     | <i>Journal of the European Ceramic Society</i> <b>26</b> (2006), 2707                     |
| Åkermanite         | $\text{Ca}_2\text{MgSi}_2\text{O}_7$  | G  | 1884      | Sweden                | <i>Archiv for Matematik og Naturvidenskab</i> <b>13</b> (1890), 310                  | <i>American Mineralogist</i> <b>92</b> (2007), 1685                                       |
| Akhtenskite        | $\text{MnO}_2$  | A  | 1982-072  | Russia                | <i>Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya</i> <b>9</b> (1989), 75      |   |
| Akimotoite         | $\text{MgSiO}_3$  | A  | 1997-044  | Australia (meteorite) | <i>American Mineralogist</i> <b>84</b> (1999), 267                                   | <i>American Mineralogist</i> <b>92</b> (2007), 1545                                       |
| Aklimaite          | $\text{Ca}_4[\text{Si}_2\text{O}_5(\text{OH})_2](\text{OH})_4 \cdot 5\text{H}_2\text{O}$                        | A  | 2011-050  | Russia                | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(2)</b> (2012), 21   | <i>Zeitschrift für Kristallographie</i> <b>227</b> (2012), 452                            |
| Akrochordite       | $\text{Mn}^{2+}_5(\text{AsO}_4)_2(\text{OH})_4 \cdot 4\text{H}_2\text{O}$                                       | G  | 1922      | Sweden                | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>44</b> (1922), 773        | <i>American Mineralogist</i> <b>74</b> (1989), 256  |
| Aksaite            | $\text{MgB}_6\text{O}_7(\text{OH})_6 \cdot 2\text{H}_2\text{O}$   | A  | 1967 s.p. | Kazakhstan            | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 447     | <i>American Mineralogist</i> <b>56</b> (1971), 1553                                       |
| Aktashite          | $\text{Cu}_6\text{Hg}_3\text{As}_4\text{S}_{12}$  | Rd | 2008 s.p. | Russia                | Problems of the metallogeny of mercury. Nauka, Moscow (1968), 111                    |   |
| Alabandite         | $\text{MnS}$  | G  | 1832      | Romania / Turkey      | Traité de Minéralogie, Vol. 4, 2nd ed. Bachelier, Paris (1822), 268                  | <i>Mineralogical Magazine</i> <b>67</b> (2003), 95  |
| Alacránite         | $\text{As}_8\text{S}_9$   | Rn | 1985-033  | Russia                | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 360    | <i>American Mineralogist</i> <b>88</b> (2003), 1796                                       |
| Alamosite          | $\text{PbSiO}_3$  | G  | 1909      | Mexico                | <i>American Journal of Science</i> <b>27</b> (1909), 399                             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(5)</b> (2004), 70     |
| Alarsite           | $\text{Al}(\text{AsO}_4)$   | A  | 1993-003  | Russia                | <i>Doklady Akademii Nauk SSSR</i> <b>338</b> (1994), 501                             | <i>Zeitschrift für Kristallographie</i> <b>194</b> (1991), 291                            |
| Albertiniite       | $\text{Fe}^{2+}(\text{SO}_3) \cdot 3\text{H}_2\text{O}$   | A  | 2015-004  | Italy                 | <i>Mineralogical Magazine</i> <b>80</b> (2016), 985                                  |   |
| Albite             | $\text{Na}(\text{AlSi}_3\text{O}_8)$  | G  | 1815      | Sweden                | <i>Ahandlingar i Fysik, Kemi och Mineralogi</i> <b>4</b> (1815), 148                 | <i>American Mineralogist</i> <b>90</b> (2005), 1115                                       |
| Albrechtschraufite | $\text{MgCa}_4\text{F}_2[\text{UO}_2(\text{CO}_3)_3]_2 \cdot 17\text{-}18\text{H}_2\text{O}$                    | A  | 1983-078  | Czech Republic        | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 179                               |   |
| Alburnite          | $\text{Ag}_8\text{GeTe}_2\text{S}_4$  | A  | 2012-073  | Romania               | <i>American Mineralogist</i> <b>99</b> (2014), 57                                    |   |
| Alcaparrosaite     | $\text{K}_3\text{Ti}^{4+}\text{Fe}^{3+}(\text{SO}_4)_4\text{O}(\text{H}_2\text{O})_2$                           | A  | 2011-024  | Chile                 | <i>Mineralogical Magazine</i> <b>76</b> (2012), 851                                  |   |

|                   |   |    |           |                     |  |   |
|-------------------|---|----|-----------|---------------------|--|---|
| Aldermanite       | $Mg_5Al_{12}(PO_4)_8(OH)_{22} \cdot 32H_2O$       | A  | 1980-044  | Australia           | <i>Mineralogical Magazine</i> <b>44</b> (1981), 59   |   |
| Aldridgeite       | $(Cd,Ca)(Cu,Zn)_4(SO_4)_2(OH)_6 \cdot 3H_2O$      | A  | 2010-029  | Australia           | <i>Australian Journal of Mineralogy</i> <b>17</b> (2015), 67   |   |
| Aleksandrovite    | $KCa_7Sn_2Li_3Si_{12}O_{36}F_2$                   | A  | 2009-004  | Tajikistan          | <i>New Data on Minerals</i> <b>45</b> (2010), 5  |   |
| Aleksite          | $PbBi_2Te_2S_2$                                   | A  | 1977-038  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>107</b> (1978), 315  | <i>Canadian Mineralogist</i> <b>45</b> (2007), 417  |
| Aleutite          | $[Cu_5O_2](AsO_4)(VO_4) \cdot (Cu,K,Pb,Rb,Cs)_Cl$ | A  | 2018-014  | Russia              | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Alexkhomyakovite  | $K_6(Ca_2Na)(CO_3)_5Cl \cdot 6H_2O$               | A  | 2015-013  | Russia              | CNMNC Newsletter 25 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 529  | <a href="https://doi.org/10.1127/ejm/2018/0030-2798">https://doi.org/10.1127/ejm/2018/0030-2798</a> |
| Alflarsenite      | $NaCa_2Be_3Si_4O_{13}(OH) \cdot 2H_2O$            | A  | 2008-023  | Norway              | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 893  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 255  |
| Alforsite         | $Ba_5(PO_4)_3Cl$                                  | A  | 1980-039  | USA                 | <i>American Mineralogist</i> <b>66</b> (1981), 1050  | <i>Acta Crystallographica</i> <b>B35</b> (1979), 2382   |
| Alfredopetrovite  | $Al_2(Se^{4+}O_3)_3 \cdot 6H_2O$                  | A  | 2015-026  | Bolivia             | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 479  |   |
| Alfredstelnzerite | $Ca_4(H_2O)_4[B_4O_4(OH)_{64}(H_2O)_{15}]$        | A  | 2007-050  | Argentina           | <i>Canadian Mineralogist</i> <b>48</b> (2010), 123   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 129  |
| Algodonite        | $Cu_{1-x}As_x$ ( $x \approx 0.15$ )               | G  | 1857      | Chile               | <i>Quarterly Journal of the Chemical Society</i> <b>10</b> (1857), 289   | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Aliettite         | $Ca_{0.2}Mg_6(Si,Al)_8O_{20}(OH)_4 \cdot 4H_2O$   | Rd | 1968 ?    | Italy               | <i>Proceedings of the International Clay Conference, Tokyo</i> <b>1</b> (1969), 233  | <i>Clay Minerals</i> <b>22</b> (1987), 187  |
| Allabogdanite     | $(Fe,Ni)_2P$                                      | A  | 2000-038  | Russia (meteorite)  | <i>American Mineralogist</i> <b>87</b> (2002), 1245  |   |
| Allactite         | $Mn^{2+}_7(AsO_4)_2(OH)_8$                        | A  | 1980 s.p. | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>7</b> (1884), 109   | <i>Mineralogical Magazine</i> <b>80</b> (2016), 719   |
| Allanite-(Ce)     | $CaCe(Al_2Fe^{2+})[Si_2O_7][SiO_4]O(OH)$          | Rn | 1987 s.p. | Denmark (Greenland) | <i>Transactions of the Royal Society of Edinburgh</i> <b>6</b> (1812), 371   |   |
| Allanite-(La)     | $CaLa(Al_2Fe^{2+})[Si_2O_7][SiO_4]O(OH)$          | A  | 2003-065  | Italy               | <i>Canadian Mineralogist</i> <b>44</b> (2006), 63  |   |
| Allanite-(Nd)     | $CaNd(Al_2Fe^{2+})[Si_2O_7][SiO_4]O(OH)$          | A  | 2010-060  | Sweden              | <i>American Mineralogist</i> <b>97</b> (2012), 983   |   |
| Allanite-(Y)      | $CaY(Al_2Fe^{2+})[Si_2O_7][SiO_4]O(OH)$           | Rn | 1966 s.p. | South Africa        | <i>Dept. Mines Mem. Geol. Surv.</i> <b>43</b> (1949), 45   | <i>Norsk Geolohisk Tidsskrift</i> <b>42</b> (1962), 277   |
| Allanpringite     | $Fe^{3+}_3(PO_4)_2(OH)_3 \cdot 5H_2O$             | A  | 2004-050  | Germany             | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 793  |   |
| Allargentum       | $Ag_{1-x}Sb_x$ ( $x \approx 0.09-0.16$ )          | Rd | 1970 s.p. | Canada              | <i>Fortschritte der Mineralogie</i> <b>28</b> (1949), 69   | <i>Canadian Mineralogist</i> <b>10</b> (1970), 163  |
| Alleghanyite      | $Mn^{2+}_5(SiO_4)_2(OH)_2$                        | G  | 1932      | USA                 | <i>American Mineralogist</i> <b>17</b> (1932), 1   | <i>American Mineralogist</i> <b>70</b> (1985), 182  |
| Allendeite        | $Sc_4Zr_3O_{12}$                                  | A  | 2007-027  | Mexico (meteorite)  | <i>American Mineralogist</i> <b>99</b> (2014), 654   |   |
| Allochalcoselite  | $Cu^{1+}Cu^{2+}_5PbO_2(SeO_3)_2Cl_5$              | A  | 2004-025  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(3)</b> (2005), 70   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 507  |
| Alloclasite       | $CoAsS$   | G  | 1866      | Romania             | <i>Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Wien</i> <b>53</b> (1866), 220                                       | <i>Canadian Mineralogist</i> <b>14</b> (1976), 561  |
| Allophane         | $Al_2O_3(SiO_2)_{1.3-2.0} \cdot 2.5-3.0H_2O$      | G  | 1816      | Germany             | <i>Göttingische Gelehrte Anzeigen</i> <b>2</b> (1816), 1249  | <i>American Mineralogist</i> <b>61</b> (1976), 379  |



|                    |   |    |           |                                  |  |  |
|--------------------|---|----|-----------|----------------------------------|--|--|
| Alloriite          | $(\text{Na,K,Ca})_{24}(\text{Na,Ca})_4\text{Ca}_4(\text{Si,Al})_{48}\text{O}_{96}(\text{SO}_4)_4(\text{SO}_3,\text{CO}_3)_2(\text{OH,Cl})_2(\text{H}_2\text{O,OH})_4$ | A  | 2006-020  | Italy                            | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(1)</b> (2007), 82   | <i>Doklady Akademii Nauk</i> <b>415(2)</b> (2007), 242     |
| Alluaivite         | $\text{Na}_{19}(\text{Ca,Mn}^{2+})_6(\text{Ti,Nb})_3\text{Si}_{26}\text{O}_{74}\text{Cl}\cdot 2\text{H}_2\text{O}$  | A  | 1988-052  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(1)</b> (1990), 117   | <i>Doklady Akademii Nauk SSSR</i> <b>312</b> (1990), 1379  |
| Alluaudite         | $(\text{Na,Ca})(\text{Mn,Mg,Fe}^{2+})(\text{Fe}^{3+},\text{Mn}^{2+})_2(\text{PO}_4)_3$  | Rd | 1979 s.p. | France                           | <i>Annales des Mines, Ser IV</i> <b>13</b> (1848), 341   | <i>Mineralogical Magazine</i> <b>43</b> (1979), 227        |
| Almandine          | $\text{Fe}^{2+}_3\text{Al}_2(\text{SiO}_4)_3$   | G  | 1546 ?    | Turkey                           | original paper?  | <i>American Mineralogist</i> <b>56</b> (1971), 791         |
| Almarudite         | $\text{K}(\square,\text{Na})_2(\text{Mn,Fe,Mg})_2[(\text{Be,Al})_3\text{Si}_{12}]\text{O}_{30}$   | A  | 2002-048  | Germany                          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>179</b> (2004), 265  |  |
| Almeidaite         | $\text{PbZn}_2(\text{Mn,Y})(\text{Ti,Fe}^{3+})_{18}\text{O}_{36}(\text{OH,O})_2$  | A  | 2013-020  | Brazil                           | <i>Mineralogical Magazine</i> <b>79</b> (2015), 269  |  |
| Alnaperbøeite-(Ce) | $(\text{CaCe}_{2.5}\text{Na}_{0.5})(\text{Al}_4)(\text{Si}_2\text{O}_7)(\text{SiO}_4)_3\text{O}(\text{OH})_2$   | A  | 2012-054  | Norway                           | <i>American Mineralogist</i> <b>99</b> (2014), 157   |  |
| Alpeite            | $\text{Ca}_4\text{Mn}^{3+}_2\text{Al}_2(\text{Mn}^{3+}\text{Mg})(\text{SiO}_4)_2(\text{Si}_3\text{O}_{10})(\text{VO}_4)(\text{OH})_6$                                 | A  | 2016-072  | Italy                            | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 907  |  |
| Alpersite          | $(\text{Mg,Cu})(\text{SO}_4)\cdot 7\text{H}_2\text{O}$  | A  | 2003-040  | USA                              | <i>American Mineralogist</i> <b>91</b> (2006), 261   |  |
| Alsakharovite-Zn   | $\text{NaSrKZn}(\text{Ti,Nb})_4(\text{Si}_4\text{O}_{12})_2(\text{O,OH})_4\cdot 7\text{H}_2\text{O}$  | A  | 2002-003  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(1)</b> (2003), 52  |  |
| Alstonite          | $\text{BaCa}(\text{CO}_3)_2$  | G  | 1841      | United Kingdom                   | Vollständige Handbuch der Mineralogie Vol. 2 (1841), 255   | <i>Lithos</i> <b>8</b> (1975), 199                         |
| Altaite            | PbTe  | G  | 1845      | Kazakhstan                       | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 556   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1493        |
| Alterite           | $\text{Zn}_2\text{Fe}^{3+}_4(\text{SO}_4)_4(\text{C}_2\text{O}_4)_2(\text{OH})_4\cdot 17\text{H}_2\text{O}$   | A  | 2018-070  | USA                              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Althausite         | $\text{Mg}_4(\text{PO}_4)_2(\text{OH,O})(\text{F},\square)$   | A  | 1974-050  | Norway                           | <i>Lithos</i> <b>8</b> (1975), 215   | <i>American Mineralogist</i> <b>65</b> (1980), 488         |
| Althupite          | $\text{AlTh}(\text{UO}_2)_7(\text{PO}_4)_4\text{O}_2(\text{OH})_5\cdot 15\text{H}_2\text{O}$  | A  | 1986-003  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>110</b> (1987), 65   |  |
| Altisite           | $\text{Na}_3\text{K}_6\text{Ti}_2\text{Al}_2\text{Si}_8\text{O}_{26}\text{Cl}_3$  | A  | 1993-055  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>123(6)</b> (1994), 82  | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 537 |
| Alum-(K)           | $\text{KAl}(\text{SO}_4)_2\cdot 12\text{H}_2\text{O}$   | Rn | 2007 s.p. | Italy ?                          | The System of Mineralogy, 7th ed., vol. II. Wiley, New York (1951), 472  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 157        |
| Alum-(Na)          | $\text{NaAl}(\text{SO}_4)_2\cdot 12\text{H}_2\text{O}$  | Rn | 2007 s.p. | ?                                | The System of Mineralogy, 7th ed., vol. II. Wiley, New York (1951), 474  | <i>Acta Crystallographica</i> <b>22</b> (1967), 182        |
| Aluminite          | $\text{Al}_2(\text{SO}_4)(\text{OH})_4\cdot 7\text{H}_2\text{O}$  | G  | 1805      | Germany                          | Beiträge zu einer allgemeinen Einleitung in das Studium der Mineralogie. Berlage des Landes-Industrie-Comptoirs, Weimar (1805), 262      | <i>Acta Crystallographica</i> <b>B34</b> (1978), 2407      |
| Aluminium          | Al  | A  | 1980-085a | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 210  | <i>American Mineralogist</i> <b>94</b> (2009), 1283        |
| Aluminoceladonite  | $\text{K}(\text{Mg,Fe}^{2+})\text{Al}(\text{Si}_4\text{O}_{10})(\text{OH})_2$   | A  | 1998 s.p. | Austria / Poland                 | <i>Canadian Mineralogist</i> <b>36</b> (1998), 905   | <i>American Mineralogist</i> <b>95</b> (2010), 348         |
| Aluminocerite-(Ce) | $(\text{Ce,REE,Ca})_9(\text{Al,Fe}^{3+})(\text{SiO}_4)_3[\text{SiO}_3(\text{OH})]_4(\text{OH})_3$   | A  | 2007-060  | Italy                            | <i>American Mineralogist</i> <b>94</b> (2009), 487   |  |
| Aluminocopiapite   | $(\text{Al,Mg})\text{Fe}^{3+}_4(\text{SO}_4)_6(\text{OH,O})_2\cdot 20\text{H}_2\text{O}$  | G  | 1947      | USA                              | <i>University of Toronto Studies, Geological Series</i> <b>51</b> (1947), 21   | <i>Canadian Mineralogist</i> <b>23</b> (1985), 53          |

|                        |   |    |           |                 |   |   |
|------------------------|---|----|-----------|-----------------|---|---|
| Aluminocoquimbite      | $\text{AlFe}(\text{SO}_4)_3 \cdot 9\text{H}_2\text{O}$  | A  | 2009-095  | Italy           | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1465   |   |
| Aluminomagnesiohulsite | $\text{Mg}_2\text{AlO}_2(\text{BO}_3)$  | Rn | 2002-038  | Russia          | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 151   |   |
| Aluminopyracmonite     | $(\text{NH}_4)_3\text{Al}(\text{SO}_4)_3$   | A  | 2012-075  | Italy           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 443   |   |
| Alumoåkermanite        | $(\text{Ca,Na})_2(\text{Al,Mg,Fe}^{2+})(\text{Si}_2\text{O}_7)$   | A  | 2008-049  | Tanzania        | <i>Mineralogical Magazine</i> <b>73</b> (2009), 373   |   |
| Alumoedtolite          | $\text{K}_2\text{NaCu}_5\text{AlO}_2(\text{AsO}_4)_4$   | A  | 2017-020  | Russia          | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 | <a href="https://doi.org/10.1180/mgm.2018.155">https://doi.org/10.1180/mgm.2018.155</a> |
| Alumohydrocalcite      | $\text{CaAl}_2(\text{CO}_3)_2(\text{OH})_4 \cdot 4\text{H}_2\text{O}$   | A  | 1980 s.p. | Russia          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>55</b> (1926), 243   | <i>American Mineralogist</i> <b>100</b> (2015), 110                                     |
| Alumoklyuchevskite     | $\text{K}_3\text{Cu}^{2+}_3\text{AlO}_2(\text{SO}_4)_4$   | A  | 1993-004  | Russia          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(1)</b> (1995), 95   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 499                             |
| Alumotantite           | $\text{AlTaO}_4$  | A  | 1980-025  | Russia          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 338   | <i>Canadian Mineralogist</i> <b>30</b> (1992), 653                                      |
| Alumovesuvianite       | $\text{Ca}_{19}\text{Al}(\text{Al}_{10}\text{Mg}_2)\text{Si}_{18}\text{O}_{69}(\text{OH})_9$                  | A  | 2016-014  | Canada          | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 833  |   |
| Alunite                | $\text{KAl}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | Italy / Ukraine | Traité Élémentaire de Minéralogie. Verdière, Paris (1824), 449  | <i>American Mineralogist</i> <b>92</b> (2007), 587                                      |
| Alunogen               | $\text{Al}_2(\text{SO}_4)_3(\text{H}_2\text{O})_{12} \cdot 5\text{H}_2\text{O}$                               | G  | 1832      | ?               | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 488  | <i>American Mineralogist</i> <b>61</b> (1976), 311                                      |
| Alvanite               | $(\text{Zn,Ni})\text{Al}_4(\text{VO}_3)_2(\text{OH})_{12} \cdot 2\text{H}_2\text{O}$                          | A  | 1962 s.p. | Kazakhstan      | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>88</b> (1959), 157  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 385                           |
| Alwilkinsite-(Y)       | $\text{Y}(\text{UO}_2)_3(\text{SO}_4)_2\text{O}(\text{OH})_3(\text{H}_2\text{O})_7 \cdot 7\text{H}_2\text{O}$ | A  | 2015-097  | USA             | <i>Mineralogical Magazine</i> <b>81</b> (2017), 895   |   |
| Amakinite              | $(\text{Fe}^{2+},\text{Mg})(\text{OH})_2$   | A  | 1967 s.p. | Russia          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 72   | <i>Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya</i> <b>10</b> (1973), 144       |
| Amarantite             | $\text{Fe}^{3+}_2\text{O}(\text{SO}_4)_2 \cdot 7\text{H}_2\text{O}$   | G  | 1888      | Chile           | <i>Vorkommnisse von Ehrenfriedersdorf, Mineralogische und Petrographische Mittheilungen</i> <b>9</b> (1888), 397                        | <i>Zeitschrift für Kristallographie</i> <b>127</b> (1968), 261                          |
| Amarillite             | $\text{NaFe}^{3+}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$   | G  | 1933      | Chile           | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>197</b> (1933), 1132   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 953                             |
| Amblygonite            | $\text{LiAl}(\text{PO}_4)\text{F}$  | G  | 1818      | Germany         | Handbuch der Mineralogie, Vol. 4b. Craz & Gerlach, Freiberg (1818), 159   |   |
| Ambrinoite             | $[\text{K},(\text{NH}_4)]_2(\text{As,Sb})_6(\text{Sb,As})_2\text{S}_{13} \cdot \text{H}_2\text{O}$            | A  | 2009-071  | Italy           | <i>American Mineralogist</i> <b>96</b> (2011), 878  |   |
| Ameghinite             | $\text{NaB}_3\text{O}_3(\text{OH})_4$   | A  | 1966-034  | Argentina       | <i>American Mineralogist</i> <b>52</b> (1967), 935  | <i>American Mineralogist</i> <b>60</b> (1975), 879                                      |
| Amesite                | $\text{Mg}_2\text{Al}(\text{AlSiO}_5)(\text{OH})_4$   | G  | 1876      | USA             | Catalogue of minerals found within about 75 miles of Amherst College. Privately printed (1876), 4                                       | <i>American Mineralogist</i> <b>76</b> (1991), 647                                      |
| Amicite                | $\text{K}_2\text{Na}_2(\text{Al}_4\text{Si}_4\text{O}_{16}) \cdot 5\text{H}_2\text{O}$                        | A  | 1979-011  | Germany         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 481   | <i>Acta Crystallographica</i> <b>B35</b> (1979), 2866                                   |
| Aminoffite             | $\text{Ca}_3(\text{BeOH})_2\text{Si}_3\text{O}_{10}$  | G  | 1937      | Sweden          | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>59</b> (1937), 290   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 915                                      |
| Ammineite              | $\text{CuCl}_2 \cdot 2\text{NH}_3$  | A  | 2008-032  | Chile           | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1359   |   |
| Ammonioalunite         | $(\text{NH}_4)\text{Al}_3(\text{SO}_4)_2(\text{OH})_6$  | A  | 1986-037  | USA             | <i>American Mineralogist</i> <b>73</b> (1988), 145  |   |
| Ammonioborite          | $(\text{NH}_4)_3\text{B}_{15}\text{O}_{20}(\text{OH})_8 \cdot 4\text{H}_2\text{O}$                            | G  | 1933      | Italy           | <i>American Mineralogist</i> <b>18</b> (1933), 480  | <i>Science</i> <b>171</b> (1971), 377   |



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| Ammoniojarosite         | $(\text{NH}_4)\text{Fe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | USA                              | <i>American Mineralogist</i> <b>12</b> (1927), 424   | <i>Mineralogical Magazine</i> <b>71</b> (2007), 427   |
| Ammoniolasalite         | $[(\text{NH}_4)_2\text{Mg}_2(\text{H}_2\text{O})_{20}][\text{V}_{10}\text{O}_{28}]$  | A  | 2017-094  | USA                              | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405   |   |
| Ammonioleucite          | $(\text{NH}_4,\text{K})(\text{AlSi}_2\text{O}_6)$  | A  | 1984-015  | Japan                            | <i>American Mineralogist</i> <b>71</b> (1986), 1022  | <i>Mineralogical Journal</i> <b>20</b> (1998), 105  |
| Ammoniomagnesiovoltaite | $(\text{NH}_4)_2\text{Mg}_5\text{Fe}^{3+}_3\text{Al}(\text{SO}_4)_{12}\cdot 18\text{H}_2\text{O}$  | A  | 2009-040  | Hungary                          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 65  |   |
| Ammoniomathesiusite     | $(\text{NH}_4)_5(\text{UO}_2)_4(\text{SO}_4)_4(\text{VO}_5)\cdot 4\text{H}_2\text{O}$  | A  | 2017-077  | USA                              | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 | <a href="https://doi.org/10.1180/mgm.2018.112">https://doi.org/10.1180/mgm.2018.112</a>               |
| Ammoniovoltaite         | $(\text{NH}_4)_2\text{Fe}^{2+}_5\text{Fe}^{3+}_3\text{Al}(\text{SO}_4)_{12}(\text{H}_2\text{O})_{18}$  | A  | 2017-022  | Russia                           | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European</i>  | <a href="https://doi.org/10.1180/minmag.2017.081.083">https://doi.org/10.1180/minmag.2017.081.083</a> |
| Ammoniozippeite         | $(\text{NH}_4)_2[(\text{UO}_2)_2(\text{SO}_4)\text{O}_2]\cdot \text{H}_2\text{O}$  | A  | 2017-073  | USA                              | <i>Canadian Mineralogist</i> <b>56</b> (2018), 235   |   |
| Amstallite              | $\text{CaAl}[(\text{Al},\text{Si})_4\text{O}_8(\text{OH})_2](\text{OH})_2\cdot (\text{H}_2\text{O},\text{Cl})$   | A  | 1986-030  | Austria                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 253  |   |
| Analcime                | $\text{Na}(\text{AlSi}_2\text{O}_6)\cdot \text{H}_2\text{O}$   | A  | 1997 s.p. | Italy                            | <i>Journal des Mines</i> <b>5</b> (1797), 278  | <i>American Mineralogist</i> <b>91</b> (2006), 568  |
| Anandite                | $\text{BaFe}^{2+}_3(\text{Si}_3\text{Fe}^{3+})\text{O}_{10}\text{S}(\text{OH})$  | A  | 1966-005  | Sri Lanka                        | <i>Mineralogical Magazine</i> <b>36</b> (1967), 1  | <i>American Mineralogist</i> <b>94</b> (2009), 1144   |
| Anapaite                | $\text{Ca}_2\text{Fe}^{2+}(\text{PO}_4)_2\cdot 4\text{H}_2\text{O}$  | G  | 1902      | Russia                           | <i>Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften</i> (1902), 18  | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 314   |
| Anatase                 | $\text{TiO}_2$   | A  | 1962 s.p. | France                           | Traité de Minéralogie, Vol. 3. Louis, Paris (1801), 129  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 462  |
| Anatolyite              | $\text{Na}_6(\text{Ca},\text{Na})(\text{Mg},\text{Fe}^{3+})_3\text{Al}(\text{AsO}_4)_6$  | A  | 2016-040  | Russia                           | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Ancylite-(Ce)           | $\text{CeSr}(\text{CO}_3)_2(\text{OH})\cdot \text{H}_2\text{O}$  | A  | 1987 s.p. | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 49  | <i>Crystallography Reports</i> <b>47</b> (2002), 223  |
| Ancylite-(La)           | $\text{LaSr}(\text{CO}_3)_2(\text{OH})\cdot \text{H}_2\text{O}$  | A  | 1995-053  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(1)</b> (1997), 96  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 493   |
| Andalusite              | $\text{Al}_2\text{SiO}_5$  | G  | 1798      | Spain                            | <i>Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts</i> <b>46</b> (1798), 386  | <i>American Mineralogist</i> <b>91</b> (2006), 319  |
| Andersonite             | $\text{Na}_2\text{Ca}(\text{UO}_2)(\text{CO}_3)_3\cdot 6\text{H}_2\text{O}$  | G  | 1951      | USA                              | <i>American Mineralogist</i> <b>36</b> (1951), 1   | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1496   |
| Andorite IV             | $\text{AgPbSb}_3\text{S}_6$  | G  | 1893      | Bolivia                          | <i>Zeitschrift für Kristallographie</i> <b>21</b> (1893), 193  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 226                      |
| Andorite VI             | $\text{AgPbSb}_3\text{S}_6$  | G  | 1892      | Romania                          | <i>Mathematikai és Természet-tudományi Értesítő</i> <b>11</b> (1892), 119  | <i>Zeitschrift für Kristallographie</i> <b>180</b> (1987), 141  |
| Andradite               | $\text{Ca}_3\text{Fe}^{3+}_2(\text{SiO}_4)_3$  | G  | 1868      | Norway                           | <i>A System of Mineralogy</i> , 5th ed. Wiley, New York (1868), 268  | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 59   |
| Andreadiniite           | $\text{CuHgAg}_7\text{Pb}_7\text{Sb}_{24}\text{S}_{48}$  | A  | 2014-049  | Italy                            | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1021   |   |
| Andrémeyerite           | $\text{BaFe}^{2+}_2(\text{Si}_2\text{O}_7)$  | Rn | 1972-005  | Democratic Republic of the Congo | <i>Bulletin of the Geological Society of Finland</i> <b>45</b> (1973), 1   | <i>American Mineralogist</i> <b>73</b> (1988), 608  |
| Andreyivanovite         | $\text{FeCrP}$   | A  | 2006-003  | Yemen (meteorite)                | <i>American Mineralogist</i> <b>93</b> (2008), 1295  | <i>Pramana - Journal of Physics</i> <b>63</b> (2004), 199   |
| Andrianovite            | $\text{Na}_{12}(\text{K},\text{Sr},\text{Ce})_3\text{Ca}_6\text{Mn}_3\text{Zr}_3\text{Nb}(\text{Si}_{25}\text{O}_{73})(\text{O},\text{H}_2\text{O},\text{OH})_5$ | A  | 2007-008  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>137(2)</b> (2008), 43   | <i>Doklady Chemistry</i> <b>403</b> (2005), 148   |

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| Anduoite            | $\text{RuAs}_2$  | A  | ?         | China                            | <i>Kexue Tongbao</i> <b>15</b> (1979), 704   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 591                       |
| Andychrysite        | $\text{PbCu}^{2+}\text{Te}^{6+}\text{O}_5(\text{H}_2\text{O})$   | A  | 2015-024  | USA                              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1055   |  |
| Andyrobertsite      | $\text{KCaCu}_5(\text{AsO}_4)_4[\text{As}(\text{OH})_2\text{O}_2]\cdot 2\text{H}_2\text{O}$                | A  | 1997-022  | Namibia                          | <i>Mineralogical Record</i> <b>30</b> (1999), 181  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 817                       |
| Angarfite           | $\text{NaFe}^{3+}_5(\text{PO}_4)_4(\text{OH})_4\cdot 4\text{H}_2\text{O}$                                  | A  | 2010-082  | Morocco                          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 781   |  |
| Angastonite         | $\text{CaMgAl}_2(\text{PO}_4)_2(\text{OH})_4\cdot 7\text{H}_2\text{O}$                                     | A  | 2008-008  | Australia                        | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1011   |  |
| Ángelaite           | $\text{Cu}_2\text{AgPbBiS}_4$  | Rn | 2003-064  | Argentina                        | <i>Revista de la Asociación Geológica Argentina</i> <b>59</b> (2004), 787  |  |
| Angelellite         | $\text{Fe}^{3+}_4\text{O}_3(\text{AsO}_4)_2$   | A  | 1962 s.p. | Argentina                        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1959), 145  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>132</b> (1978), 91 |
| Anglesite           | $\text{Pb}(\text{SO}_4)$   | G  | 1832      | United Kingdom                   | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 459   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1053                      |
| Anhydrite           | $\text{Ca}(\text{SO}_4)$   | G  | 1804      | Austria                          | Handbuch der Mineralogie. Siegfried Leberecht Crusius, Leipzig (1804), 209   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 289                       |
| Anhydrokainite      | $\text{KMg}(\text{SO}_4)\text{Cl}$   | Q  | 1912      | Germany                          | <i>Zeitschrift für Physikalische Chemie</i> <b>80</b> (1912), 1  | Dana's System of Mineralogy, 7th ed. New York (1951), 596                |
| Anilite             | $\text{Cu}_7\text{S}_4$  | A  | 1968-030  | Japan                            | <i>American Mineralogist</i> <b>54</b> (1969), 1256  | <i>Acta Crystallographica</i> <b>B26</b> (1970), 915                     |
| Aniyunwiyaitite     | $\text{Ca}_3\text{Mn}^{2+}\text{Fe}^{2+}\text{Al}_4(\text{PO}_4)_6(\text{OH})_4\cdot 12\text{H}_2\text{O}$ | A  | 2018-054  | USA                              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Ankerite            | $\text{Ca}(\text{Fe}^{2+},\text{Mg})(\text{CO}_3)_2$   | G  | 1825      | Austria                          | Treatise on Mineralogy, Vol. I. Archibald Constable, Edinburgh (1825), 411   | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 103              |
| Ankinovichite       | $\text{NiAl}_4(\text{V}^{5+}\text{O}_3)_2(\text{OH})_{12}\cdot 2\text{H}_2\text{O}$                        | A  | 2002-063  | Kazakhstan / Kyrgyzstan          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(2)</b> (2004), 59  |  |
| Annabergite         | $\text{Ni}_3(\text{AsO}_4)_2\cdot 8\text{H}_2\text{O}$   | G  | 1852      | Germany                          | An Elementary Introduction to Mineralogy. Longmans, London (1852), 503   | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 187               |
| Annite              | $\text{KFe}^{2+}_3(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$   | A  | 1998 s.p. | USA                              | A System of Mineralogy, 5th ed. Wiley, New York (1868), 308  | <i>American Mineralogist</i> <b>58</b> (1973), 889                       |
| Annivite            | $\text{Cu}_6[\text{Cu}_4(\text{Fe},\text{Zn})_2](\text{Bi},\text{Sb},\text{As})_4\text{S}_{13}$            | Q  | 2008 s.p. | Switzerland                      | <i>Mitteilungen Der Naturforschenden Gesellschaft In Bern</i> <b>317-318</b> (1854), 57  |  |
| Anorpiment          | $\text{As}_2\text{S}_3$  | A  | 2011-014  | Peru                             | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2857   |  |
| Anorthite           | $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$  | G  | 1823      | Italy                            | <i>Annalen der Physik und Physikalischen Chemie</i> , <b>73/NF-43</b> (1823), 173  | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 467                    |
| Anorthominasragrite | $\text{V}^{4+}\text{O}(\text{SO}_4)\cdot 5\text{H}_2\text{O}$  | A  | 2001-040  | USA                              | <i>Canadian Mineralogist</i> <b>41</b> (2003), 959   |  |
| Ansermetite         | $\text{Mn}^{2+}\text{V}^{5+}_2\text{O}_6\cdot 4\text{H}_2\text{O}$   | A  | 2002-017  | Switzerland                      | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1423  |  |
| Antarcticite        | $\text{CaCl}_2\cdot 6\text{H}_2\text{O}$   | A  | 1965-015  | Antarctica                       | <i>Science</i> <b>149</b> (1965), 975  | <i>Acta Crystallographica</i> <b>C42</b> (1986), 141                     |
| Anthoinite          | $\text{AlWO}_3(\text{OH})_3$   | G  | 1947      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>70</b> (1947), B153   | <i>American Mineralogist</i> <b>95</b> (2010), 639                       |
| Anthonyite          | $\text{Cu}(\text{OH})_2\cdot 3\text{H}_2\text{O}$  | A  | 1967 s.p. | USA                              | <i>American Mineralogist</i> <b>48</b> (1963), 614   |  |
| Anthophyllite       | $\square\text{Mg}_2\text{Mg}_5\text{Si}_6\text{O}_{22}(\text{OH})_2$                                       | Rd | 2012 s.p. | Norway                           | Versuch eines Verzeichnisses der in den Dänisch-Nordischen Staaten sich findenden einfachen Mineralien. Brummer, Kopenhagen (1801), 96   | <i>Zeitschrift für Kristallographie</i> <b>188</b> (1989), 237           |

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|----------------|--|----|-----------|---------------------|--|--|
| Antigorite     | $Mg_3Si_2O_5(OH)_4$  | Rd | 1998 s.p. | Italy / Switzerland | <i>Annalen der Physik und Chemie</i> <b>19</b> (1840), 595   | <i>American Mineralogist</i> <b>87</b> (2002), 1443                    |
| Antimonelite   | $Sb_2Se_3$   | A  | 1992-003  | China               | <i>Acta Mineralogica Sinica</i> <b>13</b> (1993), 7  |  |
| Antimony       | Sb   | G  | 1748      | Sweden              | <i>Svenska Vetenskaps-Akademien Handlingar</i> <b>9</b> (1748), 99   | <i>Acta Crystallographica</i> <b>16</b> (1963), 451                    |
| Antipinite     | $KNa_3Cu_2(C_2O_4)_4$  | A  | 2014-027  | Chile               | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1111   |  |
| Antlerite      | $Cu^{2+}_3(SO_4)(OH)_4$                                      | A  | 1968 s.p. | USA                 | <i>Bulletin of the United States Geological Survey</i> <b>55</b> (1889), 48  | <i>Canadian Mineralogist</i> <b>27</b> (1989), 205                     |
| Antofagastaite | $Na_2Ca(SO_4)_2 \cdot 1.5H_2O$                               | A  | 2018-049  | Chile               | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Anyuinite      | $AuPb_2$   | A  | 1987-053  | Russia              | <i>Mineralogicheskii Zhurnal</i> <b>11</b> (1989), 88  |  |
| Anzaitite-(Ce) | $Ce_4Fe^{2+}Ti_6O_{18}(OH)_2$                                | A  | 2013-004  | Russia              | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1231   |  |
| Apachite       | $Cu^{2+}_9Si_{10}O_{29} \cdot 11H_2O$                        | A  | 1979-022  | USA                 | <i>Mineralogical Magazine</i> <b>43</b> (1980), 639  |  |
| Apexite        | $NaMg(PO_4) \cdot 9H_2O$                                     | A  | 2015-002  | USA                 | <i>American Mineralogist</i> <b>100</b> (2015), 2695   |  |
| Aphthitalite   | $K_3Na(SO_4)_2$  | G  | 1835      | Italy               | Treatise on Mineralogy, 2nd part, Vol. 1. Howe / Herrick and Noyes, New Haven (1835), 36   | <i>Acta Crystallographica</i> <b>B36</b> (1980), 919                   |
| Apjohnite      | $Mn^{2+}Al_2(SO_4)_4 \cdot 22H_2O$                           | G  | 1847      | South Africa        | Generum et Specierum Mineralium, Secundum Ordines Naturales Digestorum Synopsis. Anton, Halle (1847), 298                                | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 463            |
| Aplowite       | $Co(SO_4) \cdot 4H_2O$                                       | A  | 1963-009  | Canada              | <i>Canadian Mineralogist</i> <b>8</b> (1965), 166  | <i>Acta Crystallographica</i> <b>C48</b> (1992), 776                   |
| Apuanite       | $(Fe^{2+}Fe^{3+}_2)(Fe^{3+}_2Sb^{3+}_4)O_{12}S$              | A  | 1978-069  | Italy               | <i>American Mineralogist</i> <b>64</b> (1979), 1230  | <i>American Mineralogist</i> <b>66</b> (1981), 1073                    |
| Aqualite       | $(H_3O)_8(Na,K,Sr)_5Ca_6Zr_3Si_{26}O_{66}(OH)_9Cl$           | A  | 2002-066  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(2)</b> (2007), 39   |  |
| Aradite        | $BaCa_6[(SiO_4)(VO_4)](VO_4)_2F$                             | Rd | 2013-047  | Israel              | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1073   |  |
| Aragonite      | $Ca(CO_3)$   | G  | 1791      | Spain               | <i>Bulletin des Science, par la Société Philomathique</i> <b>2</b> (1791), 67  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 1245                    |
| Arakiite       | $ZnMn^{2+}_{12}Fe^{3+}_2(As^{3+}O_3)(As^{5+}O_4)_2(OH)_{23}$ | A  | 1998-062  | Sweden              | <i>Mineralogical Record</i> <b>31</b> (2000), 253  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1471                    |
| Aramayoite     | $Ag_3Sb_2(Bi,Sb)S_6$   | G  | 1926      | Bolivia             | <i>Mineralogical Magazine</i> <b>21</b> (1926), 156  | <i>American Mineralogist</i> <b>87</b> (2002), 753                     |
| Arangasite     | $Al_2(SO_4)(PO_4)F \cdot 9H_2O$                              | A  | 2012-018  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>142(5)</b> (2013), 21   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 889                    |
| Arapovite      | $(K_{1-x}\square_x)(Ca,Na)_2U^{4+}Si_8O_{20}$ [x ≈ 0.5]      | A  | 2003-046  | Tajikistan          | <i>New Data on Minerals</i> <b>39</b> (2004), 14   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1005                    |
| Aravaipaite    | $Pb_3AlF_9 \cdot H_2O$                                       | A  | 1988-021  | USA                 | <i>American Mineralogist</i> <b>74</b> (1989), 927   | <i>American Mineralogist</i> <b>96</b> (2011), 402                     |
| Arcanite       | $K_2(SO_4)$  | G  | 1845      | USA                 | Handbuch der bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 487   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 2845                  |
| Archerite      | $H_2K(PO_4)$   | A  | 1975-008  | Australia           | <i>Mineralogical Magazine</i> <b>41</b> (1977), 33   | <i>Journal of the Physical Society of Japan</i> <b>60</b> (1991), 2673 |
| Arctite        | $(Na_5Ca)Ca_6Ba(PO_4)_6F_3$                                  | A  | 1980-049  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 506  | <i>Doklady Akademii Nauk SSSR</i> <b>274</b> (1984), 78                |
| Arcubisite     | $Ag_6CuBiS_4$  | A  | 1973-009  | Denmark (Greenland) | <i>Lithos</i> <b>9</b> (1976), 253   |  |

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|---------------------|---|----|-----------|---------------------|--|---|
| Ardaite             | $Pb_{17}Sb_{15}S_{35}Cl_9$                                      | A  | 1979-073  | Bulgaria            | <i>Mineralogical Magazine</i> <b>46</b> (1982), 357  | <i>Canadian Mineralogist</i> <b>19</b> (1981), 419  |
| Ardealite           | $Ca_2(PO_3OH)(SO_4) \cdot 4H_2O$                                | G  | 1932      | Romania             | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> <b>2</b> (1932), 40  | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1055  |
| Ardennite-(As)      | $Mn^{2+}_4Al_4(AlMg)(AsO_4)(SiO_4)_2(Si_3O_{10})(OH)_6$         | Rn | 2007 s.p. | Belgium             | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1872), 930  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 55  |
| Ardennite-(V)       | $Mn^{2+}_4Al_4(AlMg)(VO_4)(SiO_4)_2(Si_3O_{10})(OH)_6$          | A  | 2005-037  | Italy               | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 581  |   |
| Arfvedsonite        | $NaNa_2(Fe^{2+}_4Fe^{3+})Si_8O_{22}(OH)_2$                      | Rd | 2012 s.p. | Denmark (Greenland) | <i>Annals of Philosophy</i> <b>5</b> (1823), 381   | <i>Canadian Mineralogist</i> <b>14</b> (1976), 346  |
| Argandite           | $Mn_7(VO_4)_2(OH)_8$  | A  | 2010-021  | Switzerland         | <i>American Mineralogist</i> <b>96</b> (2011), 1894  |   |
| Argentobaumhauerite | $Ag_{1.5}Pb_{22}As_{33.5}S_{72}$                                | Rn | 2015 s.p. | Switzerland         | <i>American Mineralogist</i> <b>75</b> (1990), 915   | <i>Mineralogical Magazine</i> <b>80</b> (2016), 819   |
| Argentodufrénoysite | $Ag_3Pb_{26}As_{35}S_{80}$                                      | A  | 2016-046  | Switzerland         | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Argentojarosite     | $AgFe^{3+}_3(SO_4)_2(OH)_6$                                     | Rd | 1987 s.p. | USA                 | <i>American Journal of Science</i> <b>6</b> (1923), 73   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 921  |
| Argentoliveingite   | $Ag_xPb_{40-2x}As_{48+x}S_{112}$ ( $3 < x < 4$ )                | A  | 2016-029  | Switzerland         | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  |   |
| Argentopentlandite  | $Ag(Fe,Ni)_8S_8$  | A  | 1970-047  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 688  | <i>Canadian Mineralogist</i> <b>12</b> (1973), 169  |
| Argentopyrite       | $AgFe_2S_3$   | G  | 1866      | Czech Republic      | <i>Nachrichten von der K. Gesellschaft der Wissenschaften</i> (1866), 66   | <i>American Mineralogist</i> <b>94</b> (2009), 1727   |
| Argentotennantite   | $Ag_6[Cu_4(Fe,Zn)_2]As_4S_{13}$                                 | A  | 1985-026  | Kazakhstan          | <i>Doklady Akademii Nauk SSSR</i> <b>290</b> (1986), 206   | <i>Mineralogical Magazine</i> <b>53</b> (1989), 293   |
| Argentotetrahedrite | $Ag_6Cu_4(Fe,Zn)_2Sb_4S_{13}$                                   | A  | 2016-093  | Canada              | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149 | <a href="https://doi.org/10.1127/ejm/2018/0030-2773">https://doi.org/10.1127/ejm/2018/0030-2773</a> |
| Argesite            | $(NH_4)_7Bi_3Cl_{16}$   | A  | 2011-072  | Italy               | <i>American Mineralogist</i> <b>97</b> (2012), 1446  |   |
| Argutite            | $GeO_2$   | A  | 1980-067  | France              | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 97   | <i>Physics and Chemistry of Minerals</i> <b>27</b> (2000), 575                                      |
| Argyrodite          | $Ag_8GeS_6$   | G  | 1886      | Germany             | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>2</b> (1886), 67  | <i>Acta Crystallographica</i> <b>B55</b> (1999), 721  |
| Arhbarite           | $Cu_2Mg(AsO_4)(OH)_3$   | Rd | 1981-044  | Morocco             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 529  | <i>Mineralogical Magazine</i> <b>67</b> (2003), 1099  |
| Ariegilatite        | $BaCa_{12}(SiO_4)_4(PO_4)_2F_2O$                                | A  | 2016-100  | Israel              | <i>Minerals</i> <b>8</b> (2018), 109   |   |
| Arisite-(Ce)        | $NaCe_2(CO_3)_2[F_{2x}(CO_3)_{1-x}]F$                           | A  | 2009-013  | Canada / Namibia    | <i>Canadian Mineralogist</i> <b>48</b> (2010), 661   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 257   |
| Arisite-(La)        | $NaLa_2(CO_3)_2[F_{2x}(CO_3)_{1-x}]F$                           | A  | 2009-019  | Namibia             | <i>Mineralogical Magazine</i> <b>74</b> (2010), 257  |   |
| Aristarainite       | $Na_2Mg[B_6O_8(OH)_4]_2 \cdot 4H_2O$                            | A  | 1973-029  | Argentina           | <i>American Mineralogist</i> <b>59</b> (1974), 647   | <i>American Mineralogist</i> <b>62</b> (1977), 979  |
| Armalcolite         | $(Mg,Fe^{2+})Ti_2O_5$   | Rd | 1970-006  | Moon                | <i>Geochimica et Cosmochimica Acta</i> <b>34</b> , suppl.1 (1970), 55  | <i>American Mineralogist</i> <b>80</b> (1995), 810  |
| Armangite           | $Mn^{2+}_{26}[As^{3+}_6(OH)_4O_{14}][As^{3+}_6O_{18}]_2(CO_3)$  | G  | 1920      | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>42</b> (1920), 301  | <i>American Mineralogist</i> <b>64</b> (1979), 748  |
| Armbrusterite       | $Na_6K_5Mn^{3+}Mn^{2+}_{14}(Si_9O_{22})_4(OH)_{10} \cdot 4H_2O$ | A  | 2005-035  | Russia              | <i>American Mineralogist</i> <b>92</b> (2007), 416   |   |
| Armenite            | $BaCa_2(Al_6Si_9)O_{30} \cdot 2H_2O$                            | G  | 1939      | Norway              | <i>Norsk Geologisk Tidsskrift</i> <b>19</b> (1939), 312  | <i>American Mineralogist</i> <b>77</b> (1992), 422  |

|                       |  |    |           |           |  |   |
|-----------------------|--|----|-----------|-----------|--|---|
| Armstrongite          | $\text{CaZr}(\text{Si}_6\text{O}_{15})\cdot 2\text{H}_2\text{O}$   | A  | 1972-018  | Mongolia  | <i>Doklady Akademii Nauk SSSR</i> <b>209</b> (1973), 1185  | <i>American Mineralogist</i> <b>99</b> (2014), 2424   |
| Arrojadite-(BaFe)     | $\text{BaFe}^{2+}(\text{CaNa}_2)\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$           | Rn | 1994-033  | Italy     | <i>Canadian Mineralogist</i> <b>34</b> (1996), 827   |   |
| Arrojadite-(BaNa)     | $\text{BaNa}_3(\text{NaCa})\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$                | A  | 2014-071  | Italy     | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1021  |   |
| Arrojadite-(KFe)      | $(\text{KNa})\text{Fe}^{2+}(\text{CaNa}_2)\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$ | Rn | 2005 s.p. | Brazil    | <i>Publicação da Inspectoria de Obras Contra as Seccas, Rio de Janeiro</i> <b>58</b> (1925), 119                                       | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1733   |
| Arrojadite-(KNa)      | $\text{KNa}_3(\text{CaNa}_2)\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$               | A  | 2005-047  | Canada    | <i>American Mineralogist</i> <b>91</b> (2006), 1260  | <i>American Mineralogist</i> <b>91</b> (2006), 1249   |
| Arrojadite-(PbFe)     | $\text{PbFe}^{2+}(\text{CaNa}_2)\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$           | A  | 2005-056  | Brazil    | <i>American Mineralogist</i> <b>91</b> (2006), 1260  | <i>American Mineralogist</i> <b>91</b> (2006), 1249   |
| Arrojadite-(SrFe)     | $\text{SrFe}^{2+}(\text{CaNa}_2)\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})(\text{OH})_2$           | A  | 2005-032  | Sweden    | <i>American Mineralogist</i> <b>91</b> (2006), 1260  | <i>American Mineralogist</i> <b>91</b> (2006), 1249   |
| Arsenatrotitanite     | $\text{NaTi}(\text{AsO}_4)\text{O}$  | A  | 2016-015  | Russia    | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   | <a href="https://doi.org/10.1180/mgm.2018.134">https://doi.org/10.1180/mgm.2018.134</a>             |
| Arsenbrackebuschite   | $\text{Pb}_2(\text{Fe}^{3+}, \text{Zn})(\text{AsO}_4)_2(\text{OH}, \text{H}_2\text{O})$                                      | A  | 1977-014  | Namibia   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1978), 193  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1978), 153             |
| Arsendescloizite      | $\text{PbZn}(\text{AsO}_4)(\text{OH})$   | A  | 1979-030  | Namibia   | <i>Mineralogical Record</i> <b>13</b> (1982), 155  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2003), 374                                       |
| Arsenic               | As   | G  | ?         | unknown   | original paper?  | <i>Journal of Applied Crystallography</i> <b>2</b> (1969), 30                                       |
| Arseniopleite         | $(\text{Ca}, \text{Na})\text{NaMn}^{2+}(\text{Mn}^{2+}, \text{Mg}, \text{Fe}^{2+})_2(\text{AsO}_4)_3$                        | A  | 1967 s.p. | Sweden    | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>2</b> (1888), 117   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 71   |
| Arsenosiderite        | $\text{Ca}_2\text{Fe}^{3+}_3\text{O}_2(\text{AsO}_4)_3\cdot 3\text{H}_2\text{O}$   | G  | 1842      | France    | <i>Annales des Mines</i> <b>2</b> (1842), 343  | <i>American Mineralogist</i> <b>59</b> (1974), 48   |
| Arsenmarcobaldiite    | $\text{Pb}_{12}(\text{As}_{3.2}\text{Sb}_{2.8})_{\Sigma 6}\text{S}_{21}$   | A  | 2016-045  | Italy     | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Arsenmedaite          | $\text{Mn}^{2+}_6\text{As}^{5+}\text{Si}_5\text{O}_{18}(\text{OH})$  | A  | 2016-099  | Italy     | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 | <a href="https://doi.org/10.1127/ejm/2018/0030-2792">https://doi.org/10.1127/ejm/2018/0030-2792</a> |
| Arsenoclasite         | $\text{Mn}^{2+}_5(\text{AsO}_4)_2(\text{OH})_4$  | G  | 1931      | Sweden    | <i>Kungliga Svenska Vetenskapsakademiens Handlingar</i> <b>9(5)</b> (1931), 52   | <i>American Mineralogist</i> <b>56</b> (1971), 1539   |
| Arsenocrandallite     | $\text{CaAl}_3(\text{AsO}_4)(\text{AsO}_3\text{OH})(\text{OH})_6$  | A  | 1980-060  | Germany   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>61</b> (1981), 23   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 919   |
| Arsenoflorencite-(Ce) | $\text{CeAl}_3(\text{AsO}_4)_2(\text{OH})_6$   | A  | 1985-053  | Australia | <i>Mineralogical Magazine</i> <b>51</b> (1987), 605  |   |
| Arsenoflorencite-(La) | $\text{LaAl}_3(\text{AsO}_4)_2(\text{OH})_6$   | A  | 2009-078  | Russia    | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 613  |   |
| Arsenogorceixite      | $\text{BaAl}_3(\text{AsO}_4)(\text{AsO}_3\text{OH})(\text{OH})_6$  | A  | 1989-055  | Germany   | <i>Aufschluss</i> <b>44</b> (1993), 250  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 919   |
| Arsenogoyazite        | $\text{SrAl}_3(\text{AsO}_4)(\text{AsO}_3\text{OH})(\text{OH})_6$  | A  | 1983-043  | Germany   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>64</b> (1984), 11   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 919   |
| Arsenohauchecornite   | $\text{Ni}_{18}\text{Bi}_3\text{AsS}_{16}$   | A  | 1978 s.p. | Canada    | <i>Mineralogical Magazine</i> <b>43</b> (1980), 877  | <i>Canadian Mineralogist</i> <b>27</b> (1989), 137  |
| Arsenohopeite         | $\text{Zn}_3(\text{AsO}_4)_2\cdot 4\text{H}_2\text{O}$   | A  | 2010-069  | Namibia   | <i>Mineralogical Magazine</i> <b>76</b> (2012), 603  |   |
| Arsenolamprite        | As   | G  | 1886      | Germany   | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>11</b> (1886), 606  | <i>Journal of Physical Chemistry A</i> <b>113</b> (2009), 736                                       |
| Arsenolite            | $\text{As}_2\text{O}_3$  | G  | 1854      | Germany   | <i>A System of Mineralogy</i> , 4th ed. Vol. 2. Putnam, New York (1854), 139   | <i>Journal of Physical Chemistry A</i> <b>113</b> (2009), 736                                       |



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|-----------------------|---|----|------------|---------------------|--|--|
| Arsenopalladinite     | $\text{Pd}_8\text{As}_3$  | Rd | 1973-002a  | Brazil              | An Index of Mineral Species and Varieties Arranged Chemically. British Museum, London (1955), 23   | <i>Canadian Mineralogist</i> <b>15</b> (1977), 70                          |
| Arsenopyrite          | $\text{FeAsS}$  | A  | 1962 s.p.  | ?                   | Generum et Specierum Mineralium, Secundum Ordines Naturales Digestorum Synopsis. Anton, Halle (1847), 34                                 | <i>Zeitschrift für Kristallographie</i> <b>179</b> (1987), 335             |
| Arsenovanmeersscheite | $\text{U}(\text{UO}_2)_3(\text{AsO}_4)_2(\text{OH})_6 \cdot 4\text{H}_2\text{O}$  | A  | 2006-018   | Germany             | <i>Aufschluss</i> <b>58</b> (2007), 159  |  |
| Arsenowagnerite       | $\text{Mg}_2(\text{AsO}_4)\text{F}$   | A  | 2014-100   | Russia              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 877  |  |
| Arsenquatrandorite    | $\text{Ag}_{17.6}\text{Pb}_{12.8}\text{Sb}_{38.1}\text{As}_{11.5}\text{S}_{96}$   | A  | 2012-087   | Iran                | CNMNC Newsletter 16 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 2695   |  |
| Arsentsumebite        | $\text{Pb}_2\text{Cu}(\text{AsO}_4)(\text{SO}_4)(\text{OH})$  | G  | 1935 ?     | Namibia             | <i>Bulletin de la Société Française de Minéralogie</i> <b>58</b> (1935), 4   | <i>Mineralogy and Petrology</i> <b>75</b> (2002), 79                       |
| Arsenudinaite         | $\text{NaMg}_4(\text{AsO}_4)_3$   | A  | 2018-067   | Russia              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Arsenuranospathite    | $\text{Al}(\text{UO}_2)_2(\text{AsO}_4)_2\text{F} \cdot 20\text{H}_2\text{O}$   | A  | 1982 s.p.? | Germany             | <i>Mineralogical Magazine</i> <b>42</b> (1978), 117  | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 589                |
| Arsenuranylite        | $\text{Ca}(\text{UO}_2)_4(\text{AsO}_4)_2(\text{OH})_4 \cdot 6\text{H}_2\text{O}$   | G  | 1958       | Uzbekistan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>87</b> (1958), 598   |  |
| Arsiccioite           | $\text{AgHg}_2\text{TiAs}_2\text{S}_6$  | A  | 2013-058   | Italy               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 101  |  |
| Arsmirandite          | $\text{Na}_{18}\text{Cu}_{12}\text{Fe}^{3+}\text{O}_8(\text{AsO}_4)_8\text{Cl}_5$   | A  | 2014-081   | Russia              | CNMNC Newsletter 23 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 51   |  |
| Arthurite             | $\text{CuFe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$   | A  | 1964-002   | United Kingdom      | <i>Mineralogical Magazine</i> <b>33</b> (1964), 937  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>133</b> (1978), 291  |
| Artinite              | $\text{Mg}_2(\text{CO}_3)(\text{OH})_2 \cdot 3\text{H}_2\text{O}$   | G  | 1902       | Italy               | <i>Rendiconti del Regio Istituto Lombardo di Scienze e Lettere, Serie II</i> <b>35</b> (1902), 869                                       | <i>Acta Crystallographica</i> <b>B33</b> (1977), 3951                      |
| Artroeite             | $\text{PbAlF}_3(\text{OH})_2$   | A  | 1993-031   | USA                 | <i>American Mineralogist</i> <b>80</b> (1995), 179   |  |
| Artsmithite           | $\text{Hg}^{1+}_4\text{Al}(\text{PO}_4)_{1.74}(\text{OH})_{1.78}$   | A  | 2002-039   | USA                 | <i>Canadian Mineralogist</i> <b>41</b> (2003), 721   |  |
| Arupite               | $\text{Ni}_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O}$  | A  | 1988-008   | Brazil              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 76   |  |
| Arzrunite             | $\text{Pb}_2\text{Cu}_4(\text{SO}_4)(\text{OH})_4\text{Cl}_6 \cdot 2\text{H}_2\text{O}$                                     | Q  | 1899       | Chile               | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>31</b> (1899), 230  |  |
| Asbecasite            | $\text{Ca}_3\text{TiAs}_6\text{Be}_2\text{Si}_2\text{O}_{20}$   | A  | 1965-037   | Switzerland         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>46</b> (1966), 367  | <i>Mineralogical Magazine</i> <b>57</b> (1993), 315                        |
| Asbolane              | $\text{Mn}^{4+}(\text{O},\text{OH})_2(\text{Co},\text{Ni},\text{Mg},\text{Ca})_x(\text{OH})_{2x} \cdot n\text{H}_2\text{O}$ | G  | 1841       | ?                   | Vollständiges Handbuch der Mineralogie Vol. 2. Arnoldische, Dresden und Leipzig (1841), 332  | <i>Doklady Akademii Nauk, Earth Science Section</i> <b>345</b> (1996), 230 |
| Aschamalmite          | $\text{Pb}_{6-3x}\text{Bi}_{2+x}\text{S}_9$   | A  | 1982-089   | Austria             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 433  | <i>Mineralogical Magazine</i> <b>73</b> (2009), 83                         |
| Ashburtonite          | $\text{HCu}_4\text{Pb}_4\text{Si}_4\text{O}_{12}(\text{HCO}_3)_4(\text{OH})_4\text{Cl}$                                     | A  | 1990-033   | Australia           | <i>American Mineralogist</i> <b>76</b> (1991), 1701  |  |
| Ashcroftine-(Y)       | $\text{K}_5\text{Na}_5\text{Y}_{12}\text{Si}_{28}\text{O}_{70}(\text{OH})_2(\text{CO}_3)_8 \cdot 8\text{H}_2\text{O}$       | A  | 1967 s.p.  | Denmark (Greenland) | <i>Mineralogical Magazine</i> <b>23</b> (1933), 305  | <i>American Mineralogist</i> <b>72</b> (1987), 1176                        |
| Ashoverite            | $\text{Zn}(\text{OH})_2$  | A  | 1986-008   | United Kingdom      | <i>Mineralogical Magazine</i> <b>52</b> (1988), 699  |  |
| Asisite               | $\text{Pb}_7\text{SiO}_8\text{Cl}_2$  | A  | 1987-003   | Namibia             | <i>American Mineralogist</i> <b>73</b> (1988), 643   | <i>Mineralogical Magazine</i> <b>68</b> (2004), 247                        |



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|--------------------|---|----|-----------|----------------------------------|--|---|
| Åskagenite-(Nd)    | $Mn^{2+}Nd(Al_2Fe^{3+})[Si_2O_7][SiO_4]O_2$   | A  | 2009-073  | Sweden                           | <i>New Data on Minerals</i> <b>45</b> (2010), 17   |   |
| Aspedamite         | $\square_{12}(Fe^{3+}, Fe^{2+})_3Nb_4[Th(Nb, Fe^{3+})_{12}O_{42}][H_2O, (OH)]_{12}$ | A  | 2011-056  | Norway                           | <i>Canadian Mineralogist</i> <b>50</b> (2012), 793   |   |
| Aspidolite         | $NaMg_3(Si_3Al)O_{10}(OH)_2$  | Rd | 2004-049  | Japan                            | <i>Sitzungsberichte der Königlich Bayerische Akademie der Wissenschaften</i> <b>18</b> (1904), 417 | <i>Mineralogical Magazine</i> <b>69</b> (2005), 1047                              |
| Asselbornite       | $Pb(UO_2)_4(BiO_3)(AsO_4)_2(OH)_7 \cdot 4H_2O$                                      | A  | 1980-087  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 417                                      |   |
| Astrocyanite-(Ce)  | $Cu_2Ce_2(UO_2)(CO_3)_5(OH)_2 \cdot 1.5H_2O$  | A  | 1989-032  | Democratic Republic of the Congo | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 407   |   |
| Astrophyllite      | $K_2NaFe^{2+}_7Ti_2Si_8O_{26}(OH)_4F$   | G  | 1848      | Norway                           | <i>Archiv für Mineralogie, Geognosie, Bergbau und Hüttenkunde</i> <b>22</b> (1848), 465            | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 253                       |
| Atacamite          | $Cu_2Cl(OH)_3$  | G  | 1803      | Chile                            | Manuel D'Histoire Naturelle, Vol. 2. Soulange Artaud, Paris (1803), 348                            | <i>Acta Crystallographica</i> <b>C42</b> (1986), 1277                             |
| Atelestite         | $Bi_2O(AsO_4)(OH)$  | G  | 1832      | Germany                          | Vollständige Charakteristik des Mineral-System's. Arnoldische, Dresden und Leipzig (1832), 307     | <i>Canadian Mineralogist</i> <b>7</b> (1963), 547                                 |
| Atelisite-(Y)      | $Y_4Si_3O_8(OH)_8$  | A  | 2010-065  | Norway                           | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 1053                                       |   |
| Atencioite         | $Ca_2Fe^{2+}_3Mg_2Be_4(PO_4)_6(OH)_4 \cdot 6H_2O$                                   | A  | 2004-041  | Brazil                           | <i>New Data on Minerals</i> <b>41</b> (2006), 18   |   |
| Athabascaite       | $Cu_5Se_4$  | A  | 1969-022  | Canada                           | <i>Canadian Mineralogist</i> <b>10</b> (1970), 207   |   |
| Atheneite          | $Pd_2(As_{0.75}Hg_{0.25})$  | A  | 1973-050  | Brazil                           | <i>Mineralogical Magazine</i> <b>39</b> (1974), 528  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1149                               |
| Atlasovite         | $Cu^{2+}_6Fe^{3+}Bi^{3+}O_4(SO_4)_5 \cdot KCl$                                      | A  | 1986-029  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 358                  |   |
| Atokite            | $Pd_3Sn$  | A  | 1974-041  | South Africa                     | <i>Canadian Mineralogist</i> <b>13</b> (1975), 146   |   |
| Attakolite         | $CaMn^{2+}Al_4(HSiO_4)(PO_4)_3(OH)_4$   | Rd | 1992 s.p. | Sweden                           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>25</b> (1868), 197             | <i>American Mineralogist</i> <b>77</b> (1992), 1285                               |
| Attikaite          | $Ca_3Cu_2Al_2(AsO_4)_4(OH)_4 \cdot 2H_2O$   | A  | 2006-017  | Greece                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(2)</b> (2007), 17                 |   |
| Aubertite          | $Cu^{2+}Al(SO_4)_2Cl \cdot 14H_2O$  | A  | 1978-051  | Chile                            | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 348  | <i>Acta Crystallographica</i> <b>B35</b> (1979), 2499                             |
| Augelite           | $Al_2(PO_4)(OH)_3$  | G  | 1868      | Sweden                           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>25</b> (1868), 197             | <i>American Mineralogist</i> <b>53</b> (1968), 1096                               |
| Augite             | $(Ca, Mg, Fe)_2Si_2O_6$   | A  | 1988 s.p. | ?                                | <i>Bergmannisches Journal</i> <b>1</b> (1792), 215   | <i>Mineralogical Society of America Special Paper</i> <b>2</b> (1969), 31         |
| Auriacusite        | $Fe^{3+}Cu^{2+}(AsO_4)O$  | A  | 2009-037  | USA                              | <i>Mineralogy and Petrology</i> <b>99</b> (2010), 113  |   |
| Aurichalcite       | $(Zn, Cu)_5(CO_3)_2(OH)_6$  | G  | 1839      | Russia                           | <i>Annalen der Physik und Chemie</i> <b>48</b> (1839), 495   | <i>Journal of Mineralogy and Geochemistry</i> <b>191</b> (2014), 225              |
| Auricupride        | $Cu_3Au$  | G  | 1950      | Russia                           | <i>Fortschritte der Mineralogie</i> <b>28</b> (1950), 69   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 540 |
| Aurihydrargyrumite | $Au_6Hg_5$  | A  | 2017-003  | Japan                            | <i>Minerals</i> <b>8</b> (2018), 415   |   |
| Aurivilliusite     | $Hg^{1+}Hg^{2+}O$   | A  | 2002-022  | USA                              | <i>Mineralogical Magazine</i> <b>68</b> (2004), 241  | <i>Acta Crystallographica</i> <b>C41</b> (1985), 167                              |
| Aurorite           | $(Mn^{2+}, Ag, Ca)Mn^{4+}_3O_7 \cdot 3H_2O$   | A  | 1966-031  | USA                              | <i>Economic Geology</i> <b>62</b> (1967), 186  |   |

|              |  |    |           |                |   |   |
|--------------|--|----|-----------|----------------|---|---|
| Aurostibite  | AuSb <sub>2</sub>  | G  | 1952      | Canada         | <i>American Mineralogist</i> <b>37</b> (1952), 461  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 537                       |
| Austinite    | CaZn(AsO <sub>4</sub> )(OH)  | G  | 1935      | USA            | <i>American Mineralogist</i> <b>20</b> (1935), 112  | <i>Mineralogical Magazine</i> <b>61</b> (1997), 677                                 |
| Autunite     | Ca(UO <sub>2</sub> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> ·10-12H <sub>2</sub> O   | G  | 1852      | France         | Introduction to Mineralogy by Wm. Phillips, London (1852), 519  | <i>American Mineralogist</i> <b>88</b> (2003), 240                                  |
| Avdoninite   | K <sub>2</sub> Cu <sub>5</sub> Cl <sub>8</sub> (OH) <sub>4</sub> ·2H <sub>2</sub> O  | A  | 2005-046a | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(3)</b> (2006), 38  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>144(3)</b> (2015), 55  |
| Averievite   | Cu <sub>5</sub> O <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub> ·CuCl <sub>2</sub>  | A  | 1995-027  | Russia         | <i>Doklady Rossiiskoi Akademii Nauk</i> <b>359</b> (1998), 804  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>144(4)</b> (2015), 101 |
| Avicennite   | Tl <sub>2</sub> O <sub>3</sub>   | G  | 1958      | Uzbekistan     | <i>Doklady Akademii Nauk Uzbekistan SSR</i> <b>2</b> (1958), 23   | <i>Physica C</i> <b>215</b> (1993), 205   |
| Avogadrite   | KBF <sub>4</sub>   | G  | 1926      | Italy          | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VI</i> <b>3</b> (1926), 644  | <i>Acta Crystallographica</i> <b>B25</b> (1969), 2161                               |
| Awaruite     | Ni <sub>3</sub> Fe   | G  | 1885      | New Zealand    | <i>Transactions and Proceedings of the New Zealand Institute</i> <b>18</b> (1885), 401  | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751                                  |
| Axelite      | Na <sub>14</sub> Cu <sub>7</sub> (AsO <sub>4</sub> ) <sub>8</sub> F <sub>2</sub> Cl <sub>2</sub>   | A  | 2017-015a | Russia         | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |   |
| Axinite-(Fe) | Ca <sub>4</sub> Fe <sup>2+</sup> <sub>2</sub> Al <sub>4</sub> [B <sub>2</sub> Si <sub>8</sub> O <sub>30</sub> ](OH) <sub>2</sub>                             | Rn | 1968 s.p. | France         | <i>U.S. Geological Survey Bulletin</i> <b>490</b> (1911), 37  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1159                                 |
| Axinite-(Mg) | Ca <sub>4</sub> Mg <sub>2</sub> Al <sub>4</sub> [B <sub>2</sub> Si <sub>8</sub> O <sub>30</sub> ](OH) <sub>2</sub>   | Rn | 1975-025  | Tanzania       | <i>Journal of Gemmology</i> <b>14</b> (1975), 368   | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 1185                        |
| Axinite-(Mn) | Ca <sub>4</sub> Mn <sup>2+</sup> <sub>2</sub> Al <sub>4</sub> [B <sub>2</sub> Si <sub>8</sub> O <sub>30</sub> ](OH) <sub>2</sub>                             | Rn | 2004 s.p. | Germany        | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>28</b> (1909), 305   | <i>American Mineralogist</i> <b>89</b> (2004), 1763                                 |
| Azoproite    | Mg <sub>2</sub> [(Ti,Mg),Fe <sup>3+</sup> ] <sub>2</sub> O <sub>2</sub> (BO <sub>3</sub> )   | A  | 1970-021  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>99</b> (1970), 225  | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 643                              |
| Azurite      | Cu <sub>3</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>2</sub>  | G  | 1824      | France         | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 373  | <i>Physics and Chemistry of Minerals</i> <b>28</b> (2001), 498                      |
| Babánekite   | Cu <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> ·8H <sub>2</sub> O  | A  | 2012-007  | Czech Republic | <i>Journal of Geosciences</i> <b>62</b> (2017), 261   |   |
| Babephite    | BaBe(PO <sub>4</sub> )F  | A  | 1966-003  | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>167</b> (1966), 895  | <i>Soviet Physics - Crystallography</i> <b>25</b> (1980), 28                        |
| Babingtonite | Ca <sub>2</sub> Fe <sup>2+</sup> Fe <sup>3+</sup> Si <sub>5</sub> O <sub>14</sub> (OH)   | G  | 1824      | Norway         | <i>Annals of Philosophy</i> <b>7</b> (1824), 275  | <i>Zeitschrift für Kristallographie</i> <b>135</b> (1972), 355                      |
| Babkinite    | Pb <sub>2</sub> Bi <sub>2</sub> (S,Se) <sub>3</sub>  | A  | 1994-030  | Russia         | <i>Doklady Akademii Nauk</i> <b>346</b> (1996), 656   |   |
| Backite      | Pb <sub>2</sub> AlTeO <sub>6</sub> Cl  | A  | 2013-113  | USA            | <i>Canadian Mineralogist</i> <b>52</b> (2014), 935  |   |
| Badalovite   | Na <sub>2</sub> Mg <sub>2</sub> Fe <sup>3+</sup> (AsO <sub>4</sub> ) <sub>3</sub>  | A  | 2016-053  | Russia         | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135  |   |
| Baddeleyite  | ZrO <sub>2</sub>   | G  | 1893      | Sri Lanka      | <i>Mineralogical Magazine</i> <b>10</b> (1893), 148   | <i>Acta Crystallographica</i> <b>B44</b> (1988), 116                                |
| Bafertisite  | Ba <sub>2</sub> Fe <sup>2+</sup> <sub>4</sub> Ti <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>2</sub> (OH) <sub>2</sub> F <sub>2</sub> | Rd | 2016 s.p. | China          | <i>Science Record (Beijing)</i> <b>3</b> (1959), 652  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 49                                   |
| Baghdadite   | Ca <sub>6</sub> Zr <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>4</sub>  | A  | 1982-075  | Iraq           | <i>Mineralogical Magazine</i> <b>50</b> (1986), 119   | <i>Periodico di Mineralogia</i> <b>79(3)</b> (2010), 1                              |
| Bahianite    | Al <sub>5</sub> Sb <sup>5+</sup> <sub>3</sub> O <sub>14</sub> (OH) <sub>2</sub>  | A  | 1974-027  | Brazil         | <i>Mineralogical Magazine</i> <b>42</b> (1978), 179   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>126</b> (1976), 113           |
| Baileychlore | (Zn,Fe <sup>2+</sup> ,Al,Mg) <sub>6</sub> (Si,Al) <sub>4</sub> O <sub>10</sub> (OH) <sub>8</sub>   | A  | 1986-056  | Australia      | <i>American Mineralogist</i> <b>73</b> (1988), 135  |   |
| Bairdite     | Pb <sub>2</sub> Cu <sup>2+</sup> <sub>4</sub> Te <sup>6+</sup> <sub>2</sub> O <sub>10</sub> (OH) <sub>2</sub> (SO <sub>4</sub> )·H <sub>2</sub> O            | A  | 2012-061  | USA            | <i>American Mineralogist</i> <b>98</b> (2013), 1315   |   |

|                     |  |     |           |                |  |  |
|---------------------|--|-----|-----------|----------------|--|--|
| Bakhchisaraitsevite | $\text{Na}_2\text{Mg}_5(\text{PO}_4)_4 \cdot 7\text{H}_2\text{O}$  | A   | 1999-005  | Russia         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 402                                      | <i>Canadian Mineralogist</i> <b>38</b> (2000), 831             |
| Baksanite           | $\text{Bi}_6\text{Te}_2\text{S}_3$   | A   | 1992-042  | Russia         | <i>Doklady Akademii Nauk</i> <b>347</b> (1996), 787  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1475            |
| Balangeroite        | $\text{Mg}_{21}\text{Si}_8\text{O}_{27}(\text{OH})_{20}$   | A   | 1982-002  | Italy          | <i>American Mineralogist</i> <b>68</b> (1983), 214   | <i>Zeitschrift für Kristallographie</i> <b>227</b> (2012), 460 |
| Balestraitite       | $\text{KLi}_2\text{V}^{5+}\text{Si}_4\text{O}_{12}$  | A   | 2013-080  | Italy          | <i>American Mineralogist</i> <b>100</b> (2015), 608  |  |
| Baličžuničite       | $\text{Bi}_2\text{O}(\text{SO}_4)_2$   | A   | 2012-098  | Italy          | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1043   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 597            |
| Baliphollite        | $\text{LiBaMg}_2\text{Al}_3(\text{Si}_2\text{O}_6)_2(\text{OH})_8$   | A ? | ?         | China          | <i>Scientia Geologica Sinica</i> <b>1</b> (1975), 100  | <i>Ti Chih K'o Hsueh</i> (1977), 65                            |
| Balkanite           | $\text{Ag}_5\text{Cu}_9\text{HgS}_8$   | A   | 1971-009  | Bulgaria       | <i>American Mineralogist</i> <b>58</b> (1973), 11  | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 279    |
| Balliranoite        | $(\text{Na},\text{K})_6\text{Ca}_2(\text{Si}_6\text{Al}_6\text{O}_{24})\text{Cl}_2(\text{CO}_3)$   | A   | 2008-065  | Italy          | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 113  |  |
| Balyakinite         | $\text{Cu}^{2+}(\text{Te}^{4+}\text{O}_3)$   | A   | 1980-001  | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>253</b> (1980), 1448  | <i>Acta Chemica Scandinavica</i> <b>26</b> (1972), 1423        |
| Bambollaite         | $\text{Cu}(\text{Se},\text{Te})_2$   | A   | 1965-014  | Mexico         | <i>Canadian Mineralogist</i> <b>11</b> (1972), 738   |  |
| Bamfordite          | $\text{Fe}^{3+}\text{Mo}_2\text{O}_6(\text{OH})_3 \cdot \text{H}_2\text{O}$  | A   | 1996-059  | Australia      | <i>American Mineralogist</i> <b>83</b> (1998), 172   |  |
| Banalsite           | $\text{Na}_2\text{BaAl}_4\text{Si}_4\text{O}_{16}$   | G   | 1944      | United Kingdom | <i>Mineralogical Magazine</i> <b>27</b> (1944), 33   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 533             |
| Bandyllite          | $\text{CuB}(\text{OH})_4\text{Cl}$   | G   | 1938      | Chile          | <i>American Mineralogist</i> <b>23</b> (1938), 85  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 713             |
| Bannermanite        | $(\text{Na},\text{K})_x\text{V}^{4+}_x\text{V}^{5+}_{6-x}\text{O}_{15}$ (0.5 < x < 0.9)  | A   | 1980-010  | El Salvador    | <i>American Mineralogist</i> <b>68</b> (1983), 634   |  |
| Bannisterite        | $(\text{Ca},\text{K},\text{Na})(\text{Mn}^{2+},\text{Fe}^{2+})_{10}(\text{Si},\text{Al})_{16}\text{O}_{38}(\text{OH})_8 \cdot n\text{H}_2\text{O}$ | A   | 1967-005  | United Kingdom | <i>Mineralogical Magazine</i> <b>36</b> (1968), 893  | <i>Clays and Clay Minerals</i> <b>40</b> (1992), 129           |
| Baotite             | $\text{Ba}_4(\text{Ti},\text{Nb},\text{W})_8\text{O}_{16}(\text{SiO}_3)_4\text{Cl}$  | A   | 1962 s.p. | China          | <i>Soviet Physics - Crystallography</i> <b>5</b> (1960), 523                                       | <i>Soviet Physics - Crystallography</i> <b>14</b> (1969), 508  |
| Barahonaite-(Al)    | $(\text{Ca},\text{Cu},\text{Na},\text{Fe}^{3+},\text{Al})_{12}\text{Al}_2(\text{AsO}_4)_8(\text{OH},\text{Cl})_x \cdot n\text{H}_2\text{O}$        | A   | 2006-051  | Spain          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 205   |  |
| Barahonaite-(Fe)    | $(\text{Ca},\text{Cu},\text{Na},\text{Fe}^{3+},\text{Al})_{12}\text{Fe}^{3+}_2(\text{AsO}_4)_8(\text{OH},\text{Cl})_x \cdot n\text{H}_2\text{O}$   | A   | 2006-052  | Spain          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 205   |  |
| Bararite            | $(\text{NH}_4)_2\text{SiF}_6$  | G   | 1951      | India          | Dana's System of Mineralogy, 7th ed., Vol. 2. Wiley, New York (1951), 106                          |  |
| Baratovite          | $\text{KLi}_3\text{Ca}_7\text{Ti}_2(\text{SiO}_3)_{12}\text{F}_2$  | A   | 1974-055  | Tajikistan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 580                  | <i>American Mineralogist</i> <b>64</b> (1979), 383             |
| Barberiite          | $(\text{NH}_4)\text{BF}_4$   | A   | 1993-008  | Italy          | <i>American Mineralogist</i> <b>79</b> (1994), 381   | <i>Acta Crystallographica</i> <b>B27</b> (1971), 1102          |
| Barbosalite         | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2$   | G   | 1954      | Brazil         | <i>Science</i> <b>119</b> (1954), 739  | <i>Acta Crystallographica</i> <b>12</b> (1959), 695            |
| Barentsite          | $\text{Na}_7\text{Al}(\text{HCO}_3)_2(\text{CO}_3)_2\text{F}_4$  | A   | 1982-101  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 474                  | <i>Doklady Akademii Nauk SSSR</i> <b>273</b> (1983), 699       |
| Bariandite          | $\text{Al}_{0.6}(\text{V}^{5+},\text{V}^{4+})_8\text{O}_{20} \cdot 9\text{H}_2\text{O}$  | A   | 1970-043  | Gabon          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 49 | <i>American Mineralogist</i> <b>75</b> (1990), 508             |
| Baričite            | $(\text{Mg},\text{Fe})_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O}$   | A   | 1975-027  | Canada         | <i>Canadian Mineralogist</i> <b>14</b> (1976), 403   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1317            |
| Barikaite           | $\text{Ag}_3\text{Pb}_{10}(\text{Sb}_8\text{As}_{11})_{\Sigma 19}\text{S}_{40}$  | A   | 2012-055  | Iran           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3039   | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3093           |
| Barioferrite        | $\text{BaFe}^{3+}_{12}\text{O}_{19}$   | A   | 2009-030  | Israel         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(3)</b> (2010), 22                 |  |
| Bario-olgitite      | $\text{Na}(\text{Na},\text{Sr},\text{Ce})_2\text{Ba}(\text{PO}_4)_2$   | A   | 2003-002  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(1)</b> (2004), 41              | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1521            |

|                       |  |    |           |                |   |  |
|-----------------------|--|----|-----------|----------------|---|--|
| Bario-orthojoaquinite | $\text{Ba}_4\text{Fe}^{2+}_2\text{Ti}_2\text{O}_2(\text{SiO}_3)_8\cdot\text{H}_2\text{O}$                            | A  | 1979-081  | USA            | <i>American Mineralogist</i> <b>67</b> (1982), 809  |  |
| Barioperovskite       | $\text{BaTiO}_3$   | A  | 2006-040  | USA            | <i>American Mineralogist</i> <b>93</b> (2008), 154  | <i>Journal of Applied Crystallography</i> <b>42</b> (2009), 480  |
| Bariopharmacoalumite  | $\text{Ba}_{0.5}\text{Al}_4[(\text{AsO}_4)_3(\text{OH})_4]\cdot 4\text{H}_2\text{O}$                                 | A  | 2010-041  | France         | <i>Mineralogical Magazine</i> <b>75</b> (2011), 135   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 851  |
| Bariopharmacosiderite | $\text{Ba}_{0.5}\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4\cdot 5\text{H}_2\text{O}$                              | Rd | 1994 s.p. | Germany        | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>11</b> (1966), 121   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1477  |
| Bariosincosite        | $\text{Ba}(\text{VO})_2(\text{PO}_4)_2\cdot 4\text{H}_2\text{O}$   | A  | 1998-047  | Australia      | <i>Mineralogical Magazine</i> <b>63</b> (1999), 735   |  |
| Barlowite             | $\text{Cu}_4\text{BrF}(\text{OH})_6$   | A  | 2010-020  | Australia      | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1755  |  |
| Barnesite             | $\text{Na}_2\text{V}^{5+}_6\text{O}_{16}\cdot 3\text{H}_2\text{O}$   | A  | 1967 s.p. | USA            | <i>American Mineralogist</i> <b>48</b> (1963), 1187   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 345                                |
| Barquillite           | $\text{Cu}_2(\text{Cd,Fe})\text{GeS}_4$  | A  | 1996-050  | Spain          | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 111   |  |
| Barrerite             | $\text{Na}_2(\text{Si}_7\text{Al}_2)\text{O}_{18}\cdot 6\text{H}_2\text{O}$  | A  | 1974-017  | Italy          | <i>Mineralogical Magazine</i> <b>40</b> (1975), 208   | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 1123   |
| Barringerite          | $(\text{Fe,Ni})_2\text{P}$   | A  | 1968-037  | Bolivia        | <i>Science</i> <b>165</b> (1969), 169   | <i>Journal of Solid State Chemistry</i> <b>8</b> (1973), 57  |
| Barroisite            | $\square(\text{NaCa})(\text{Mg}_3\text{Al}_2)(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$                       | Rd | 2012 s.p. | Austria        | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>175</b> (1922), 426  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>6</b> (1957), 215                           |
| Barrotite             | $\text{Cu}_9\text{Al}(\text{HSiO}_4)_2[(\text{SO}_4)(\text{HAsO}_4)_{0.5}](\text{OH})_{12}\cdot 8\text{H}_2\text{O}$ | A  | 2011-063a | France         | <i>Riviera Scientifique</i> <b>98</b> (2014), 3   |  |
| Barrydawsonite-(Y)    | $\text{Na}_{1.5}\text{Y}_{0.5}\text{CaSi}_3\text{O}_9\text{H}$   | A  | 2014-042  | Canada         | <i>Mineralogical Magazine</i> <b>79</b> (2015), 671   |  |
| Barstowite            | $\text{Pb}_4(\text{CO}_3)\text{Cl}_6\cdot \text{H}_2\text{O}$  | A  | 1989-057  | United Kingdom | <i>Mineralogical Magazine</i> <b>55</b> (1991), 121   | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 110   |
| Bartelkeite           | $\text{PbFe}^{2+}\text{Ge}(\text{Ge}_2\text{O}_7)(\text{OH})_2\cdot \text{H}_2\text{O}$                              | A  | 1979-029  | Namibia        | <i>Chemie der Erde</i> <b>40</b> (1981), 201  | <i>American Mineralogist</i> <b>97</b> (2012), 1812  |
| Bartonite             | $\text{K}_6\text{Fe}_{20}\text{S}_{26}\text{S}$  | A  | 1977-039  | USA            | <i>American Mineralogist</i> <b>66</b> (1981), 369  | <i>American Mineralogist</i> <b>66</b> (1981), 376   |
| Barwoodite            | $\text{Mn}^{2+}_6(\text{Nb}^{5+}\square)_2(\text{SiO}_4)_2\text{O}_3(\text{OH})_3$                                   | A  | 2017-046  | USA            | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.3749/canmin.1800032">https://doi.org/10.3749/canmin.1800032</a>                      |
| Barylite              | $\text{BaBe}_2\text{Si}_2\text{O}_7$   | Rd | 2014 s.p. | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1876), 123  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 145  |
| Barysilite            | $\text{Pb}_8\text{Mn}(\text{Si}_2\text{O}_7)_3$  | G  | 1888      | Sweden         | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>45</b> (1888), 7  | <i>Mineralogical Magazine</i> <b>66</b> (2002), 353  |
| Baryte                | $\text{Ba}(\text{SO}_4)$   | A  | 1971 s.p. | ?              | Explication Morale du Jeu de Cartes. Bruxelles (1778), 99   | <i>Canadian Mineralogist</i> <b>15</b> (1977), 522   |
| Barytocalcite         | $\text{BaCa}(\text{CO}_3)_2$   | G  | 1824      | United Kingdom | <i>Annals of Philosophy</i> <b>8</b> (1824), 114  | <i>Journal of Research of the National Bureau of Standards - A. Physics and Chemistry</i> <b>75A</b> (1971), 197 |
| Barytolamprophyllite  | $(\text{BaK})\text{Ti}_2\text{Na}_3\text{Ti}(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2$                        | Rd | 2016 s.p. | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>88</b> (1959), 713  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 403   |
| Bassanite             | $\text{Ca}(\text{SO}_4)\cdot 0.5\text{H}_2\text{O}$  | G  | 1910      | Italy          | <i>Atti della Regia Accademia delle Scienze di Napoli, Serie II</i> <b>14</b> (1910), 368 p.  | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 985  |
| Bassetite             | $\text{Fe}^{2+}(\text{UO}_2)_2(\text{PO}_4)_2(\text{H}_2\text{O})_{10}$  | G  | 1915      | United Kingdom | <i>Mineralogical Magazine</i> <b>17</b> (1915), 221   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 663  |
| Bassoite              | $\text{SrV}^{4+}_3\text{O}_7\cdot 4\text{H}_2\text{O}$   | A  | 2011-028  | Italy          | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2677  |  |

|                 |  |    |           |                |   |   |
|-----------------|--|----|-----------|----------------|---|---|
| Bastnäsité-(Ce) | Ce(CO <sub>3</sub> )F  | Rn | 1987 s.p. | Sweden         | Manuels-Roret. Nouveau Manuel Complet de Minéralogie, Première Partie. Paris (1841), 296  | <i>American Mineralogist</i> <b>78</b> (1993), 415                                      |
| Bastnäsité-(La) | La(CO <sub>3</sub> )F  | Rn | 1966 s.p. | Russia         | <i>American Mineralogist</i> <b>51</b> (1966), 152  |   |
| Bastnäsité-(Nd) | Nd(CO <sub>3</sub> )F  | A  | 2011-062  | Norway         | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 187   |   |
| Bastnäsité-(Y)  | Y(CO <sub>3</sub> )F   | A  | 1987 s.p. | Kazakhstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>99</b> (1970), 328  |   |
| Batagayite      | CaZn <sub>2</sub> (Zn,Cu) <sub>6</sub> (PO <sub>4</sub> ) <sub>4</sub> [PO <sub>3</sub> (OH)] <sub>3</sub> ·12H <sub>2</sub> O                                       | A  | 2017-002  | Russia         | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529          |   |
| Batievaite-(Y)  | Ca <sub>2</sub> Y <sub>2</sub> [(H <sub>2</sub> O) <sub>2</sub> □]Ti(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> | Rd | 2015-016  | Russia         | <i>Mineralogy and Petrology</i> <b>110</b> (2016), 895  | <i>Minerals</i> <b>8</b> (2018), 458  |
| Batiferrite     | BaTi <sub>2</sub> Fe <sup>3+</sup> <sub>8</sub> Fe <sup>2+</sup> <sub>2</sub> O <sub>19</sub>  | A  | 1997-038  | Germany        | <i>Mineralogy and Petrology</i> <b>71</b> (2001), 1   |   |
| Batisite        | Na <sub>2</sub> BaTi <sub>2</sub> O <sub>2</sub> (Si <sub>2</sub> O <sub>6</sub> ) <sub>2</sub>  | A  | 1962 s.p. | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>133</b> (1960), 657  | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 843                                  |
| Batisivite      | BaTi <sub>6</sub> (V,Cr) <sub>8</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>22</sub>   | A  | 2006-054  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(5)</b> (2007), 65  | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 975                             |
| Baumhauerite    | Pb <sub>12</sub> As <sub>16</sub> S <sub>36</sub>  | G  | 1902      | Switzerland    | <i>Mineralogical Magazine</i> <b>13</b> (1902), 151   | <i>Zeitschrift für Kristallographie</i> <b>129</b> (1969), 178                          |
| Baumhauerite II | Pb <sub>3</sub> As <sub>4</sub> S <sub>9</sub>   | Q  | 1959      | Switzerland    | <i>Naturwissenschaften</i> <b>46</b> (1959), 72   |   |
| Baumoite        | BaU <sub>3</sub> Mo <sub>2</sub> O <sub>16</sub> (H <sub>2</sub> O) <sub>6</sub>   | A  | 2017-054  | Australia      | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931         |   |
| Baumstarkite    | Ag <sub>3</sub> Sb <sub>3</sub> S <sub>6</sub>   | A  | 1999-049  | Peru           | <i>American Mineralogist</i> <b>87</b> (2002), 753  |   |
| Bauranoite      | BaU <sub>2</sub> O <sub>7</sub> ·4-5H <sub>2</sub> O   | A  | 1971-052  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 75  |   |
| Bavenite        | Ca <sub>4</sub> Be <sub>2+2x</sub> Al <sub>2-x</sub> Si <sub>9</sub> O <sub>26-x</sub> (OH) <sub>2+2x</sub> (x = 0 to 1)   | Rd | 2015 s.p. | Italy          | <i>Atti della Reale Accademia dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali, Serie V</i> <b>10</b> (1901), 139 | <i>Acta Crystallographica</i> <b>20</b> (1966), 301                                     |
| Bavsiite        | Ba <sub>2</sub> V <sub>2</sub> O <sub>2</sub> [Si <sub>4</sub> O <sub>12</sub> ]   | A  | 2014-019  | Canada         | CNMNC Newsletter 21 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 797   |   |
| Bayerite        | Al(OH) <sub>3</sub>  | G  | 1928      | Israel         | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>175</b> (1928), 249  | <i>Zeitschrift für Kristallographie</i> <b>148</b> (1978), 255                          |
| Bayldonite      | Cu <sub>3</sub> PbO(AsO <sub>3</sub> OH) <sub>2</sub> (OH) <sub>2</sub>  | G  | 1865      | United Kingdom | <i>Journal of the Chemical Society</i> <b>18</b> (1865), 259  | <i>American Mineralogist</i> <b>66</b> (1981), 148                                      |
| Bayleyite       | Mg <sub>2</sub> (UO <sub>2</sub> )(CO <sub>3</sub> ) <sub>3</sub> ·18H <sub>2</sub> O  | G  | 1951      | USA            | <i>American Mineralogist</i> <b>36</b> (1951), 1  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>35</b> (1986), 133 |
| Baylissite      | K <sub>2</sub> Mg(CO <sub>3</sub> ) <sub>2</sub> ·4H <sub>2</sub> O  | A  | 1975-024  | Switzerland    | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>56</b> (1976), 187   | <i>Australian Journal of Chemistry</i> <b>30</b> (1977), 1379                           |
| Bazhenovite     | Ca <sub>8</sub> S <sub>5</sub> (S <sub>2</sub> O <sub>3</sub> )(OH) <sub>12</sub> ·20H <sub>2</sub> O  | A  | 1986-053  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 737   | <i>American Mineralogist</i> <b>90</b> (2005), 1556                                     |

|                |   |    |           |                                  |   |   |
|----------------|---|----|-----------|----------------------------------|---|---|
| Bazirite       | BaZrSi <sub>3</sub> O <sub>9</sub>  | A  | 1976-053  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>42</b> (1978), 35  |   |
| Bazzite        | Be <sub>3</sub> (Sc,Fe <sup>3+</sup> ,Mg) <sub>2</sub> Si <sub>6</sub> O <sub>18</sub> ·Na <sub>0.32</sub> ·nH <sub>2</sub> O         | G  | 1915      | Italy                            | <i>Atti della Reale Accademia dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali, Serie V</i> <b>24</b> (1915), 313 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 1419   |
| Bearsite       | Be <sub>2</sub> (AsO <sub>4</sub> )(OH)·4H <sub>2</sub> O   | A  | 1967 s.p. | Kazakhstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 442  |   |
| Bearthite      | Ca <sub>2</sub> Al(PO <sub>4</sub> ) <sub>2</sub> (OH)  | A  | 1986-050  | Italy / Switzerland              | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>73</b> (1993), 1   | <i>Contributions to Mineralogy and Petrology</i> <b>121</b> (1995), 258                               |
| Beaverite-(Cu) | Pb(Fe <sup>3+</sup> <sub>2</sub> Cu)(SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>   | Rd | 1987 s.p. | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>1</b> (1911), 26  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 919   |
| Beaverite-(Zn) | Pb(Fe <sup>3+</sup> <sub>2</sub> Zn)(SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>   | A  | 2010-086  | Japan                            | <i>Mineralogical Magazine</i> <b>75</b> (2011), 375   |   |
| Bechererite    | Zn <sub>7</sub> Cu(OH) <sub>13</sub> [SiO(OH) <sub>3</sub> (SO <sub>4</sub> )]  | A  | 1994-005  | USA                              | <i>American Mineralogist</i> <b>81</b> (1996), 244  | <i>American Mineralogist</i> <b>82</b> (1997), 1014   |
| Beckettite     | Ca <sub>2</sub> V <sub>6</sub> Al <sub>6</sub> O <sub>20</sub>  | A  | 2015-001  | Mexico (meteorite)               | CNMNC Newsletter 25 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 529   |   |
| Becquerelite   | Ca(UO <sub>2</sub> ) <sub>6</sub> O <sub>4</sub> (OH) <sub>6</sub> ·8H <sub>2</sub> O   | G  | 1922      | Democratic Republic of the Congo | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>174</b> (1922), 1240   | <i>American Mineralogist</i> <b>87</b> (2002), 550  |
| Bederite       | Ca <sub>2</sub> Mn <sup>2+</sup> <sub>4</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>6</sub> ·2H <sub>2</sub> O        | A  | 1998-007  | Argentina                        | <i>American Mineralogist</i> <b>84</b> (1999), 1674   |   |
| Béhierite      | Ta(BO <sub>4</sub> )  | Rn | 1967 s.p. | Madagascar                       | <i>American Mineralogist</i> <b>47</b> (1962), 414  |   |
| Behoite        | Be(OH) <sub>2</sub>   | A  | 1969-031  | USA                              | <i>American Mineralogist</i> <b>55</b> (1970), 1  | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>631</b> (2005), 1247                     |
| Béhounekite    | U(SO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O) <sub>4</sub>  | A  | 2010-046  | Czech Republic                   | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2739  |   |
| Beidellite     | (Na,Ca) <sub>0.3</sub> Al <sub>2</sub> (Si,Al) <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub> ·nH <sub>2</sub> O                      | G  | 1925      | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>15</b> (1925), 465  | <i>American Mineralogist</i> <b>70</b> (1985), 1004   |
| Belakovskiiite | Na <sub>7</sub> (UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>4</sub> (SO <sub>3</sub> OH)(H <sub>2</sub> O) <sub>3</sub>                 | A  | 2013-075  | USA                              | <i>Mineralogical Magazine</i> <b>78</b> (2014), 639   |   |
| Belendorffite  | Cu <sub>7</sub> Hg <sub>6</sub>   | A  | 1989-024  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 21  | <i>Acta Chemica Scandinavica</i> <b>23</b> (1969), 1181   |
| Belkovite      | Ba <sub>3</sub> Nb <sub>6</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>12</sub>  | A  | 1989-053  | Russia                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 23  |   |
| Bellbergite    | (K,Ba,Sr) <sub>2</sub> Sr <sub>2</sub> Ca <sub>2</sub> (Ca,Na) <sub>4</sub> (Si,Al) <sub>36</sub> O <sub>72</sub> ·30H <sub>2</sub> O | A  | 1990-057  | Germany                          | <i>Mineralogy and Petrology</i> <b>48</b> (1993), 147   |   |
| Bellidoite     | Cu <sub>2</sub> Se  | A  | 1970-050  | Czech Republic                   | <i>Economic Geology</i> <b>70</b> (1975), 384   |   |
| Bellingerite   | Cu <sub>3</sub> (IO <sub>3</sub> ) <sub>6</sub> ·2H <sub>2</sub> O  | G  | 1940      | Chile                            | <i>American Mineralogist</i> <b>25</b> (1940), 505  | <i>Acta Crystallographica</i> <b>B30</b> (1974), 965  |
| Belloite       | Cu(OH)Cl  | A  | 1998-054  | Chile                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 67  | <i>Monatshefte für Chemie</i> <b>115</b> (1984), 725  |
| Belogubite     | CuZn(SO <sub>4</sub> ) <sub>2</sub> ·10H <sub>2</sub> O   | A  | 2018-005  | Russia                           | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647          |   |
| Belomarinaite  | KNa(SO <sub>4</sub> )   | A  | 2017-069a | Russia                           | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647          |   |
| Belousovite    | KZn(SO <sub>4</sub> )Cl   | A  | 2016-047  | Russia                           | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135  | <a href="https://doi.org/10.1180/minmag.2017.081.084">https://doi.org/10.1180/minmag.2017.081.084</a> |
| Belovite-(Ce)  | NaCeSr <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub> F   | G  | 1954      | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>96</b> (1954), 613   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(2)</b> (1995), 98                 |



|                |  |    |           |                |  |   |
|----------------|--|----|-----------|----------------|--|---|
| Belovite-(La)  | NaLaSr <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub> F  | A  | 1995-023  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(3)</b> (1996), 101                   | <i>Doklady Physics</i> <b>355</b> (1997), 344                             |
| Belyankinite   | Ca <sub>1-2</sub> (Ti,Zr,Nb) <sub>5</sub> O <sub>12</sub> ·9H <sub>2</sub> O (?)   | Q  | 1950      | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>71</b> (1950), 925  |   |
| Bementite      | Mn <sub>7</sub> Si <sub>6</sub> O <sub>15</sub> (OH) <sub>8</sub>  | Rd | 1963 s.p. | USA            | <i>Proceedings of the Academy of Natural Sciences of Philadelphia</i> 1887 (1888), 310                   | <i>American Mineralogist</i> <b>79</b> (1994), 91                         |
| Benauite       | SrFe <sup>3+</sup> <sub>3</sub> (PO <sub>4</sub> )(PO <sub>3</sub> OH)(OH) <sub>6</sub>  | A  | 1995-001  | Germany        | <i>Chemie der Erde</i> <b>56</b> (1996), 171   |   |
| Benavidesite   | Pb <sub>4</sub> MnSb <sub>6</sub> S <sub>14</sub>  | Rn | 1980-073  | Peru           | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 166  | <i>Solid State Sciences</i> <b>5</b> (2003), 771                          |
| Bendadaite     | Fe <sup>2+</sup> Fe <sup>3+</sup> <sub>2</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·4H <sub>2</sub> O               | A  | 1998-053a | Portugal       | <i>Mineralogical Magazine</i> <b>74</b> (2010), 469  |   |
| Benitoite      | BaTiSi <sub>3</sub> O <sub>9</sub>   | G  | 1907      | USA            | <i>University of California Publications. Bulletin of the Department of Geology</i> <b>5</b> (1907), 149 | <i>Zeitschrift für Kristallographie</i> <b>129</b> (1969), 222            |
| Benjaminite    | Ag <sub>3</sub> Bi <sub>7</sub> S <sub>12</sub>  | Rd | 1975-003a | USA            | <i>Canadian Mineralogist</i> <b>13</b> (1975), 402   | <i>Canadian Mineralogist</i> <b>17</b> (1979), 607                        |
| Benleonardite  | Ag <sub>15</sub> Cu(Sb,As) <sub>2</sub> S <sub>7</sub> Te <sub>4</sub>   | A  | 1985-043  | Mexico         | <i>Mineralogical Magazine</i> <b>50</b> (1986), 681  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1213                      |
| Benstonite     | Ba <sub>6</sub> Ca <sub>6</sub> Mg(CO <sub>3</sub> ) <sub>13</sub>   | A  | 1967 s.p. | USA            | <i>American Mineralogist</i> <b>47</b> (1962), 585   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>136</b> (1979), 326 |
| Bentorite      | Ca <sub>6</sub> Cr <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (OH) <sub>12</sub> ·26H <sub>2</sub> O                             | A  | 1979-042  | Israel         | <i>Israel Journal of Earth Sciences</i> <b>29</b> (1980), 81   |   |
| Benyacarite    | KTiMn <sup>2+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> OF·15H <sub>2</sub> O               | A  | 1995-002  | Argentina      | <i>Canadian Mineralogist</i> <b>35</b> (1997), 707   | <i>Zeitschrift für Kristallographie</i> <b>208</b> (1993), 57             |
| Beraunite      | Fe <sup>2+</sup> Fe <sup>3+</sup> <sub>5</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>5</sub> ·6H <sub>2</sub> O                | G  | 1840      | Czech Republic | <i>Journal für Praktische Chemie</i> <b>20</b> (1840), 66  | <i>Zeitschrift für Kristallographie</i> <b>201</b> (1992), 263            |
| Berberite      | Be <sub>2</sub> (BO <sub>3</sub> )(OH)·H <sub>2</sub> O  | A  | 1967-004  | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>174</b> (1967), 189   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>162</b> (1990), 101 |
| Berdesinskiite | V <sup>3+</sup> <sub>2</sub> TiO <sub>5</sub>  | A  | 1980-036  | Kenya          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 110  | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 885               |
| Berezanskite   | KTi <sub>2</sub> Li <sub>3</sub> Si <sub>12</sub> O <sub>30</sub>  | A  | 1996-041  | Tajikistan     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(4)</b> (1997), 75                    | <i>Mineralogical Magazine</i> <b>80</b> (2016), 733                       |
| Bergenite      | Ca <sub>2</sub> Ba <sub>4</sub> (UO <sub>2</sub> ) <sub>9</sub> O <sub>6</sub> (PO <sub>4</sub> ) <sub>6</sub> ·16H <sub>2</sub> O | G  | 1959      | Germany        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1959), 232  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 91                         |
| Bergslagite    | CaBe(AsO <sub>4</sub> )(OH)  | A  | 1983-021  | Sweden         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 257  | <i>Zeitschrift für Kristallographie</i> <b>166</b> (1984), 73             |
| Berlinite      | Al(PO <sub>4</sub> )   | G  | 1868      | Sweden         | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>25</b> (1868), 197                   | <i>American Mineralogist</i> <b>92</b> (2007), 1998                       |
| Bermanite      | Mn <sup>2+</sup> Mn <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·4H <sub>2</sub> O                | G  | 1936      | USA            | <i>American Mineralogist</i> <b>21</b> (1936), 656   | <i>American Mineralogist</i> <b>61</b> (1976), 1241                       |
| Bernalite      | Fe(OH) <sub>3</sub>  | A  | 1991-032  | Australia      | <i>American Mineralogist</i> <b>78</b> (1993), 827   | <i>Mineralogical Magazine</i> <b>69</b> (2005), 309                       |
| Bernardite     | TlAs <sub>5</sub> S <sub>8</sub>   | A  | 1987-052  | Macedonia      | <i>Mineralogical Magazine</i> <b>53</b> (1989), 531  |   |
| Bernarlottiite | Pb <sub>12</sub> (As <sub>10</sub> Sb <sub>6</sub> )S <sub>36</sub>  | A  | 2013-133  | Italy          | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 701  |   |
| Berndtite      | SnS <sub>2</sub>   | Rn | 1968 s.p. | Bolivia        | <i>Fortschritte der Mineralogie</i> <b>42</b> (1966), 211  | <i>American Mineralogist</i> <b>63</b> (1978), 289                        |
| Berryite       | Cu <sub>3</sub> Ag <sub>2</sub> Pb <sub>3</sub> Bi <sub>7</sub> S <sub>16</sub>  | A  | 1965-013  | USA            | <i>Canadian Mineralogist</i> <b>8</b> (1966), 407  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 465                        |
| Berthierine    | (Fe <sup>2+</sup> ,Fe <sup>3+</sup> ,Al) <sub>3</sub> (Si,Al) <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>                        | G  | 1832      | France         | <i>Traité Élémentaire de Minéralogie</i> , 2nd ed. Verdière, Paris (1832), 128                           | <i>Canadian Mineralogist</i> <b>23</b> (1985), 213                        |

|                   |  |    |           |                |   |   |
|-------------------|--|----|-----------|----------------|---|---|
| Berthierite       | FeSb <sub>2</sub> S <sub>4</sub>   | G  | 1827      | France         | <i>Edinburgh Journal of Science</i> <b>7</b> (1827), 353  | <i>Journal of Solid State Chemistry</i> <b>162</b> (2001), 79                           |
| Bertossaite       | Li <sub>2</sub> CaAl <sub>4</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>4</sub>  | A  | 1965-038  | Rwanda         | <i>Canadian Mineralogist</i> <b>8</b> (1966), 668   | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1079                                     |
| Bertrandite       | Be <sub>4</sub> Si <sub>2</sub> O <sub>7</sub> (OH) <sub>2</sub>   | G  | 1878      | France         | <i>Bulletin de la Société Minéralogique de France</i> <b>6</b> (1883), 252  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 13                            |
| Beryl             | Be <sub>3</sub> Al <sub>2</sub> Si <sub>6</sub> O <sub>18</sub>  | G  | ?         | unknown        | <i>Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts</i> <b>46</b> (1798), 158   | <i>Mineralogical Magazine</i> <b>72</b> (2008), 799                                     |
| Beryllite         | Be <sub>3</sub> (SiO <sub>4</sub> )(OH) <sub>2</sub> ·H <sub>2</sub> O   | G  | 1954      | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>99</b> (1954), 451   |   |
| Beryllonite       | NaBe(PO <sub>4</sub> )   | G  | 1888      | USA            | <i>American Journal of Science</i> <b>136</b> (1888), 290   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>20</b> (1973), 1   |
| Berzelianite      | Cu <sub>2-x</sub> Se (x ≈ 0.12)  | G  | 1832      | Sweden         | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 534  | <i>Journal of Solid State Chemistry</i> <b>93</b> (1991), 202                           |
| Berzeliite        | (NaCa <sub>2</sub> )Mg <sub>2</sub> (AsO <sub>4</sub> ) <sub>3</sub>   | G  | 1840      | Sweden         | <i>Annalen der Chemie und Pharmacie Heidelberg</i> <b>34</b> (1840), 211  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1081                                    |
| Beshtauite        | (NH <sub>4</sub> ) <sub>2</sub> (UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O   | A  | 2012-051  | Russia         | <i>American Mineralogist</i> <b>99</b> (2014), 1783   |   |
| Betalomonosovite  | Na <sub>5+x</sub> Ti <sub>4</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> [PO <sub>3</sub> (OH)] <sub>2-y</sub> [PO <sub>2</sub> (OH)] <sub>2</sub> O <sub>2</sub><br>[(OH,F) <sub>2-x</sub> O <sub>z</sub> ] [0 < x < 2, 0 < y < 1, 0 < z < 1] | Rd | 2015 s.p. | Russia         | <i>Canadian Mineralogist</i> <b>53</b> (2015), 401  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 289                             |
| Betekhtinite      | (Cu,Fe) <sub>21</sub> Pb <sub>2</sub> S <sub>15</sub>  | G  | 1955      | Germany        | <i>Geologie</i> <b>4</b> (1955), 535  | <i>Acta Crystallographica</i> <b>12</b> (1959), 646                                     |
| Betpakdalite-CaCa | [Ca <sub>2</sub> (H <sub>2</sub> O) <sub>17</sub> Ca(H <sub>2</sub> O) <sub>6</sub> ][Mo <sup>6+</sup> <sub>8</sub> As <sup>5+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> O <sub>36</sub> (OH)]  | Rd | 1967 s.p. | Kazakhstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>90</b> (1961), 425  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 61                                       |
| Betpakdalite-CaMg | [Ca <sub>2</sub> (H <sub>2</sub> O) <sub>17</sub> Mg(H <sub>2</sub> O) <sub>6</sub> ][Mo <sup>6+</sup> <sub>8</sub> As <sup>5+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> O <sub>36</sub> (OH)]  | A  | 2011-034  | Namibia        | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175  |   |
| Betpakdalite-FeFe | [Fe <sup>3+</sup> <sub>2</sub> (H <sub>2</sub> O) <sub>15</sub> (OH) <sub>2</sub> Fe <sup>3+</sup> (H <sub>2</sub> O) <sub>6</sub> ][Mo <sub>8</sub> As <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> O <sub>37</sub> ]                                   | A  | 2017-011  | Australia      | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529  |   |
| Betpakdalite-NaCa | [Na <sub>2</sub> (H <sub>2</sub> O) <sub>17</sub> Ca(H <sub>2</sub> O) <sub>6</sub> ][Mo <sup>6+</sup> <sub>8</sub> As <sup>5+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> O <sub>34</sub> (OH) <sub>3</sub> ]                                    | Rn | 1971-057  | Kazakhstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>100</b> (1971), 603   |   |
| Betpakdalite-NaNa | [Na <sub>2</sub> (H <sub>2</sub> O) <sub>16</sub> Na(H <sub>2</sub> O) <sub>6</sub> ][Mo <sup>6+</sup> <sub>8</sub> As <sup>5+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> O <sub>33</sub> (OH) <sub>4</sub> ]                                    | A  | 2011-078  | Chile          | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175  |   |
| Bettertonite      | Al <sub>6</sub> (AsO <sub>4</sub> ) <sub>3</sub> (OH) <sub>9</sub> (H <sub>2</sub> O) <sub>5</sub> ·11H <sub>2</sub> O   | A  | 2014-074  | United Kingdom | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1849  |   |
| Beudantite        | PbFe <sup>3+</sup> <sub>3</sub> (AsO <sub>4</sub> )(SO <sub>4</sub> )(OH) <sub>6</sub>   | Rd | 1987 s.p. | Germany        | <i>Annals of Philosophy</i> <b>11</b> (1826), 194   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 27                            |
| Beusite           | Mn <sup>2+</sup> Mn <sup>2+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub>   | A  | 1968-012  | Argentina      | <i>American Mineralogist</i> <b>53</b> (1968), 1799   | <i>American Mineralogist</i> <b>76</b> (1991), 1985                                     |
| Beusite-(Ca)      | CaMn <sup>2+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub>  | A  | 2017-051  | Canada         | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/mgm.2018.120">https://doi.org/10.1180/mgm.2018.120</a> |
| Beyerite          | CaBi <sub>2</sub> O <sub>2</sub> (CO <sub>3</sub> ) <sub>2</sub>   | G  | 1943      | Germany        | <i>American Mineralogist</i> <b>28</b> (1943), 521  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 693                                      |
| Bezsmertnovite    | (Au,Ag) <sub>4</sub> Cu(Te,Pb)   | A  | 1979-014  | Kazakhstan     | <i>Doklady Akademii Nauk SSSR</i> <b>249</b> (1979), 185  |   |
| Biachellaite      | (Na,Ca,K) <sub>8</sub> (Si <sub>6</sub> Al <sub>6</sub> O <sub>24</sub> )(SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>0.5</sub> ·H <sub>2</sub> O   | A  | 2007-044  | Italy          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>137(3)</b> (2008), 57  | <i>Crystallography Reports</i> <b>53</b> (2008), 981                                    |
| Bianchite         | Zn(SO <sub>4</sub> )·6H <sub>2</sub> O   | G  | 1930      | Italy          | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VI</i> <b>41</b> (1930), 760   |   |

|                |  |   |           |                                  |   |  |
|----------------|--|---|-----------|----------------------------------|---|--|
| Bicapite       | $[KNa_2Mg_2(H_2O)_{25}][H_2PV^{5+}_{12}O_{40}(V^{5+}O)_2]$ | A | 2018-048  | USA                              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037                                    |  |
| Bicchulite     | $Ca_2Al_2SiO_6(OH)_2$                                      | A | 1973-006  | Japan                            | <i>Mineralogical Journal</i> <b>7</b> (1973), 243   | <i>Zeitschrift für Kristallographie</i> <b>152</b> (1980), 13  |
| Bideauxite     | $AgPb_2F_2Cl_3$  | A | 1969-038  | USA                              | <i>Mineralogical Magazine</i> <b>37</b> (1970), 637   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 915             |
| Bieberite      | $Co(SO_4) \cdot 7H_2O$                                     | G | 1845      | Germany                          | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 487  | <i>American Mineralogist</i> <b>92</b> (2007), 532             |
| Biehlite       | $Sb^{3+}_2MoO_6$   | A | 1999-019a | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 234   | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 529 |
| Bigcreekite    | $BaSi_2O_5 \cdot 4H_2O$                                    | A | 1999-015  | USA                              | <i>Canadian Mineralogist</i> <b>39</b> (2001), 761  |  |
| Bijvoetite-(Y) | $Y_8(UO_2)_{16}O_8(CO_3)_{16}(OH)_8 \cdot 39H_2O$          | A | 1981-035  | Democratic Republic of the Congo | <i>Canadian Mineralogist</i> <b>20</b> (1982), 231  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 153             |
| Bikitaite      | $LiAlSi_2O_6 \cdot H_2O$                                   | A | 1997 s.p. | Zimbabwe                         | <i>American Mineralogist</i> <b>42</b> (1957), 792  | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 247    |
| Bilibinskite   | $PbAu_3Cu_2Te_2$   | A | 1977-024  | Russia / Kazakhstan              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>107</b> (1978), 310   | <i>Novye dannye o Mineralakh</i> <b>37</b> (1991), 138         |
| Bilinite       | $Fe^{2+}Fe^{3+}_2(SO_4)_4 \cdot 22H_2O$                    | G | 1913      | Czech Republic                   | <i>Sbornik Klubu prirodovědeckého</i> <b>2</b> (1913)   |  |
| Billietite     | $Ba(UO_2)_6O_4(OH)_6 \cdot 8H_2O$                          | G | 1947      | Democratic Republic of the Congo | <i>Annales de la Société Géologique Belge</i> <b>70</b> (1947), B212  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1197            |
| Billingsleyite | $Ag_7AsS_6$  | A | 1967-012  | USA                              | <i>American Mineralogist</i> <b>53</b> (1968), 1791   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 155             |
| Billwiseite    | $Sb^{3+}_5Nb_3WO_{18}$                                     | A | 2010-053  | Pakistan                         | <i>Canadian Mineralogist</i> <b>50</b> (2012), 805  |  |
| Bindheimite    | $Pb_2Sb^{5+}_2O_7$   | Q | 2013 s.p. | Russia                           | A System of Mineralogy, 5th ed. Wiley, New York (1868)  |  |
| Biphosphammite | $(NH_4,K)H_2(PO_4)$  | G | 1870      | Australia                        | <i>The Rural Carolinian</i> <b>1</b> (1870), 469  | <i>Mineralogical Magazine</i> <b>38</b> (1972), 965            |
| Biraite-(Ce)   | $Ce_2Fe^{2+}(Si_2O_7)(CO_3)$                               | A | 2003-037  | Russia                           | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 715   |  |
| Birchite       | $Cd_2Cu_2(PO_4)_2(SO_4) \cdot 5H_2O$                       | A | 2006-048  | Australia                        | <i>American Mineralogist</i> <b>93</b> (2008), 910  |  |
| Biringuccite   | $Na_2B_5O_8(OH) \cdot H_2O$                                | A | 1967 s.p. | Italy                            | <i>Accademia Nazionale dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali, Serie VIII</i> <b>30</b> (1961) 74                                   | <i>American Mineralogist</i> <b>59</b> (1974), 1005            |
| Birnessite     | $(Na,Ca,K)_{0.6}(Mn^{4+},Mn^{3+})_2O_4 \cdot 1.5H_2O$      | G | 1956      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>31</b> (1956), 283   | <i>American Mineralogist</i> <b>92</b> (2007), 771             |
| Birunite       | $Ca_{18}(SiO_3)_{8.5}(CO_3)_{8.5}(SO_4) \cdot 15H_2O$      | Q | 1957      | Uzbekistan                       | <i>Doklady Akademii Nauk Uzbekistan SSR</i> <b>12</b> (1957), 17  |  |
| Bischofite     | $MgCl_2 \cdot 6H_2O$                                       | G | 1877      | Germany                          | Die Bildung der Steinsalzlager und ihrer Mutterlaugensalze unter spezieller Berücksichtigung der Flöze von Douglasshall in der Egelnschen Mulde. Pfeffer, Halle (1877), 156 | <i>Acta Crystallographica</i> <b>C41</b> (1985), 8             |
| Bismite        | $Bi_2O_3$  | G | 1868      | Bolivia                          | A System of Mineralogy, 5th ed. Wiley, New York (1868), 185   | <i>Acta Chemica Scandinavica</i> <b>24</b> (1970), 384         |
| Bismoclite     | $BiOCl$  | G | 1935      | South Africa                     | <i>Mineralogical Magazine</i> <b>24</b> (1935), 59  | <i>Zeitschrift für Kristallographie</i> <b>205</b> (1993), 35  |

|                      |   |    |           |                |  |  |
|----------------------|---|----|-----------|----------------|--|--|
| Bismuth              | Bi  | G  | 1546      | Germany        | De natura fossilium, Libri X (1546)  | <i>Journal of the Physical Society of Japan</i> <b>51</b> (1982), 3826 |
| Bismuthinite         | Bi <sub>2</sub> S <sub>3</sub>  | G  | 1832      | ?              | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 418   | <i>Physics and Chemistry of Minerals</i> <b>32</b> (2005), 578         |
| Bismutite            | Bi <sub>2</sub> O <sub>2</sub> (CO <sub>3</sub> )   | G  | 1841      | Germany        | <i>Annalen der Physik und Chemie</i> <b>23</b> (1841), 627   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 693                     |
| Bismutocolumbite     | BiNbO <sub>4</sub>  | A  | 1991-003  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(3)</b> (1992), 130                               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 145          |
| Bismutoferrite       | Fe <sup>3+</sup> <sub>2</sub> Bi(SiO <sub>4</sub> ) <sub>2</sub> (OH)   | G  | 1871      | Germany        | <i>Journal für Praktische Chemie</i> <b>4</b> (1871), 353  | <i>Soviet Physics - Crystallography</i> <b>22</b> (1977), 419          |
| Bismutohauchecornite | Ni <sub>9</sub> Bi <sub>2</sub> S <sub>8</sub>  | A  | 1978 s.p. | Russia         | <i>Trudy Mineralogicheskoy Muzeya Akademiyi Nauk SSSR</i> <b>26</b> (1978), 201                                      | <i>Mineralogical Magazine</i> <b>43</b> (1980), 873                    |
| Bismutostibiconite   | (Bi,Fe <sup>3+</sup> ,□) <sub>2</sub> Sb <sup>5+</sup> <sub>2</sub> O <sub>7</sub>  | Q  | 2013 s.p. | Germany        | <i>Chemie der Erde</i> <b>42</b> (1983), 77  |  |
| Bismutotantalite     | BiTaO <sub>4</sub>  | G  | 1929      | Uganda         | <i>Mineralogical Magazine</i> <b>22</b> (1929), 185  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 103                     |
| Bitikleite           | Ca <sub>3</sub> (SbSn)(AlO <sub>4</sub> ) <sub>3</sub>  | Rn | 2009-052  | Russia         | <i>American Mineralogist</i> <b>95</b> (2010), 959   |  |
| Bityite              | CaLiAl <sub>2</sub> (Si <sub>2</sub> BeAl)O <sub>10</sub> (OH) <sub>2</sub>   | A  | 1998 s.p. | Madagascar     | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>146</b> (1908), 1367                                    | <i>American Mineralogist</i> <b>68</b> (1983), 130                     |
| Bixbyite             | Mn <sup>3+</sup> <sub>2</sub> O <sub>3</sub>  | G  | 1897      | USA            | <i>American Journal of Science</i> <b>154</b> (1897), 105  | <i>Journal of Solid State Chemistry</i> <b>181</b> (2008), 2250        |
| Bjarebyite           | BaMn <sup>2+</sup> <sub>2</sub> Al <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>3</sub>   | A  | 1972-022  | USA            | <i>Mineralogical Record</i> <b>4</b> (1973), 282   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1033                    |
| Blakeite             | Fe <sup>3+</sup> <sub>2</sub> (Te <sup>4+</sup> O <sub>3</sub> ) <sub>3</sub> (?)   | Q  | 1944      | USA            | <i>American Mineralogist</i> <b>29</b> (1944), 211   |  |
| Blatonite            | (UO <sub>2</sub> )(CO <sub>3</sub> )·H <sub>2</sub> O   | A  | 1997-025  | USA            | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1077  |  |
| Blatterite           | Sb <sup>5+</sup> <sub>3</sub> Mn <sup>3+</sup> <sub>9</sub> Mn <sup>2+</sup> <sub>35</sub> (BO <sub>3</sub> ) <sub>16</sub> O <sub>32</sub>                                   | A  | 1984-038  | Sweden         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 121  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1171                    |
| Bleasdaleite         | Ca <sub>2</sub> Cu <sub>5</sub> (Bi,Cu)(PO <sub>4</sub> ) <sub>4</sub> (H <sub>2</sub> O,OH,Cl) <sub>13</sub>   | A  | 1998-003a | Australia      | <i>Australian Journal of Mineralogy</i> <b>5</b> (1999), 69  |  |
| Blixite              | Pb <sub>8</sub> O <sub>5</sub> (OH) <sub>2</sub> Cl <sub>4</sub>  | A  | 1962 s.p. | Sweden         | <i>Arkiv för Mineralogi och Geologi</i> <b>2</b> (1958), 411   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 515                     |
| Blödite              | Na <sub>2</sub> Mg(SO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O  | A  | 1982 s.p. | Austria        | Chemische Untersuchungen mineralischer, vegetabilischer und animalischer Substanzen. Maurerschen, Berlin (1821), 240 | <i>Canadian Mineralogist</i> <b>23</b> (1985), 669                     |
| Blossite             | Cu <sub>2</sub> V <sup>5+</sup> <sub>2</sub> O <sub>7</sub>   | A  | 1986-002  | El Salvador    | <i>American Mineralogist</i> <b>72</b> (1987), 397   | <i>Acta Crystallographica</i> <b>B31</b> (1975), 603                   |
| Bluebellite          | Cu <sub>6</sub> (IO <sub>3</sub> )(OH) <sub>10</sub> Cl   | A  | 2013-121  | USA            | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1325   |  |
| Bluelizardite        | Na <sub>7</sub> (UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>4</sub> Cl(H <sub>2</sub> O) <sub>2</sub>   | A  | 2013-062  | USA            | <i>Journal of Geosciences</i> <b>59</b> (2014), 145  |  |
| Bluestreakite        | K <sub>4</sub> Mg <sub>2</sub> (V <sup>4+</sup> <sub>2</sub> V <sup>5+</sup> <sub>8</sub> O <sub>28</sub> )·14H <sub>2</sub> O  | A  | 2014-047  | USA            | <i>Canadian Mineralogist</i> <b>52</b> (2014), 1007  |  |
| Bobcookite           | NaAl(UO <sub>2</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>4</sub> ·18H <sub>2</sub> O   | A  | 2014-030  | USA            | <i>Mineralogical Magazine</i> <b>79</b> (2015), 695  |  |
| Bobfergusonite       | Na <sub>2</sub> Mn <sup>2+</sup> <sub>5</sub> Fe <sup>3+</sup> Al(PO <sub>4</sub> ) <sub>6</sub>  | A  | 1984-072a | Canada         | <i>Canadian Mineralogist</i> <b>24</b> (1986), 599   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 705                     |
| Bobierrite           | Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ·8H <sub>2</sub> O  | G  | 1868      | Chile          | A System of Mineralogy, 5th ed. Wiley, New York (1868), 795  | <i>American Mineralogist</i> <b>71</b> (1986), 1229                    |
| Bobjonesite          | V <sup>4+</sup> O(SO <sub>4</sub> )·3H <sub>2</sub> O   | A  | 2000-045  | USA            | <i>Canadian Mineralogist</i> <b>41</b> (2003), 83  |  |
| Bobkingite           | Cu <sub>5</sub> Cl <sub>2</sub> (OH) <sub>8</sub> ·2H <sub>2</sub> O  | A  | 2000-029  | United Kingdom | <i>Mineralogical Magazine</i> <b>66</b> (2002), 301  |  |
| Bobmeyerite          | Pb <sub>4</sub> (Al <sub>3</sub> Cu)(Si <sub>4</sub> O <sub>12</sub> )(S <sub>0.5</sub> Si <sub>0.5</sub> O <sub>4</sub> )(OH) <sub>7</sub> Cl(H <sub>2</sub> O) <sub>3</sub> | A  | 2012-019  | USA            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 81   |  |
| Bobshannonite        | KBaNa <sub>2</sub> (Mn,Na) <sub>8</sub> (Nb,Ti) <sub>4</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>4</sub> O <sub>4</sub> (OH) <sub>4</sub> (O,F) <sub>2</sub>               | Rd | 2014-052  | Canada         | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1791   |  |
| Bobtrillite          | (Na,Ca) <sub>13</sub> Sr <sub>11</sub> (Zr,Y,Nb) <sub>14</sub> Si <sub>42</sub> B <sub>6</sub> O <sub>132</sub> (OH) <sub>12</sub> ·12H <sub>2</sub> O                        | A  | 2001-041  | Canada         | <i>Canadian Mineralogist</i> <b>43</b> (2005), 747   |  |

|                |  |    |           |                     |  |   |
|----------------|--|----|-----------|---------------------|--|---|
| Bodieite       | $\text{Bi}^{3+}_2(\text{Te}^{4+}\text{O}_3)_2(\text{SO}_4)$  | A  | 2017-117  | USA                 | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647   | <a href="https://doi.org/10.3749/canmin.1800046">https://doi.org/10.3749/canmin.1800046</a> |
| Bogdanovite    | $(\text{Au,Te,Pb})_3(\text{Cu,Fe})$  | A  | 1978-019  | Kazakhstan / Russia | <i>Vestnik Moskovskogo Universiteta, Geologiya Seriya</i> <b>1</b> (1979), 44  | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Bøggildite     | $\text{Na}_2\text{Sr}_2\text{Al}_2(\text{PO}_4)\text{F}_9$   | G  | 1951      | Denmark (Greenland) | <i>Meddelelser fra Dansk Geologisk Forening</i> <b>12</b> (1951), 109  | <i>Canadian Mineralogist</i> <b>20</b> (1982), 263  |
| Boggsite       | $\text{Na}_3\text{Ca}_8(\text{Si}_{77}\text{Al}_{19})\text{O}_{192}\cdot 70\text{H}_2\text{O}$               | A  | 1989-009  | USA                 | <i>American Mineralogist</i> <b>75</b> (1990), 1200  | <i>American Mineralogist</i> <b>75</b> (1990), 501  |
| Bøgvadite      | $\text{Na}_2\text{Ba}_2\text{SrAl}_4\text{F}_{20}$   | A  | 1987-029  | Denmark (Greenland) | <i>Bulletin of the Geological Society of Denmark</i> <b>37</b> (1988), 21  | <i>Mineralogy and Petrology</i> <b>108</b> (2014), 479                                      |
| Bohdanowiczite | $\text{AgBiSe}_2$  | Rd | 1978 s.p. | Poland              | <i>Przeglad Geologiczny</i> <b>15</b> (1967), 240  | <i>Mineralogical Magazine</i> <b>43</b> (1979), 131   |
| Böhmite        | $\text{AlO}(\text{OH})$  | G  | 1927      | France              | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>184</b> (1927), 1661  | <i>Clays and Clay Minerals</i> <b>29</b> (1981), 435  |
| Bohseite       | $\text{Ca}_4\text{Be}_{3+x}\text{Al}_{1-x}\text{Si}_9\text{O}_{25-x}(\text{OH})_{3+x}$ ( $x = 0$ to $1$ )    | Rd | 2015 s.p. | Denmark (Greenland) | <i>Mineralogical Magazine</i> <b>81</b> (2017), 35   |   |
| Bokite         | $(\text{Al,Fe})_{1.3}(\text{V}^{5+},\text{V}^{4+},\text{Fe}^{3+})_8\text{O}_{20}\cdot 7.5\text{H}_2\text{O}$ | A  | 1967 s.p. | Kazakhstan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 51  | <i>American Mineralogist</i> <b>75</b> (1990), 508  |
| Boleite        | $\text{KAg}_9\text{Pb}_{26}\text{Cu}_{24}\text{Cl}_{62}(\text{OH})_{48}$                                     | Rn | 1891      | Mexico              | <i>Bulletin de la Société Française de Minéralogie</i> <b>14</b> (1891), 283   | <i>Canadian Mineralogist</i> <b>38</b> (2000), 801  |
| Bolivarite     | $\text{Al}_2(\text{PO}_4)(\text{OH})_3\cdot 4\text{H}_2\text{O}$   | Q  | 1921      | Spain               | <i>Boletín de la Real Sociedad Española de Historia Natural</i> <b>21</b> (1921), 326  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 59   |
| Boltwoodite    | $(\text{K,Na})(\text{UO}_2)(\text{SiO}_3\text{OH})\cdot 1.5\text{H}_2\text{O}$                               | G  | 1956      | USA                 | <i>Science</i> <b>124</b> (1956), 931  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1069   |
| Bonaccordite   | $\text{Ni}_2\text{Fe}^{3+}\text{O}_2(\text{BO}_3)$   | A  | 1974-019  | South Africa        | <i>Transactions of the Geological Society of South Africa</i> <b>77</b> (1974), 375  |   |
| Bonacinaite    | $\text{Sc}(\text{AsO}_4)\cdot 2\text{H}_2\text{O}$   | A  | 2018-056  | Italy               | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Bonattite      | $\text{Cu}(\text{SO}_4)\cdot 3\text{H}_2\text{O}$  | G  | 1957      | Italy               | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VIII</i> <b>22</b> (1957), 318  | <i>Acta Crystallographica</i> <b>B24</b> (1968), 508  |
| Bonazziite     | $\text{As}_4\text{S}_4$  | A  | 2013-141  | Kyrgyzstan          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 121  |   |
| Bonshtedtite   | $\text{Na}_3\text{Fe}^{2+}(\text{PO}_4)(\text{CO}_3)$  | A  | 1981-026a | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 486  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>142(1)</b> (2013), 46          |
| Boothite       | $\text{Cu}(\text{SO}_4)\cdot 7\text{H}_2\text{O}$  | G  | 1903      | USA                 | <i>University of California Department of Geology Bulletin</i> <b>3</b> (1903), 207  | <i>Australian Journal of Mineralogy</i> <b>10</b> (2004), 3                                 |
| Boracite       | $\text{Mg}_3\text{B}_7\text{O}_{13}\text{Cl}$  | G  | 1789      | Germany             | <i>Bergmannisches Journal</i> <b>1</b> (1789), 393   | <i>Zeitschrift für Kristallographie</i> <b>138</b> (1973), 64                               |
| Boralsilite    | $\text{Al}_{16}\text{B}_6\text{O}_{30}(\text{Si}_2\text{O}_7)$   | A  | 1996-029  | Antarctica          | <i>American Mineralogist</i> <b>83</b> (1998), 638   | <i>American Mineralogist</i> <b>84</b> (1999), 1152   |
| Borax          | $\text{Na}_2\text{B}_4\text{O}_5(\text{OH})_4\cdot 8\text{H}_2\text{O}$                                      | G  | ?         | unknown             | original paper?  | <i>Acta Crystallographica</i> <b>E64</b> (2008), i24  |
| Borcarite      | $\text{Ca}_4\text{MgB}_4\text{O}_6(\text{CO}_3)_2(\text{OH})_6$  | A  | 1968 s.p. | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>94</b> (1965), 180   | <i>Mineralogical Magazine</i> <b>59</b> (1995), 297   |
| Borisenkoite   | $\text{Cu}_3[(\text{V,As})\text{O}_4]_2$   | A  | 2015-113  | Russia              | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  |   |
| Borishanskiite | $\text{Pd}_{1+x}(\text{As,Pb})_2$ ( $x = 0.0-0.2$ )  | A  | 1974-010  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 57   |   |

|                 |   |    |           |                |  |  |
|-----------------|---|----|-----------|----------------|--|--|
| Bornemanite     | $\text{Na}_6(\text{Na}\square)\text{Ba}_2\text{Tl}_2\text{Nb}_2(\text{Si}_2\text{O}_7)_4(\text{PO}_4)_2\text{O}_4(\text{OH})_2\text{F}_2$ | Rd | 1973-053  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 322                | <i>Mineralogical Magazine</i> <b>71</b> (2007), 593                                  |
| Bornhardtite    | $\text{Co}^{2+}\text{Co}^{3+}_2\text{Se}_4$   | G  | 1955      | Germany        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1955), 133                                    |  |
| Bornite         | $\text{Cu}_5\text{FeS}_4$   | A  | 1962 s.p. | ?              | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559                   | <i>American Mineralogist</i> <b>90</b> (2005), 1256                                  |
| Borocookeite    | $\text{LiAl}_4(\text{Si}_3\text{B})\text{O}_{10}(\text{OH})_8$  | A  | 2000-013  | Russia         | <i>American Mineralogist</i> <b>88</b> (2003), 830   |  |
| Borodaevite     | $\text{Ag}_{4.83}\text{Fe}_{0.21}\text{Pb}_{0.45}(\text{Bi},\text{Sb})_{8.84}\text{S}_{16}$   | A  | 1991-037  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(4)</b> (1992), 113           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 337                        |
| Boromullite     | $\text{Al}_9\text{BSi}_2\text{O}_{19}$  | A  | 2007-021  | Australia      | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 935                                      |  |
| Boromuscovite   | $\text{KAl}_2(\text{Si}_3\text{B})\text{O}_{10}(\text{OH})_2$   | A  | 1989-027  | USA            | <i>American Mineralogist</i> <b>76</b> (1991), 1998  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 859                                   |
| Borovskite      | $\text{Pd}_3\text{SbTe}_4$  | A  | 1972-032  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 427                |  |
| Bortnikovite    | $\text{Pd}_4\text{Cu}_3\text{Zn}$   | A  | 2006-027  | Russia         | <i>Geology of Ore Deposits</i> <b>49</b> (2007), 318   |  |
| Boscardinite    | $\text{TiPb}_4(\text{Sb}_7\text{As}_2)_{\Sigma=9}\text{S}_{18}$   | A  | 2010-079  | Italy          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 235   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 47                                   |
| Bosiite         | $\text{NaFe}^{3+}_3(\text{Al}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$                                | A  | 2014-094  | Russia         | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 581                                      |  |
| Bosoite         | $\text{SiO}_2 \cdot n\text{C}_x\text{H}_{2x+2}$   | A  | 2014-023  | Japan          | CNMNC Newsletter 21 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 797                        |  |
| Bostwickite     | $\text{CaMn}^{3+}_6\text{Si}_3\text{O}_{16} \cdot 7\text{H}_2\text{O}$  | A  | 1982-073  | USA            | <i>Mineralogical Magazine</i> <b>47</b> (1983), 387  |  |
| Botallackite    | $\text{Cu}_2\text{Cl}(\text{OH})_3$   | G  | 1865      | United Kingdom | <i>Journal of the Chemical Society</i> <b>18</b> (1865), 212                                     | <i>Mineralogical Magazine</i> <b>49</b> (1985), 87                                   |
| Botryogen       | $\text{MgFe}^{3+}(\text{SO}_4)_2(\text{OH}) \cdot 7\text{H}_2\text{O}$  | G  | 1828      | Sweden         | <i>Annalen der Physik und Chemie</i> <b>12</b> (1828), 491                                       | <i>Acta Crystallographica</i> <b>B24</b> (1968), 760                                 |
| Bottinoite      | $\text{NiSb}^{5+}_2(\text{OH})_{12} \cdot 6\text{H}_2\text{O}$  | A  | 1991-029  | Italy          | <i>American Mineralogist</i> <b>77</b> (1992), 1301  | <i>American Mineralogist</i> <b>81</b> (1996), 1494                                  |
| Bouazzerite     | $\text{Bi}_6(\text{Mg},\text{Co})_{11}\text{Fe}_{14}(\text{AsO}_4)_{18}\text{O}_{12}(\text{OH})_4 \cdot 86\text{H}_2\text{O}$             | A  | 2005-042  | Morocco        | <i>American Mineralogist</i> <b>92</b> (2007), 1630  |  |
| Boulangerite    | $\text{Pb}_5\text{Sb}_4\text{S}_{11}$   | G  | 1837      | France         | <i>Annalen der Physik und Chemie</i> <b>41</b> (1837), 216                                       | <i>Canadian Mineralogist</i> <b>50</b> (2012), 181                                   |
| Bournonite      | $\text{CuPbSbS}_3$  | G  | 1805      | United Kingdom | System of Mineralogy, vol. II. Bell & Bradfute, Edinburgh (1805), 579                            | <i>Zeitschrift für Kristallographie</i> <b>131</b> (1970), 397                       |
| Boussingaultite | $(\text{NH}_4)_2\text{Mg}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$   | G  | 1864      | Italy          | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>58</b> (1864), 583 | <i>Acta Crystallographica</i> <b>17</b> (1964), 1478                                 |
| Bowieite        | $\text{Rh}_2\text{S}_3$   | A  | 1980-022  | USA            | <i>Canadian Mineralogist</i> <b>22</b> (1984), 543   |  |
| Boyleite        | $\text{Zn}(\text{SO}_4) \cdot 4\text{H}_2\text{O}$  | A  | 1977-026  | Germany        | <i>Chemie der Erde</i> <b>37</b> (1978), 73  | <i>Acta Crystallographica</i> <b>E57</b> (2001), i109                                |
| Braccoite       | $\text{NaMn}^{2+}_5[\text{Si}_5\text{O}_{14}(\text{OH})](\text{AsO}_3)(\text{OH})$  | A  | 2013-093  | Italy          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 171  |  |
| Bracewellite    | $\text{CrO}(\text{OH})$   | A  | 1967-035  | Guyana         | <i>U.S. Geological Survey Professional Paper</i> <b>887</b> (1976), 1                            |  |
| Brackebuschite  | $\text{Pb}_2\text{Mn}^{3+}(\text{VO}_4)_2(\text{OH})$   | G  | 1880      | Argentina      | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>32</b> (1880), 708                 | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1027                                  |
| Bradaczekite    | $\text{NaCu}_4(\text{AsO}_4)_3$   | A  | 2000-002  | Russia         | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1115  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(5)</b> (2001), 1 |



|                  |   |    |           |                                  |  |   |
|------------------|---|----|-----------|----------------------------------|--|---|
| Bradleyite       | $\text{Na}_3\text{Mg}(\text{PO}_4)(\text{CO}_3)$  | G  | 1941      | USA                              | <i>American Mineralogist</i> <b>26</b> (1941), 646   |   |
| Braggite         | PtS   | G  | 1932      | South Africa                     | <i>Mineralogical Magazine</i> <b>23</b> (1932), 188  | <i>Acta Crystallographica</i> <b>B29</b> (1973), 1446                                   |
| Braithwaiteite   | $\text{NaCu}^{2+}_5(\text{Sb}^{5+}\text{Ti}^{4+})\text{O}_2(\text{AsO}_4)_4[\text{AsO}_3(\text{OH})]_2 \cdot 8\text{H}_2\text{O}$       | A  | 2006-050  | Bolivia                          | <i>Canadian Mineralogist</i> <b>47</b> (2009), 947   | <i>Journal of Coordination Chemistry</i> <b>61</b> (2008), 15                           |
| Braitschite-(Ce) | $\text{Ca}_{6.15}\text{Na}_{0.85}\text{REE}_{2.08}[\text{B}_6\text{O}_7(\text{OH})_3(\text{O},\text{OH})_3]_4 \cdot \text{H}_2\text{O}$ | A  | 1967-029  | USA                              | <i>American Mineralogist</i> <b>53</b> (1968), 1081  | <i>American Mineralogist</i> <b>96</b> (2011), 197                                      |
| Brandãoite       | $\text{BeAl}_2(\text{PO}_4)_2(\text{OH})_2(\text{H}_2\text{O})_5$   | A  | 2016-071a | Brazil                           | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931  | <a href="https://doi.org/10.1180/mgm.2018.121">https://doi.org/10.1180/mgm.2018.121</a> |
| Brandholzite     | $\text{MgSb}_2(\text{OH})_{12} \cdot 6\text{H}_2\text{O}$   | A  | 1998-017  | Germany                          | <i>American Mineralogist</i> <b>85</b> (2000), 593   | <i>Journal of Geosciences</i> <b>55</b> (2010), 149                                     |
| Brandtite        | $\text{Ca}_2\text{Mn}^{2+}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$   | G  | 1888      | Sweden                           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>45</b> (1888), 417   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1181                                     |
| Brannerite       | $\text{UTi}_2\text{O}_6$  | A  | 1967 s.p. | USA                              | <i>Journal of the Franklin Institute</i> <b>189</b> (1920), 225  | <i>Canadian Mineralogist</i> <b>20</b> (1982), 271                                      |
| Brannockite      | $\text{KSn}_2(\text{Li}_3\text{Si}_2)\text{O}_{30}$   | A  | 1972-029  | USA                              | <i>Mineralogical Record</i> <b>4</b> (1973), 73  | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 153                             |
| Brassite         | $\text{Mg}(\text{AsO}_3\text{OH}) \cdot 4\text{H}_2\text{O}$  | A  | 1973-047  | Czech Republic                   | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>96</b> (1973), 365                                      | <i>Acta Crystallographica</i> <b>B32</b> (1976), 1460                                   |
| Braunerite       | $\text{K}_2\text{Ca}(\text{UO}_2)(\text{CO}_3)_3 \cdot 6\text{H}_2\text{O}$   | A  | 2015-123  | Czech Republic                   | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691  |   |
| Braunite         | $\text{Mn}^{2+}\text{Mn}^{3+}_6\text{O}_8(\text{SiO}_4)$  | G  | 1828      | Germany / Italy                  | <i>Annalen der Physik und Chemie</i> <b>14</b> (1828), 197   | <i>American Mineralogist</i> <b>61</b> (1976), 1226                                     |
| Brazilianite     | $\text{NaAl}_3(\text{PO}_4)_2(\text{OH})_4$   | G  | 1945      | Brazil                           | <i>American Mineralogist</i> <b>30</b> (1945), 572   | <i>American Mineralogist</i> <b>98</b> (2013), 1624                                     |
| Bredigite        | $(\text{Ca},\text{Ba})\text{Ca}_{13}\text{Mg}_2(\text{SiO}_4)_8$  | G  | 1948      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>28</b> (1948), 255  | <i>American Mineralogist</i> <b>61</b> (1976), 74                                       |
| Breithauptite    | NiSb  | G  | 1845      | Germany                          | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Acta Chemica Scandinavica</i> <b>23</b> (1969), 2621                                 |
| Brendelite       | $(\text{Bi},\text{Pb})_2(\text{Fe}^{3+},\text{Fe}^{2+})\text{O}_2(\text{OH})(\text{PO}_4)$  | A  | 1997-001  | Germany                          | <i>Mineralogy and Petrology</i> <b>63</b> (1998), 263  |   |
| Brenkite         | $\text{Ca}_2(\text{CO}_3)\text{F}_2$  | A  | 1977-036  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1978), 325  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>27</b> (1980), 261 |
| Brewsterite-Ba   | $\text{Ba}(\text{Al}_2\text{Si}_6)\text{O}_{16} \cdot 5\text{H}_2\text{O}$  | A  | 1997 s.p. | USA / Italy                      | <i>Canadian Mineralogist</i> <b>31</b> (1993), 687   | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 353                              |
| Brewsterite-Sr   | $\text{Sr}(\text{Al}_2\text{Si}_6)\text{O}_{16} \cdot 5\text{H}_2\text{O}$  | Rn | 1997 s.p. | United Kingdom                   | <i>Edinburgh Philosophy Journal</i> <b>6</b> (1822), 112   | <i>American Mineralogist</i> <b>72</b> (1987), 645                                      |
| Breyite          | $\text{Ca}_3\text{S}_3\text{O}_9$   | A  | 2018-062  | Brazil                           | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Brezinaite       | $\text{Cr}_3\text{S}_4$   | A  | 1969-004  | USA                              | <i>American Mineralogist</i> <b>54</b> (1969), 1509  | <i>Acta Crystallographica</i> <b>10</b> (1957), 620                                     |
| Brianite         | $\text{Na}_2\text{CaMg}(\text{PO}_4)_2$   | A  | 1966-030  | USA                              | <i>Geochimica et Cosmochimica Acta</i> <b>31</b> (1967), 1711  | <i>American Mineralogist</i> <b>60</b> (1975), 717                                      |
| Brianroulstonite | $\text{Ca}_3\text{B}_5\text{O}_6(\text{OH})_7\text{Cl}_2 \cdot 8\text{H}_2\text{O}$   | A  | 1996-009  | Canada                           | <i>Canadian Mineralogist</i> <b>35</b> (1997), 751   |   |
| Brianyoungite    | $\text{Zn}_3(\text{CO}_3)(\text{OH})_4$   | A  | 1991-053  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>57</b> (1993), 665  |   |
| Briartite        | $\text{Cu}_2\text{FeGeS}_4$   | A  | 1965-018  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>88</b> (1965), 432                                      | <i>Materials Research Bulletin</i> <b>14</b> (1979), 1195                               |

|                 |   |    |           |   |  |  |
|-----------------|---|----|-----------|---|--|--|
| Bridgmanite     | MgSiO <sub>3</sub>  | A  | 2014-017  | Australia (meteorite)                       | <i>Science</i> <b>346</b> (2014), 1100   | <i>American Mineralogist</i> <b>1026</b> (2017), 357           |
| Brindleyite     | (Ni,Al) <sub>3</sub> (Si,Al) <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>  | A  | 1975-009a | Greece                                      | <i>American Mineralogist</i> <b>63</b> (1978), 484   |  |
| Brinrobertsite  | (Na,K,Ca) <sub>0.3</sub> (Al,Fe,Mg) <sub>4</sub> (Si,Al) <sub>8</sub> O <sub>20</sub> (OH) <sub>4</sub> ·3.5H <sub>2</sub> O  | A  | 1997-040  | United Kingdom                              | <i>Mineralogical Magazine</i> <b>66</b> (2002), 605  |  |
| Britholite-(Ce) | (Ce,Ca) <sub>5</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH)  | Rn | 1987 s.p. | Denmark (Greenland)                         | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 190   | <i>American Mineralogist</i> <b>86</b> (2001), 1066            |
| Britholite-(Y)  | (Y,Ca) <sub>5</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH)   | Rn | 1966 s.p. | Japan                                       | <i>Scientific Papers of the Institute of Physical and Chemical Research</i> <b>34</b> (1938), 1018 | <i>Zeitschrift für Kristallographie</i> <b>206</b> (1993), 233 |
| Britvinitite    | Pb <sub>14</sub> Mg <sub>9</sub> (Si <sub>10</sub> O <sub>28</sub> )(BO <sub>3</sub> ) <sub>4</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>12</sub> F <sub>2</sub> | A  | 2006-031  | Sweden                                      | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(6)</b> (2007), 18                 | <i>Crystallography Reports</i> <b>53</b> (2008), 206           |
| Brizziite       | NaSbO <sub>3</sub>  | A  | 1993-044  | Italy                                       | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 667   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 89             |
| Brochantite     | Cu <sub>4</sub> (SO <sub>4</sub> )(OH) <sub>6</sub>   | A  | 1980 s.p. | Russia                                      | <i>Annals of Philosophy</i> <b>8</b> (1824), 241   | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 267    |
| Brockite        | (Ca,Th,Ce)(PO <sub>4</sub> )·H <sub>2</sub> O   | A  | 1967 s.p. | USA   | <i>American Mineralogist</i> <b>47</b> (1962), 1346  | <i>Journal of Chemical Physics</i> <b>16</b> (1948), 1003      |
| Brodtkorbite    | Cu <sub>2</sub> HgSe <sub>2</sub>   | A  | 1999-023  | Argentina                                   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 225   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 663    |
| Bromargyrite    | AgBr  | A  | 1962 s.p. | Mexico                                      | <i>Annalen der Physik und Chemie</i> <b>153</b> (1849), 134  | <i>Physical Review B</i> <b>59</b> (1999), 750                 |
| Bromellite      | BeO   | G  | 1925      | Sweden                                      | <i>Zeitschrift für Kristallographie</i> <b>62</b> (1925), 113                                      | <i>Journal of Applied Physics</i> <b>59</b> (1986), 3728       |
| Brontesite      | (NH <sub>4</sub> ) <sub>3</sub> PbCl <sub>5</sub>   | A  | 2008-039  | Italy                                       | <i>Canadian Mineralogist</i> <b>47</b> (2009), 1237  |  |
| Brookite        | TiO <sub>2</sub>  | G  | 1825      | United Kingdom                              | <i>Annals of Philosophy</i> <b>9</b> (1825), 140   | <i>Canadian Mineralogist</i> <b>17</b> (1979), 77              |
| Browneite       | MnS   | A  | 2012-008  | Poland (meteorite)                          | <i>American Mineralogist</i> <b>97</b> (2012), 2056  |  |
| Brownleeite     | MnSi  | A  | 2008-011  | IDP (interplanetary dust particle) over USA | <i>American Mineralogist</i> <b>95</b> (2010), 221   | <i>Powder Diffraction</i> <b>6</b> (1991), 194                 |
| Brownmillerite  | Ca <sub>2</sub> Fe <sup>3+</sup> AlO <sub>5</sub>   | A  | 1963-017  | Germany                                     | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1964), 22                                       | <i>American Mineralogist</i> <b>89</b> (2004), 405             |
| Brucite         | Mg(OH) <sub>2</sub>   | G  | 1818      | USA   | <i>American Journal of Science</i> <b>1</b> (1818), 439  | <i>American Mineralogist</i> <b>91</b> (2006), 127             |
| Brüggenite      | Ca(IO <sub>3</sub> ) <sub>2</sub> ·H <sub>2</sub> O   | A  | 1970-040  | Chile                                       | <i>Journal of Research of the U.S. Geological Survey</i> <b>2</b> (1974), 471                      |  |
| Brugnatellite   | Mg <sub>6</sub> Fe <sup>3+</sup> (CO <sub>3</sub> )(OH) <sub>13</sub> ·4H <sub>2</sub> O  | Q  | 1909      | Italy                                       | <i>Rendiconti delle Sedute della Reale Accademia dei Lincei, Serie V</i> <b>18</b> (1909), 3       |  |
| Brumadoite      | Cu <sub>3</sub> (Te <sup>6+</sup> O <sub>4</sub> )(OH) <sub>4</sub> ·5H <sub>2</sub> O  | A  | 2008-028  | Brazil                                      | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1201   |  |
| Brunogeierite   | Fe <sup>2+</sup> <sub>2</sub> Ge <sup>4+</sup> O <sub>4</sub>   | Rd | 1972-004  | Namibia                                     | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1972), 263                                      | <i>Journal of Geosciences</i> <b>58</b> (2013), 71             |
| Brushite        | Ca(PO <sub>3</sub> OH)·2H <sub>2</sub> O  | G  | 1865      | Venezuela                                   | <i>American Journal of Science and Arts</i> <b>39</b> (1865), 43                                   | <i>Physics and Chemistry of Minerals</i> <b>31</b> (2004), 606 |
| Bubnovaite      | K <sub>2</sub> Na <sub>8</sub> Ca(SO <sub>4</sub> ) <sub>6</sub>  | A  | 2014-108  | Russia                                      | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 677  |  |
| Buchwaldite     | NaCa(PO <sub>4</sub> )  | A  | 1975-041  | Denmark (Greenland)                         | <i>American Mineralogist</i> <b>62</b> (1977), 362   | <i>Acta Crystallographica</i> <b>C39</b> (1983), 1483          |

|                |  |    |          |                    |   |  |
|----------------|--|----|----------|--------------------|---|--|
| Buckhornite    | $(\text{Pb}_2\text{BiS}_3)(\text{AuTe}_2)$   | A  | 1988-022 | USA                | <i>Canadian Mineralogist</i> <b>30</b> (1992), 1039   | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 10                    |
| Buddingtonite  | $(\text{NH}_4)(\text{AlSi}_3)\text{O}_8$   | A  | 1963-001 | USA                | <i>American Mineralogist</i> <b>49</b> (1964), 831  | <i>Physics and Chemistry of Minerals</i> <b>28</b> (2001), 188                   |
| Bukovite       | $\text{Cu}_4\text{Ti}_2\text{Se}_4$  | A  | 1970-029 | Czech Republic     | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 529 | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 122        |
| Bukovskýite    | $\text{Fe}^{3+}_2(\text{AsO}_4)(\text{SO}_4)(\text{OH})\cdot 7\text{H}_2\text{O}$  | A  | 1967-022 | Czech Republic     | <i>Acta Universitatis Carolinae Geologica</i> <b>4</b> (1967), 297                                  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 133 |
| Bulachite      | $\text{Al}_2(\text{AsO}_4)(\text{OH})_3\cdot 3\text{H}_2\text{O}$  | A  | 1982-081 | Germany            | <i>Aufschluss</i> <b>34</b> (1983), 445   |  |
| Bulgakite      | $\text{Li}_2(\text{Ca},\text{Na})\text{Fe}^{2+}_7\text{Ti}_2(\text{Si}_4\text{O}_{12})_2\text{O}_2(\text{OH})_4(\text{O},\text{F})(\text{H}_2\text{O})_2$                | A  | 2014-041 | Tajikistan         | <i>Canadian Mineralogist</i> <b>54</b> (2016), 33   |  |
| Bultfonteinite | $\text{Ca}_2\text{SiO}_3(\text{OH})\text{F}\cdot \text{H}_2\text{O}$   | G  | 1932     | South Africa       | <i>Mineralogical Magazine</i> <b>23</b> (1932), 145   | <i>Acta Crystallographica</i> <b>16</b> (1963), 551                              |
| Bunnoite       | $\text{Mn}^{2+}_6\text{AlSi}_6\text{O}_{18}(\text{OH})_3$  | A  | 2014-054 | Japan              | <i>Mineralogy and Petrology</i> <b>110</b> (2016), 917  |  |
| Bunsenite      | $\text{NiO}$   | G  | 1868     | Germany            | A System of Mineralogy, 5th ed. Wiley, New York (1868), 134   |  |
| Burangaite     | $\text{NaFe}^{2+}\text{Al}_5(\text{PO}_4)_4(\text{OH})_6\cdot 2\text{H}_2\text{O}$   | A  | 1976-013 | Rwanda             | <i>Bulletin of the Geological Society of Finland</i> <b>49</b> (1977), 33                           | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1515                              |
| Burbankite     | $(\text{Na},\text{Ca})_3(\text{Sr},\text{Ba},\text{Ce})_3(\text{CO}_3)_5$  | G  | 1953     | USA                | <i>American Mineralogist</i> <b>38</b> (1953), 1169   | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 507                      |
| Burckhardtite  | $\text{Pb}_2(\text{Fe}^{3+}\text{Te}^{6+})(\text{AlSi}_3\text{O}_8)\text{O}_6$   | A  | 1976-052 | Mexico             | <i>American Mineralogist</i> <b>64</b> (1979), 355  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1763                             |
| Burgessite     | $\text{Co}_2(\text{H}_2\text{O})_4[\text{AsO}_3(\text{OH})]_2(\text{H}_2\text{O})$   | A  | 2007-055 | Canada             | <i>Canadian Mineralogist</i> <b>47</b> (2009), 159  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 165                               |
| Burkeite       | $\text{Na}_4(\text{SO}_4)(\text{CO}_3)$  | G  | 1921     | USA                | <i>Journal of Industrial and Engineering Chemistry</i> <b>13</b> (1921), 249                        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 203                    |
| Burnettite     | $\text{CaVAISiO}_6$  | A  | 2013-054 | Mexico (meteorite) | CNMNC Newsletter 17 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 2997                          |  |
| Burnsite       | $\text{KCdCu}_7\text{O}_2(\text{SeO}_3)_2\text{Cl}_9$  | A  | 2000-050 | Russia             | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1171   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1587                              |
| Burovaite-Ca   | $(\text{Na},\text{K})_4\text{Ca}_2(\text{Ti},\text{Nb})_8[\text{Si}_4\text{O}_{12}]_4(\text{OH},\text{O})_8\cdot 12\text{H}_2\text{O}$                                   | A  | 2008-001 | Russia             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(2)</b> (2009), 40                  |  |
| Burpalite      | $\text{Na}_4\text{Ca}_2\text{Zr}_2(\text{Si}_2\text{O}_7)_2\text{F}_4$   | A  | 1988-036 | Russia             | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 177  |  |
| Burroite       | $\text{Ca}_2(\text{NH}_4)_2(\text{V}_{10}\text{O}_{28})\cdot 15\text{H}_2\text{O}$   | A  | 2016-079 | USA                | <i>Canadian Mineralogist</i> <b>55</b> (2017), 473  |  |
| Burtite        | $\text{CaSn}^{4+}(\text{OH})_6$  | A  | 1980-078 | Morocco            | <i>Canadian Mineralogist</i> <b>19</b> (1981), 397  |  |
| Buryatite      | $\text{Ca}_3(\text{Si},\text{Fe}^{3+},\text{Al})(\text{SO}_4)\text{B}(\text{OH})_4(\text{OH},\text{O})_6\cdot 12\text{H}_2\text{O}$                                      | A  | 2000-021 | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(2)</b> (2001), 72               |  |
| Buseckite      | $(\text{Fe},\text{Zn},\text{Mn})\text{S}$  | A  | 2011-070 | Poland (meteorite) | <i>American Mineralogist</i> <b>97</b> (2012), 1226   |  |
| Buserite       | $\text{Na}_4\text{Mn}_{14}\text{O}_{27}\cdot 21\text{H}_2\text{O}$ (?)   | A  | 1970-024 | Japan              | <i>Helvetica Chimica Acta</i> <b>54</b> (1971), 1112  | <i>American Mineralogist</i> <b>68</b> (1983), 972                               |
| Bushmakinitite | $\text{Pb}_2\text{Al}(\text{PO}_4)(\text{VO}_4)(\text{OH})$  | A  | 2001-031 | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(2)</b> (2002), 62               | <i>Doklady Earth Sciences</i> <b>382</b> (2002), 100                             |
| Bussenite      | $\text{Ba}_4(\text{Na},\square)_2(\text{Fe}^{2+},\text{Na})_2\text{Ti}_2(\text{Si}_2\text{O}_7)_2(\text{CO}_3)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_2\text{F}_2$ | Rd | 2000-035 | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 50               | <i>Crystallography Reports</i> <b>47</b> (2002), 43                              |
| Bussyite-(Ce)  | $(\text{Ce},\text{REE})_3(\text{Na},\text{H}_2\text{O})_6\text{MnSi}_9\text{Be}_5(\text{O},\text{OH})_{30}\text{F}_4$  | A  | 2007-039 | Canada             | <i>Canadian Mineralogist</i> <b>47</b> (2009), 193  |  |
| Bussyite-(Y)   | $(\text{Y},\text{REE},\text{Ca})_3(\text{Na},\text{Ca})_6\text{MnSi}_9\text{Be}_5(\text{O},\text{F},\text{OH})_{34}$   | A  | 2014-060 | Canada             | <i>Canadian Mineralogist</i> <b>53</b> (2015), 235  |  |

|                         |   |   |           |                                  |   |   |
|-------------------------|---|---|-----------|----------------------------------|---|---|
| Bustamite               | $\text{CaMn}^{2+}\text{Si}_2\text{O}_6$   | G | 1826      | USA                              | <i>Annales des Sciences Naturelles</i> <b>8</b> (1826), 411                                       | <i>American Mineralogist</i> <b>63</b> (1978), 274                                      |
| Butianite               | $\text{Ni}_6\text{SnS}_2$   | A | 2016-028  | Mexico (meteorite)               | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915                         | <a href="https://doi.org/10.2138/am-2018-6599">https://doi.org/10.2138/am-2018-6599</a> |
| Butlerite               | $\text{Fe}^{3+}(\text{SO}_4)(\text{OH})\cdot 2\text{H}_2\text{O}$   | G | 1928      | USA                              | <i>American Mineralogist</i> <b>13</b> (1928), 203  | <i>American Mineralogist</i> <b>56</b> (1971), 751                                      |
| Bütschliite             | $\text{K}_2\text{Ca}(\text{CO}_3)_2$  | G | 1947      | USA                              | <i>American Mineralogist</i> <b>32</b> (1947), 607  | <i>Acta Crystallographica</i> <b>C40</b> (1984), 1299                                   |
| Buttgenbachite          | $\text{Cu}_{36}(\text{NO}_3)_2\text{Cl}_8(\text{OH})_{62}\cdot n\text{H}_2\text{O}$   | G | 1925      | Democratic Republic of the Congo | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>181</b> (1925), 421 | <i>Mineralogical Magazine</i> <b>67</b> (2003), 47                                      |
| Byelorussite-(Ce)       | $\text{NaBa}_2\text{Ce}_2\text{Mn}^{2+}\text{Ti}_2\text{Si}_8\text{O}_{26}(\text{F},\text{OH})\cdot \text{H}_2\text{O}$   | A | 1988-042  | Belarus                          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(5)</b> (1989), 100            | <i>Crystallography Reports</i> <b>49</b> (2004), 964                                    |
| Bykovaite               | $(\text{Ba},\text{Na},\text{K})_2(\text{Na},\text{Ti},\text{Mn})_4(\text{Ti},\text{Nb})_2\text{O}_2\text{Si}_4\text{O}_{14}(\text{H}_2\text{O}, \text{F},\text{OH})_2\cdot 3.5\text{H}_2\text{O}$                 | A | 2003-044  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(5)</b> (2005), 40                | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 251                             |
| Byrudite                | $(\text{Be}, \square)(\text{V}^{3+}, \text{Ti})_3\text{O}_6$  | A | 2013-045  | Norway                           | <i>Mineralogical Magazine</i> <b>79</b> (2015), 261   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1147                                     |
| Bystrite                | $(\text{Na},\text{K})_7\text{Ca}(\text{Si}_6\text{Al}_6)\text{O}_{24}(\text{S}^{2-})_{1.5}\cdot \text{H}_2\text{O}$   | A | 1990-008  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>120(3)</b> (1991), 97             | <i>Doklady Akademii Nauk SSSR</i> <b>319</b> (1991), 873                                |
| Byströmite              | $\text{MgSb}^{5+}_2\text{O}_6$  | G | 1952      | Mexico                           | <i>American Mineralogist</i> <b>37</b> (1952), 53   |   |
| Bytízite                | $\text{Cu}_3\text{SbSe}_3$  | A | 2016-044  | Czech Republic                   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 199   |   |
| Byzantievite            | $\text{Ba}_5(\text{Ca}, \text{REE}, \text{Y})_{22}(\text{Ti}, \text{Nb})_{18}(\text{SiO}_4)_4[(\text{PO}_4), (\text{SiO}_4)]_4(\text{BO}_3)_9\text{O}_{22}[(\text{OH}), \text{F}]_{43}(\text{H}_2\text{O})_{1.5}$ | A | 2009-001  | Tajikistan                       | <i>Mineralogical Magazine</i> <b>74</b> (2010), 285   |   |
| Cabalarite              | $\text{CaMg}_2(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$  | A | 1997-012  | Switzerland                      | <i>American Mineralogist</i> <b>85</b> (2000), 1307   |   |
| Cabriite                | $\text{Pd}_2\text{CuSn}$  | A | 1981-057  | Russia                           | <i>Canadian Mineralogist</i> <b>21</b> (1983), 481  |   |
| Cabvinite               | $\text{Th}_2\text{F}_7(\text{OH})\cdot 3\text{H}_2\text{O}$   | A | 2016-011  | Italy                            | <i>American Mineralogist</i> <b>102</b> (2017), 1384  |   |
| Cacoxenite              | $\text{Fe}^{3+}_{24}\text{AlO}_6(\text{PO}_4)_{17}(\text{OH})_{12}\cdot 75\text{H}_2\text{O}$   | G | 1826      | Czech Republic                   | <i>Archiv für die Gesamte Naturlehre</i> <b>8</b> (1826), 446                                     | <i>Nature</i> <b>306</b> (1983), 356  |
| Cadmium                 | Cd  | A | 1980-086a | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 304                 | <i>Journal of Chemical Physics</i> <b>3</b> (1935), 605                                 |
| Cadmoindite             | $\text{CdIn}_2\text{S}_4$   | A | 2003-042  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(4)</b> (2004), 21             |   |
| Cadmoselite             | CdSe  | G | 1957      | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>86</b> (1957), 626                  | <i>Acta Crystallographica</i> <b>A33</b> (1977), 355                                    |
| Cadwaladerite           | $\text{AlCl}(\text{OH})_2\cdot 4\text{H}_2\text{O}$   | Q | 1941      | Chile                            | <i>Academy of Natural Science of Philadelphia, Notulae Naturae</i> <b>80</b> (1941)               |   |
| Caesiumpharmacosiderite | $\text{CsFe}_4[(\text{AsO}_4)_3(\text{OH})_4]\cdot 4\text{H}_2\text{O}$   | A | 2013-096  | Chile                            | CNMNC Newsletter 18 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 3249                        |   |
| Cafarsite               | $(\text{Ca}, \text{Na}, \square)_{19}\text{Ti}_8\text{Fe}^{3+}_4\text{Fe}^{2+}_4(\text{AsO}_3)_{28}\text{F}$  | A | 1965-036  | Switzerland                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>46</b> (1966), 367       | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 859                             |
| Cafetite                | $\text{CaTi}_2\text{O}_5\cdot \text{H}_2\text{O}$   | A | 1962 s.p. | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>88</b> (1959), 444                  | <i>American Mineralogist</i> <b>88</b> (2003), 424                                      |
| Cahnite                 | $\text{Ca}_2\text{B}(\text{AsO}_4)(\text{OH})_4$  | G | 1927      | USA                              | <i>American Mineralogist</i> <b>12</b> (1927), 149  | <i>American Mineralogist</i> <b>46</b> (1961), 1077                                     |

|                       |  |     |           |                  |  |   |
|-----------------------|--|-----|-----------|------------------|--|---|
| Cairncrossite         | $\text{Sr}_2\text{Ca}_{7-x}\text{Na}_{2x}(\text{Si}_4\text{O}_{10})_4(\text{OH})_2(\text{H}_2\text{O})_{15-x}$                                       | A   | 2013-012  | South Africa     | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 495                                  |   |
| Calamaite             | $\text{Na}_2\text{TiO}(\text{SO}_4)_2 \cdot 2\text{H}_2\text{O}$   | A   | 2016-036  | Chile            | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 801                                  |   |
| Calaverite            | $\text{AuTe}_2$  | G   | 1868      | USA              | <i>American Journal of Science and Arts</i> <b>95</b> (1868), 305                            | <i>Acta Crystallographica</i> <b>B49</b> (1993), 6                                |
| Calciborite           | $\text{CaB}_2\text{O}_4$   | G   | 1956      | Russia           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>85</b> (1956), 76              | <i>Doklady Akademii Nauk SSSR</i> <b>251</b> (1980), 1122                         |
| Calcinaksite          | $\text{KNaCa}(\text{Si}_4\text{O}_{10}) \cdot \text{H}_2\text{O}$  | A   | 2013-081  | Germany          | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 397                                       |   |
| Calcioancylite-(Ce)   | $(\text{Ce}, \text{Ca}, \text{Sr})\text{CO}_3(\text{OH}, \text{H}_2\text{O})$  | Rn  | 1987 s.p. | Russia           | <i>Comptes Rendus de l'Academie des Sciences de Russie</i> (1922), 60                        | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>171</b> (1997), 309         |
| Calcioancylite-(Nd)   | $\text{Nd}_{2.8}\text{Ca}_{1.2}(\text{CO}_3)_4(\text{OH})_3 \cdot \text{H}_2\text{O}$  | Rn  | 1989-008  | Italy            | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 413                                   |   |
| Calcioandyrrobertsite | $\text{KCaCu}_5(\text{AsO}_4)_4[\text{As}(\text{OH})_2\text{O}_2] \cdot 2\text{H}_2\text{O}$   | Rn  | 1997-023  | Namibia          | <i>Mineralogical Record</i> <b>30</b> (1999), 181  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 817                                |
| Calcioaravaipaite     | $\text{PbCa}_2\text{AlF}_9$  | A   | 1994-018  | USA              | <i>Mineralogical Record</i> <b>27</b> (1996), 293  | <i>American Mineralogist</i> <b>96</b> (2011), 402                                |
| Calcio Burbankite     | $\text{Na}_3(\text{Ca}, \text{Ce}, \text{Sr}, \text{La})_3(\text{CO}_3)_5$   | A   | 1993-001  | Canada           | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1231  | <i>Crystallography Reports</i> <b>46</b> (2001), 927                              |
| Calcio catapleite     | $\text{CaZrSi}_3\text{O}_9 \cdot 2\text{H}_2\text{O}$  | Rn  | 2007 s.p. | Russia           | <i>Doklady Akademii Nauk SSSR</i> <b>154</b> (1964), 607                                     | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1037                               |
| Calcio copiapite      | $\text{CaFe}^{3+}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$  | A   | 1967 s.p. | Azerbaijan       | <i>Trudy Azerbaidzhanskogo Geograficheskogo Obshchestva</i> (1960), 49                       |   |
| Calcio delrioite      | $\text{Ca}(\text{VO}_3)_2 \cdot 4\text{H}_2\text{O}$   | A   | 2012-031  | USA              | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2803   |   |
| Calcio ferrite        | $\text{Ca}_4\text{MgFe}^{3+}_4(\text{PO}_4)_6(\text{OH})_4 \cdot 12\text{H}_2\text{O}$   | G   | 1858      | Germany          | <i>Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefakten-Kunde</i> (1858), 287 | <i>Acta Crystallographica</i> <b>E70</b> (2014), i16                              |
| Calcio hilairite      | $\text{CaZrSi}_3\text{O}_9 \cdot 3\text{H}_2\text{O}$  | A   | 1984-023  | USA              | <i>American Mineralogist</i> <b>73</b> (1988), 1191  | <i>Crystallography Reports</i> <b>47</b> (2002), 748                              |
| Calcio johillerite    | $\text{NaCaMg}_3(\text{AsO}_4)_3$  | A   | 2016-068  | Russia           | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315                   |   |
| Calcio langbeinite    | $\text{K}_2\text{Ca}_2(\text{SO}_4)_3$   | A   | 2011-067  | Russia           | <i>Mineralogical Magazine</i> <b>76</b> (2012), 673  |   |
| Calcio murmanite      | $(\text{Na}, \square)_2\text{Ca}(\text{Ti}, \text{Mg}, \text{Nb})_4[\text{Si}_2\text{O}_7]_2\text{O}_2(\text{OH}, \text{O})_2(\text{H}_2\text{O})_4$ | Rd  | 2014-103  | Russia           | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 835                                  |   |
| Calcio olivine        | $\text{Ca}_2(\text{SiO}_4)$  | Rd  | 2007 s.p. | Germany / Russia | <i>Geology of Ore Deposits</i> <b>51</b> (2009), 741   | <i>Crystallography Reports</i> <b>53</b> (2008), 404                              |
| Calcio petersite      | $\text{CaCu}_6(\text{PO}_4)_2(\text{PO}_3\text{OH})(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A   | 2001-004  | Czech Republic   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1393  |   |
| Calcio samarskite     | $(\text{Ca}, \text{Fe}, \text{Y})(\text{Nb}, \text{Ta}, \text{Ti})\text{O}_4$  | G   | 1928      | USA              | <i>American Mineralogist</i> <b>13</b> (1928), 63  | <i>Mineralogical Magazine</i> <b>63</b> (1999), 27                                |
| Calcio tantite        | $\text{CaTa}_4\text{O}_{11}$   | A   | 1981-039  | Russia           | <i>Mineralogicheskii Zhurnal</i> <b>4(3)</b> (1982), 75                                      | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1289                               |
| Calcio uranoite       | $(\text{Ca}, \text{Ba}, \text{Pb}, \text{K}, \text{Na})\text{U}_2\text{O}_7 \cdot 5\text{H}_2\text{O}$   | A   | 1973-004  | Russia           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 108            | <i>Doklady Akademii Nauk SSSR</i> <b>262</b> (1982), 209                          |
| Calcio ursilite       | $\text{Ca}_4(\text{UO}_2)_4(\text{Si}_2\text{O}_5)_5(\text{OH})_6 \cdot 15\text{H}_2\text{O}$  | G   | 1957      | Tajikistan       | <i>Voprosy Geologii Urana</i> . Atomic Press, Moscow (1957), 73                              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 553 |
| Calcite               | $\text{Ca}(\text{CO}_3)$   | G   | 1836      | unknown          | <i>Magazin für die Oryktographie von Sachsen</i> <b>7</b> (1836), 118                        | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1225                               |
| Calcio jarlite        | $\text{Na}_2(\text{Ca}, \square)_{14}(\text{Mg}, \square)_2\text{Al}_{12}\text{F}_{64}(\text{OH})_4$   | A ? | 1973      | Russia           | <i>Konstitutsiya i Svoistva Mineralov</i> <b>7</b> (1973), 131                               |   |

|                       |   |    |            |                    |   |  |
|-----------------------|---|----|------------|--------------------|---|--|
| Calclacite            | $\text{Ca}(\text{CH}_3\text{COO})\text{Cl}\cdot 5\text{H}_2\text{O}$  | G  | 1945       | Belgium            | <i>Bulletin du Musée Royal d'Histoire Naturelle de Belgique</i> <b>21</b> (1945), n. 26   |  |
| Calcurmolite          | $(\text{Ca}_{1-x}\text{Na}_x)_2(\text{UO}_2)_3(\text{MoO}_4)_2(\text{OH})_{6-x}\cdot n\text{H}_2\text{O}$                     | A  | 1988-xxx ? | Armenia            | <i>Yadernoe Goryuchee i Reaktornye Metally</i> <b>3</b> (1959), 160   | <i>New Data on Minerals</i> <b>40</b> (2005), 29                               |
| Calcybeborosilite-(Y) | $(\text{Y}, \text{REE}, \text{Ca})_2(\text{B}, \text{Be})_2(\text{SiO}_4)_2(\text{OH}, \text{O})_2$                           | Q  | ?          | Tajikistan         | <i>Moscow University Geology Bulletin</i> <b>55</b> (2000), 62  |  |
| Calderite             | $\text{Mn}^{2+}_3\text{Fe}^{3+}_2(\text{SiO}_4)_3$  | G  | 1909       | India (or unknown) | <i>Memoirs of the Geological Survey of India</i> <b>37</b> (1909), 182  | <i>Canadian Mineralogist</i> <b>17</b> (1979), 569                             |
| Calderónite           | $\text{Pb}_2\text{Fe}^{3+}(\text{VO}_4)_2(\text{OH})$   | A  | 2001-022   | Spain              | <i>American Mineralogist</i> <b>88</b> (2003), 1703   |  |
| Caledonite            | $\text{Cu}_2\text{Pb}_5(\text{SO}_4)_3(\text{CO}_3)(\text{OH})_6$   | G  | 1832       | United Kingdom     | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 367  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 649                             |
| Calkinsite-(Ce)       | $\text{Ce}_2(\text{CO}_3)_3\cdot 4\text{H}_2\text{O}$   | A  | 1987 s.p.  | USA                | <i>American Mineralogist</i> <b>38</b> (1953), 1169   |  |
| Callaghanite          | $\text{Cu}_2\text{Mg}_2(\text{CO}_3)(\text{OH})_6\cdot 2\text{H}_2\text{O}$   | G  | 1954       | USA                | <i>American Mineralogist</i> <b>39</b> (1954), 630  | <i>American Mineralogist</i> <b>58</b> (1973), 551                             |
| Calomel               | $\text{HgCl}$   | G  | ?          | unknown            | original paper?   | <i>Zeitschrift für Kristallographie</i> <b>187</b> (1989), 305                 |
| Calumetite            | $\text{Cu}(\text{OH})_2\cdot 2\text{H}_2\text{O}$   | A  | 1967 s.p.  | USA                | <i>American Mineralogist</i> <b>48</b> (1963), 614  |  |
| Calvertite            | $\text{Cu}_5\text{Ge}_{0.5}\text{S}_4$  | A  | 2006-030   | Namibia            | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1519   |  |
| Calzirtite            | $\text{Ca}_2\text{Zr}_5\text{Ti}_2\text{O}_{16}$  | A  | 1967 s.p.  | Russia             | <i>Doklady Akademii Nauk SSSR</i> <b>137</b> (1961), 681  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 467                  |
| Camanchacaite         | $\text{NaCaMg}_2[\text{AsO}_4][\text{AsO}_3(\text{OH})]_2$  | A  | 2018-025   | Chile              | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Cámaraite             | $\text{Ba}_3\text{NaFe}^{2+}_8\text{Ti}_4(\text{Si}_2\text{O}_7)_4\text{O}_4(\text{OH})_4\text{F}_3$                          | Rd | 2009-011   | Kazakhstan         | <i>Mineralogical Magazine</i> <b>73</b> (2009), 847   | <i>Mineralogical Magazine</i> <b>73</b> (2009), 855                            |
| Camaronesite          | $\text{Fe}^{3+}_2(\text{PO}_3\text{OH})_2(\text{SO}_4)(\text{H}_2\text{O})_4\cdot 1-2\text{H}_2\text{O}$                      | A  | 2012-094   | Chile              | <i>Mineralogical Magazine</i> <b>77</b> (2013), 453   |  |
| Camérolaite           | $\text{Cu}_6\text{Al}_3(\text{OH})_{18}(\text{H}_2\text{O})_2[\text{Sb}(\text{OH})_6](\text{SO}_4)$                           | Rn | 1990-036   | France             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 481   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1527                           |
| Cameronite            | $\text{Cu}_{5-x}(\text{Cu}, \text{Ag})_{3+x}\text{Te}_{10}$ ( $x = 0.43$ )  | A  | 1984-069   | USA                | <i>Canadian Mineralogist</i> <b>24</b> (1986), 379  | <i>Canadian Mineralogist</i> <b>52</b> (2014), 423                             |
| Camgasite             | $\text{CaMg}(\text{AsO}_4)(\text{OH})\cdot 5\text{H}_2\text{O}$   | A  | 1988-031   | Germany            | <i>Aufschluss</i> <b>40</b> (1989), 369   |  |
| Caminite              | $\text{Mg}_7(\text{SO}_4)_5(\text{OH})_4\cdot \text{H}_2\text{O}$   | A  | 1983-015   | Pacific Ocean      | <i>American Mineralogist</i> <b>71</b> (1986), 819  | <i>Vestnik Moskovskogo Universiteta, Ser. 4 Geologiya</i> <b>44</b> (1989), 76 |
| Campigliaite          | $\text{Cu}_4\text{Mn}^{2+}(\text{SO}_4)_2(\text{OH})_6\cdot 4\text{H}_2\text{O}$  | A  | 1981-001   | Italy              | <i>American Mineralogist</i> <b>67</b> (1982), 385  | <i>American Mineralogist</i> <b>67</b> (1982), 388                             |
| Campostriniite        | $(\text{Bi}_{2.5}\text{Na}_{0.5})(\text{NH}_4)_2\text{Na}_2(\text{SO}_4)_6\cdot \text{H}_2\text{O}$                           | A  | 2013-086a  | Italy              | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1007  |  |
| Canaphite             | $\text{Na}_2\text{CaP}_2\text{O}_7\cdot 4\text{H}_2\text{O}$  | A  | 1983-067   | USA                | <i>Mineralogical Record</i> <b>16</b> (1985), 467   | <i>American Mineralogist</i> <b>73</b> (1988), 168                             |
| Canasite              | $\text{K}_3\text{Na}_3\text{Ca}_5\text{Si}_{12}\text{O}_{30}(\text{OH})_4$  | A  | 1962 s.p.  | Russia             | <i>Trudy Mineralogicheskogo Muzeya Akademii Nauk SSSR</i> <b>9</b> (1959), 158  | <i>Acta Crystallographica</i> <b>A43</b> , suppl. (1987), C159                 |
| Canavesite            | $\text{Mg}_2(\text{HBO}_3)(\text{CO}_3)\cdot 5\text{H}_2\text{O}$   | A  | 1977-025   | Italy              | <i>Canadian Mineralogist</i> <b>16</b> (1978), 69   |  |
| Cancrinite            | $(\text{Na}, \text{Ca}, \square)_8(\text{Al}_6\text{Si}_6)\text{O}_{24}(\text{CO}_3, \text{SO}_4)_2\cdot 2\text{H}_2\text{O}$ | G  | 1833       | Russia             | Elemente der Krystallographie. Mittler, Berlin (1833), 155  | <i>American Mineralogist</i> <b>91</b> (2006), 1117                            |
| Cancrisilite          | $\text{Na}_7(\text{Si}_7\text{Al}_5)\text{O}_{24}(\text{CO}_3)\cdot 3\text{H}_2\text{O}$                                      | A  | 1990-013   | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>120(6)</b> (1991), 80   |  |
| Canfieldite           | $\text{Ag}_8\text{SnS}_6$   | G  | 1894       | Bolivia            | <i>American Journal of Science</i> <b>47</b> (1894), 451  | <i>Canadian Mineralogist</i> <b>50</b> (2012), 111                             |
| Cannizzarite          | $\text{Pb}_8\text{Bi}_{10}\text{S}_{23}$  | G  | 1924       | Italy              | <i>Annali dell'Osservatorio Vesuviano</i> <b>1</b> (1924), 31-36  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 483                             |
| Cannonite             | $\text{Bi}_2\text{O}(\text{SO}_4)(\text{OH})_2$   | A  | 1992-002   | USA                | <i>Mineralogical Magazine</i> <b>56</b> (1992), 605   | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3067                           |
| Canosoite             | $\text{Ba}_2\text{Fe}^{3+}(\text{AsO}_4)_2(\text{OH})$  | A  | 2015-030   | Italy              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 305   |  |
| Canutite              | $\text{NaMn}_3(\text{AsO}_4)[\text{AsO}_3(\text{OH})]_2$  | A  | 2013-070   | Chile              | <i>Mineralogical Magazine</i> <b>78</b> (2014), 787   |  |



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|------------------------|---|----|-----------|---------------------|--|--|
| Caoxite                | $\text{Ca}(\text{C}_2\text{O}_4) \cdot 3\text{H}_2\text{O}$   | A  | 1996-012  | Italy               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 84   | <i>Mineralogical Magazine</i> <b>69</b> (2005), 77           |
| Capgaronnite           | $\text{AgHgClS}$  | A  | 1990-011  | France              | <i>American Mineralogist</i> <b>77</b> (1992), 197   |  |
| Cappelenite-(Y)        | $\text{BaY}_6\text{B}_6\text{Si}_3\text{O}_{24}\text{F}_2$  | A  | 1987 s.p. | Norway              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>7</b> (1894) 598  | <i>American Mineralogist</i> <b>69</b> (1984), 190           |
| Capranicaite           | $\text{KCaNaAl}_4\text{B}_4\text{Si}_2\text{O}_{18}$  | A  | 2009-086  | Italy               | <i>Mineralogical Magazine</i> <b>75</b> (2011), 33   |  |
| Caracolite             | $\text{Na}_2(\text{Pb}_2\text{Na})(\text{SO}_4)_3\text{Cl}$   | G  | 1886      | Chile               | <i>Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften</i> <b>48</b> (1886), 1045                                    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1969), 58 |
| Carborborite           | $\text{Ca}_2\text{Mg}[\text{B}(\text{OH})_4]_2(\text{CO}_3)_2 \cdot 4\text{H}_2\text{O}$  | A  | 1967 s.p. | China               | <i>Scientia Sinica</i> <b>13</b> (1964), 813   | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 578        |
| Carbobystrite          | $\text{Na}_8(\text{Al}_6\text{Si}_6\text{O}_{24})(\text{CO}_3) \cdot 4\text{H}_2\text{O}$   | A  | 2009-028  | Russia              | <i>Canadian Mineralogist</i> <b>48</b> (2010), 291   |  |
| Carbocernaite          | $(\text{Sr}, \text{Ce}, \text{La})(\text{Ca}, \text{Na})(\text{CO}_3)_2$  | A  | 1967 s.p. | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>90</b> (1961), 42  | <i>American Mineralogist</i> <b>102</b> (2017), 1340         |
| Carboirite             | $\text{Fe}^{2+}\text{Al}_2\text{GeO}_5(\text{OH})_2$  | A  | 1980-066  | France              | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 97   |  |
| Carbokentbrooksit      | $(\text{Na}, \square)_{12}(\text{Na}, \text{Ce})_3\text{Ca}_6\text{Mn}_3\text{Zr}_3\text{NbSi}_{25}\text{O}_{73}(\text{OH})_3(\text{CO}_3) \cdot \text{H}_2\text{O}$  | A  | 2002-056  | Tajikistan          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(5)</b> (2003), 40  |  |
| Carbonatecyanotrichite | $\text{Cu}_4\text{Al}_2(\text{CO}_3)(\text{OH})_{12} \cdot 2\text{H}_2\text{O}$   | Rn | 1967 s.p. | Kazakhstan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 458   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 635           |
| Cardite                | $\text{Zn}_{5.5}(\text{AsO}_4)_2(\text{AsO}_3\text{OH})(\text{OH})_3 \cdot 3\text{H}_2\text{O}$   | A  | 2015-125  | Australia           | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691  |  |
| Carducciite            | $(\text{AgSb})\text{Pb}_6(\text{As}, \text{Sb})_8\text{S}_{20}$   | A  | 2013-006  | Italy               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1775   |  |
| Caresite               | $\text{Fe}^{2+}_4\text{Al}_2(\text{OH})_{12}(\text{CO}_3) \cdot 3\text{H}_2\text{O}$  | A  | 1992-030  | Canada              | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1541  |  |
| Carletonite            | $\text{KNa}_4\text{Ca}_4\text{Si}_8\text{O}_{18}(\text{CO}_3)_4(\text{F}, \text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1969-016  | Canada              | <i>American Mineralogist</i> <b>56</b> (1971), 1855  | <i>American Mineralogist</i> <b>57</b> (1972), 765           |
| Carletonmooreite       | $\text{Ni}_3\text{Si}$  | A  | 2018-068  | USA                 | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Carlfrancisite         | $\text{Mn}^{2+}_3(\text{Mn}^{2+}, \text{Mg}, \text{Fe}^{3+}, \text{Al})_{42}(\text{As}^{3+}\text{O}_3)_2(\text{As}^{5+}\text{O}_4)_4[(\text{Si}, \text{As}^{5+})\text{O}_4]_6[(\text{As}^{5+}, \text{Si})\text{O}_4]_2(\text{OH})_{42}$ | A  | 2012-033  | Namibia             | <i>American Mineralogist</i> <b>98</b> (2013), 1693  |  |
| Carlfriesite           | $\text{CaTe}^{6+}(\text{Te}^{4+})_2\text{O}_8$  | A  | 1973-013  | Mexico              | <i>Mineralogical Magazine</i> <b>40</b> (1975), 127  | <i>American Mineralogist</i> <b>63</b> (1978), 847           |
| Carlgieseckeite-(Nd)   | $\text{NaNdCa}_3(\text{PO}_4)_3\text{F}$  | A  | 2010-036  | Denmark (Greenland) | <i>Canadian Mineralogist</i> <b>50</b> (2012), 571   |  |
| Carlhintzeite          | $\text{Ca}_2\text{AlF}_7 \cdot \text{H}_2\text{O}$  | A  | 1978-031  | Germany             | <i>Canadian Mineralogist</i> <b>17</b> (1979), 103   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 623          |
| Carlinit               | $\text{Ti}_2\text{S}$   | A  | 1974-062  | USA                 | <i>American Mineralogist</i> <b>60</b> (1975), 559   |  |
| Carlosbarbosaite       | $(\text{UO}_2)_2\text{Nb}_2\text{O}_6(\text{OH})_2 \cdot 2\text{H}_2\text{O}$   | A  | 2010-047  | Brazil              | <i>Mineralogical Magazine</i> <b>76</b> (2012), 75   |  |
| Carlosruizite          | $\text{K}_3\text{Na}_2\text{Na}_3\text{Mg}_5(\text{IO}_3)_6(\text{SeO}_4)_6 \cdot 6\text{H}_2\text{O}$  | A  | 1993-020  | Chile               | <i>American Mineralogist</i> <b>79</b> (1994), 1003  |  |
| Carlosturanite         | $(\text{Mg}, \text{Fe}^{2+}, \text{Ti})_{21}(\text{Si}, \text{Al})_{12}\text{O}_{28}(\text{OH})_{34} \cdot \text{H}_2\text{O}$  | A  | 1984-009  | Italy               | <i>American Mineralogist</i> <b>70</b> (1985), 767   | <i>American Mineralogist</i> <b>70</b> (1985), 773           |
| Carlsbergite           | $\text{CrN}$  | A  | 1971-026  | Denmark (Greenland) | <i>Nature Physical Science</i> <b>233</b> (1971), 113  | <i>Mineralogical Magazine</i> <b>70</b> (2006), 373          |
| Carlsonite             | $(\text{NH}_4)_5\text{Fe}^{3+}_3\text{O}(\text{SO}_4)_6 \cdot 7\text{H}_2\text{O}$  | A  | 2014-067  | USA                 | <i>American Mineralogist</i> <b>101</b> (2016), 2095   |  |
| Carmichaelite          | $(\text{Ti}, \text{Cr}, \text{Fe})(\text{O}, \text{OH})_2$  | A  | 1996-062  | USA                 | <i>American Mineralogist</i> <b>85</b> (2000), 792   |  |
| Carminite              | $\text{PbFe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2$   | G  | 1850      | Germany             | <i>Annalen der Physik und Chemie</i> <b>80</b> (1850), 391   | <i>Mineralogical Magazine</i> <b>60</b> (1996), 805          |

|                  |  |   |           |                                  |   |   |
|------------------|--|---|-----------|----------------------------------|---|---|
| Carnallite       | KMgCl <sub>3</sub> ·6H <sub>2</sub> O  | G | 1856      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>98</b> (1856), 161                                | <i>American Mineralogist</i> <b>70</b> (1985), 1309                                 |
| Carnotite        | K <sub>2</sub> (UO <sub>2</sub> ) <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub> ·3H <sub>2</sub> O  | G | 1899      | USA                              | <i>Bulletin de la Société Française de Minéralogie</i> <b>22</b> (1899), 26               | <i>American Mineralogist</i> <b>50</b> (1965), 825                                  |
| Carobbiite       | KF   | G | 1956      | Italy                            | <i>Rendiconti della Società Mineralogica Italiana</i> <b>12</b> (1956), 212               |   |
| Carpathite       | C <sub>24</sub> H <sub>12</sub>  | A | 1971 s.p. | Ukraine                          | <i>Mineralogicheskii Sbornik</i> <b>9</b> (1955), 120                                     | <i>American Mineralogist</i> <b>92</b> (2007), 1262                                 |
| Carpholite       | Mn <sup>2+</sup> Al <sub>2</sub> Si <sub>2</sub> O <sub>6</sub> (OH) <sub>4</sub>  | G | 1817      | Czech Republic                   | Letztes Mineral-System. Craz und Gerlach, Freiberg (1817), 43                             | <i>American Mineralogist</i> <b>74</b> (1989), 1084                                 |
| Carraraite       | Ca <sub>3</sub> Ge(SO <sub>4</sub> )(CO <sub>3</sub> )(OH) <sub>6</sub> ·12H <sub>2</sub> O  | A | 1998-002  | Italy                            | <i>American Mineralogist</i> <b>86</b> (2001), 1293                                       |   |
| Carrboydite      | (Ni <sub>1-x</sub> Al <sub>x</sub> )(SO <sub>4</sub> ) <sub>x/2</sub> (OH) <sub>2</sub> ·nH <sub>2</sub> O (x < 0.5, n > 3x/2)   | Q | 1974-033  | Australia                        | <i>American Mineralogist</i> <b>61</b> (1976), 366  |   |
| Carrollite       | CuCo <sub>2</sub> S <sub>4</sub>   | G | 1852      | USA                              | <i>American Journal of Science and Arts</i> <b>13</b> (1852), 418                         | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1317                                 |
| Caryinite        | (Na,Pb)(Ca,Na)CaMn <sup>2+</sup> <sub>2</sub> (AsO <sub>4</sub> ) <sub>3</sub>   | A | 1980 s.p. | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>2</b> (1874), 178              | <i>Mineralogical Magazine</i> <b>57</b> (1993), 721                                 |
| Caryochroite     | (Na,Sr) <sub>3</sub> (Fe <sup>3+</sup> ,Mg) <sub>10</sub> Ti <sub>2</sub> Si <sub>12</sub> O <sub>37</sub> (H <sub>2</sub> O,O,OH) <sub>17</sub>                               | A | 2005-031  | Russia                           | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1331                                       |   |
| Caryopilite      | Mn <sup>2+</sup> <sub>3</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>   | A | 1967 s.p. | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>11</b> (1889), 27              | <i>Canadian Mineralogist</i> <b>36</b> (1998), 163                                  |
| Cascandite       | CaScSi <sub>3</sub> O <sub>8</sub> (OH)  | A | 1980-011  | Italy                            | <i>American Mineralogist</i> <b>67</b> (1982), 599  | <i>American Mineralogist</i> <b>67</b> (1982), 604                                  |
| Cassagnaite      | Ca <sub>4</sub> Fe <sup>3+</sup> <sub>4</sub> V <sup>3+</sup> <sub>2</sub> (OH) <sub>6</sub> O <sub>2</sub> (Si <sub>3</sub> O <sub>10</sub> )(SiO <sub>4</sub> ) <sub>2</sub> | A | 2006-019a | Italy                            | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 95                                |   |
| Cassedanneite    | Pb <sub>5</sub> (VO <sub>4</sub> ) <sub>2</sub> (CrO <sub>4</sub> ) <sub>2</sub> ·H <sub>2</sub> O   | A | 1984-063  | Russia                           | <i>Comptes Rendus de l'Academie des Sciences de Paris, Ser. II</i> <b>306</b> (1988), 125 |   |
| Cassidyite       | Ca <sub>2</sub> Ni(PO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O   | A | 1966-024  | Australia                        | <i>American Mineralogist</i> <b>52</b> (1967), 1190                                       |   |
| Cassiterite      | SnO <sub>2</sub>   | G | 1832      | United Kingdom                   | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 618                    | <i>Acta Crystallographica</i> <b>B53</b> (1997), 373                                |
| Castellaroite    | Mn <sup>2+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> ·4.5H <sub>2</sub> O  | A | 2015-071  | Italy                            | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 687                               |   |
| Caswellsilverite | NaCrS <sub>2</sub>   | A | 1981-012a | USA                              | <i>American Mineralogist</i> <b>67</b> (1982), 132  |   |
| Catalanoite      | Na <sub>2</sub> (HPO <sub>4</sub> )·8H <sub>2</sub> O  | A | 2002-008  | Argentina                        | 18th General Meeting of IMA, Edinburgh (2002), abstr.                                     |   |
| Catamarcaite     | Cu <sub>6</sub> GeWS <sub>8</sub>  | A | 2003-020  | Argentina                        | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1481                                       |   |
| Catapleite       | Na <sub>2</sub> Zr(Si <sub>3</sub> O <sub>9</sub> )·2H <sub>2</sub> O  | G | 1850      | Norway                           | <i>Annalen der Physik und Chemie</i> <b>79</b> (1850), 299                                | <i>Doklady Akademii Nauk SSSR</i> <b>260</b> (1981), 623                            |
| Cattierite       | CoS <sub>2</sub>   | G | 1945      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>30</b> (1945), 483  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 650                                |
| Cattiite         | Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ·22H <sub>2</sub> O  | A | 2000-032  | Russia                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 160                             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>142(2)</b> (2013), 120 |
| Cavansite        | Ca(V <sup>4+</sup> O)(Si <sub>4</sub> O <sub>10</sub> )·4H <sub>2</sub> O  | A | 1967-019  | USA                              | <i>American Mineralogist</i> <b>58</b> (1973), 405  | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1267                                 |
| Cavoite          | CaV <sub>3</sub> O <sub>7</sub>  | A | 2001-024  | Italy                            | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 181                               | <i>Acta Crystallographica</i> <b>B29</b> (1973), 269                                |
| Cayalsite-(Y)    | CaY <sub>6</sub> Al <sub>2</sub> Si <sub>4</sub> O <sub>18</sub> F <sub>6</sub>  | A | 2011-094  | Norway                           | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 683                               |   |
| Caysichite-(Y)   | (Ca,Yb,Er) <sub>4</sub> Y <sub>4</sub> (Si <sub>8</sub> O <sub>20</sub> )(CO <sub>3</sub> ) <sub>6</sub> (OH)·7H <sub>2</sub> O  | A | 1973-044  | Canada                           | <i>Canadian Mineralogist</i> <b>12</b> (1974), 293  | <i>Canadian Mineralogist</i> <b>16</b> (1978), 81                                   |
| Cebaite-(Ce)     | Ba <sub>3</sub> Ce <sub>2</sub> (CO <sub>3</sub> ) <sub>5</sub> F <sub>2</sub>   | A | 1987 s.p. | China                            | <i>Scientia Geologica Sinica</i> <b>4</b> (1983), 409                                     |   |

|                     |   |    |           |                     |  |  |
|---------------------|---|----|-----------|---------------------|--|--|
| Cebollite           | $\text{Ca}_5\text{Al}_2(\text{SiO}_4)_3(\text{OH})_4$   | Q  | 1914      | USA                 | <i>Washington Academy of Sciences, Ser. IV</i> <b>16</b> (1914), 480   | <i>Mineralogical Magazine</i> <b>43</b> (1980), 583            |
| Čechite             | $\text{PbFe}^{2+}(\text{VO}_4)(\text{OH})$  | A  | 1980-068  | Czech Republic      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 520  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 34   |
| Čejkaite            | $\text{Na}_4(\text{UO}_2)(\text{CO}_3)_3$   | A  | 1999-045  | Czech Republic      | <i>American Mineralogist</i> <b>88</b> (2003), 686   | <i>American Mineralogist</i> <b>98</b> (2013), 549             |
| Celadonite          | $\text{KMgFe}^{3+}\text{Si}_4\text{O}_{10}(\text{OH})_2$  | A  | 1998 s.p. | Italy               | Generum et specierum mineralium secundum ordines naturales digestorium synopsis. Halle (1847)  | <i>Mineralogicheskiy Zhurnal</i> <b>8(3)</b> (1986), 32        |
| Celestine           | $\text{Sr}(\text{SO}_4)$  | A  | 1967 s.p. | USA                 | <i>Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts. Dugour, Paris</i> (1792), 150                                     | <i>Zeitschrift für Kristallographie</i> <b>121</b> (1965), 204 |
| Celsian             | $\text{Ba}(\text{Al}_2\text{Si}_2\text{O}_8)$   | G  | 1895      | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>17</b> (1895), 578  | <i>American Mineralogist</i> <b>61</b> (1976), 414             |
| Centennialite       | $\text{CaCu}_3\text{Cl}_2(\text{OH})_6 \cdot n\text{H}_2\text{O}$ ( $n \sim 0.7$ )  | A  | 2013-110  | USA                 | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1105   |  |
| Cerchiaraitite-(Al) | $\text{Ba}_4\text{Al}_4(\text{Si}_4\text{O}_{12})\text{O}_2(\text{OH})_4\text{Cl}_2[\text{Si}_2\text{O}_3(\text{OH})_4]$  | A  | 2012-011  | USA                 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 69   |  |
| Cerchiaraitite-(Fe) | $\text{Ba}_4\text{Fe}^{3+}_4(\text{Si}_4\text{O}_{12})\text{O}_2(\text{OH})_4\text{Cl}_2[\text{Si}_2\text{O}_3(\text{OH})_4]$   | A  | 2012-012  | Italy / USA         | <i>Mineralogical Magazine</i> <b>77</b> (2013), 69   |  |
| Cerchiaraitite-(Mn) | $\text{Ba}_4\text{Mn}_4(\text{Si}_4\text{O}_{12})\text{O}_2(\text{OH})_4\text{Cl}_2[\text{Si}_2\text{O}_3(\text{OH})_4]$  | Rn | 1999-012  | Italy               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 373  | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 185    |
| Cerianite-(Ce)      | $\text{CeO}_2$  | A  | 1987 s.p. | Canada              | <i>American Mineralogist</i> <b>40</b> (1955), 560   | <i>Physical Review B</i> <b>48</b> (1993), 178                 |
| Cerite-(Ce)         | $(\text{Ce}, \text{La}, \text{Ca})_9(\text{Mg}, \text{Fe}^{3+})(\text{SiO}_4)_3(\text{SiO}_3\text{OH})_4(\text{OH})_3$  | A  | 1987 s.p. | Sweden              | <i>Neues Allgemeines Journal der Chemie</i> <b>2</b> (1804), 397   | <i>American Mineralogist</i> <b>68</b> (1983), 996             |
| Cerite-(La)         | $(\text{La}, \text{Ce}, \text{Ca})_9(\text{Fe}^{3+}, \text{Ca}, \text{Mg})(\text{SiO}_4)_3(\text{SiO}_3\text{OH})_4(\text{OH})_3$   | A  | 2001-042  | Russia              | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1177  |  |
| Cerium              | Ce  | Q  | 2002      | Moon                | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>382</b> (2002), 83                          |  |
| Černýite            | $\text{Cu}_2\text{CdSnS}_4$   | A  | 1976-057  | Canada              | <i>Canadian Mineralogist</i> <b>16</b> (1978), 139   | <i>Canadian Mineralogist</i> <b>16</b> (1978), 147             |
| Cerrojojonite       | $\text{CuPbBiSe}_3$   | A  | 2018-040  | Bolivia             | <i>Minerals</i> <b>8</b> (2018), 420   |  |
| Ceruleite           | $\text{CuAl}_4(\text{AsO}_4)_2(\text{OH})_8(\text{H}_2\text{O})_4$  | Rn | 2007 s.p. | Chile               | <i>Bulletin de la Société Française de Minéralogie</i> <b>23</b> (1900), 147   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 181            |
| Cerussite           | $\text{Pb}(\text{CO}_3)$  | G  | 1845      | Italy               | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 503   | <i>Zeitschrift für Kristallographie</i> <b>199</b> (1992), 67  |
| Cervandonite-(Ce)   | $(\text{Ce}, \text{Nd}, \text{La})(\text{Fe}^{3+}, \text{Ti}, \text{Fe}^{2+}, \text{Al})_3\text{O}_2(\text{Si}_2\text{O}_7)_{1-x+y}(\text{AsO}_3)_{1+x-y}(\text{OH})_{3x-3y}$ | A  | 1986-044  | Italy / Switzerland | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>68</b> (1988), 125  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 423             |
| Cervantite          | $\text{Sb}^{3+}\text{Sb}^{5+}\text{O}_4$  | Rd | 1962 s.p. | Spain               | A System of Mineralogy, 3rd ed. Putnam, New York (1850), 417   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1271          |
| Cervelleite         | $\text{Ag}_4\text{TeS}$   | A  | 1986-018  | Mexico              | <i>European Journal of Mineralogy</i> <b>1</b> (1989), 371   | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 413         |
| Cesanite            | $\text{Ca}_2\text{Na}_3(\text{SO}_4)_3\text{OH}$  | A  | 1980-023  | Italy               | <i>Mineralogical Magazine</i> <b>44</b> (1981), 269  | <i>American Mineralogist</i> <b>87</b> (2002), 715             |
| Césarferreiraite    | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$   | A  | 2012-099  | Brazil              | <i>American Mineralogist</i> <b>99</b> (2014), 607   |  |
| Cesàrolite          | $\text{PbMn}^{4+}_3\text{O}_6(\text{OH})_2$   | G  | 1920      | Tunisia             | <i>Annales de la Société Géologique de Belgique</i> <b>43</b> (1920), 239  | <i>Chemie der Erde</i> <b>26</b> (1967), 256                   |
| Cesbronite          | $\text{Cu}_3\text{Te}^{6+}\text{O}_4(\text{OH})_4$  | Rd | 1974-006  | Mexico              | <i>Mineralogical Magazine</i> <b>39</b> (1974), 744  |  |
| Cesiodymite         | $\text{CsKCu}_5\text{O}(\text{SO}_4)_5$   | A  | 2016-002  | Russia              | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 593  |  |
| Cesiokenopyrochlore | $\square\text{Nb}_2(\text{O}, \text{OH})_6\text{Cs}_{1-x}$  | A  | 2016-104  | Madagascar          | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |  |

|                 |   |   |           |                                  |  |   |
|-----------------|---|---|-----------|----------------------------------|--|---|
| Cesplumtantite  | $\text{Cs}_2\text{Pb}_3\text{Ta}_8\text{O}_{24}$  | A | 1985-040  | Democratic Republic of the Congo | <i>Mineralogicheskij Zhurnal</i> <b>8(5)</b> (1986), 92  |   |
| Cetineite       | $\text{NaK}_5\text{Sb}_{14}\text{S}_6\text{O}_{18}(\text{H}_2\text{O})_6$   | A | 1986-019  | Italy                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 419  | <i>American Mineralogist</i> <b>73</b> (1988), 398                        |
| Chabazite-Ca    | $\text{Ca}_2[\text{Al}_4\text{Si}_8\text{O}_{24}] \cdot 13\text{H}_2\text{O}$   | A | 1997 s.p. | Italy                            | <i>Journal d'Histoire Naturelle</i> <b>2</b> (1792), 181   | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 351               |
| Chabazite-K     | $(\text{K}_2\text{NaCa}_{0.5})[\text{Al}_4\text{Si}_8\text{O}_{24}] \cdot 11\text{H}_2\text{O}$                                 | A | 1997 s.p. | Italy                            | <i>Rendiconti dell'Accademia Nazionale dei Lincei</i> <b>40</b> (1976), 490  | <i>Crystallography Reports</i> <b>50</b> (2005), 544                      |
| Chabazite-Mg    | $(\text{Mg}_{0.7}\text{K}_{0.5}\text{Ca}_{0.5}\text{Na}_{0.1})[\text{Al}_3\text{Si}_9\text{O}_{24}] \cdot 10\text{H}_2\text{O}$ | A | 2009-060  | Hungary                          | <i>American Mineralogist</i> <b>95</b> (2010), 939   |   |
| Chabazite-Na    | $(\text{Na}_3\text{K})[\text{Al}_4\text{Si}_8\text{O}_{24}] \cdot 11\text{H}_2\text{O}$   | A | 1997 s.p. | Italy                            | <i>American Mineralogist</i> <b>55</b> (1970), 1278  |   |
| Chabazite-Sr    | $(\text{Sr}, \text{Ca})_2[\text{Al}_4\text{Si}_8\text{O}_{24}] \cdot 11\text{H}_2\text{O}$                                      | A | 1999-040  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(4)</b> (2000), 54  |   |
| Chabournéite    | $\text{Ti}_4\text{Pb}_2(\text{Sb}, \text{As})_{20}\text{S}_{34}$  | A | 1976-042  | France                           | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 10   | <i>Zeitschrift für Kristallographie</i> <b>150</b> (1979), 85             |
| Chadwickite     | $(\text{UO}_2)(\text{HAsO}_3)$  | A | 1997-005  | Germany                          | <i>Aufschluss</i> <b>49</b> (1998), 253  |   |
| Chaidamuite     | $\text{ZnFe}^{3+}(\text{SO}_4)_2(\text{OH}) \cdot 4\text{H}_2\text{O}$  | A | 1985-011  | China                            | <i>Acta Mineralogica Sinica</i> <b>6</b> (1986), 109   | <i>Science in China, Ser. B</i> <b>33</b> (1990), 623                     |
| Chalcanthite    | $\text{Cu}(\text{SO}_4) \cdot 5\text{H}_2\text{O}$  | G | ?         | unknown                          | original paper?  | <i>Zeitschrift für Kristallographie</i> <b>141</b> (1975), 330            |
| Chalcoalumite   | $\text{CuAl}_4(\text{SO}_4)(\text{OH})_{12} \cdot 3\text{H}_2\text{O}$  | G | 1925      | USA                              | <i>American Mineralogist</i> <b>10</b> (1925), 79  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2901                      |
| Chalcocite      | $\text{Cu}_2\text{S}$   | G | 1751      | ?                                | A History of the Materia Medica. Longman, Hitch and Hawes, London (1751), 140  | <i>Zeitschrift für Kristallographie</i> <b>150</b> (1979), 299            |
| Chalcocyanite   | $\text{Cu}(\text{SO}_4)$  | G | 1873      | Italy                            | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>5</b> (1873), 26                              | <i>Mineralogy and Petrology</i> <b>39</b> (1988), 201                     |
| Chalcomenite    | $\text{Cu}(\text{Se}^{4+}\text{O}_3) \cdot 2\text{H}_2\text{O}$   | G | 1881      | Argentina                        | <i>Bulletin de la Société Française de Minéralogie</i> <b>4</b> (1881), 51   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 551             |
| Chalconatronite | $\text{Na}_2\text{Cu}(\text{CO}_3)_2 \cdot 3\text{H}_2\text{O}$   | G | 1955      | Egypt                            | <i>Science</i> <b>122</b> (1955), 75   | <i>Zeitschrift für Kristallographie</i> <b>148</b> (1978), 165            |
| Chalcophanite   | $\text{ZnMn}^{4+}_3\text{O}_7 \cdot 3\text{H}_2\text{O}$  | G | 1875      | USA                              | <i>The American Chemist</i> <b>6</b> (1875), 1   | <i>American Mineralogist</i> <b>73</b> (1988), 1401                       |
| Chalcopyllite   | $\text{Cu}_{18}\text{Al}_2(\text{AsO}_4)_4(\text{SO}_4)_3(\text{OH})_{24} \cdot 36\text{H}_2\text{O}$                           | G | 1841      | United Kingdom                   | Vollständiges Handbuch der Mineralogie. Arnoldische, Dresden und Leipzig (1841), 149   | <i>Zeitschrift für Kristallographie</i> <b>151</b> (1980), 129            |
| Chalcopyrite    | $\text{CuFeS}_2$  | G | 1725 ?    | ?                                | Pyritologia, oder Kiess-Historie. Gross, Leipzig (1725), 114   | <i>Acta Crystallographica</i> <b>B29</b> (1973), 579                      |
| Chalcosiderite  | $\text{CuFe}^{3+}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$  | G | 1814      | United Kingdom                   | Systematisch-Tabellarische Uebersicht der Mineralogisch-Einfachen Fossilien. Kriegerschen Buchhandlung, Cassel und Marburg (1814), 323 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 227             |
| Chalcostibite   | $\text{CuSbS}_2$  | G | 1847      | Germany                          | Generum et specierum mineralium secundum ordines naturales digestorium synopsis. Halle (1847), 32                                      | <i>American Mineralogist</i> <b>90</b> (2005), 162                        |
| Chalcothallite  | $(\text{Cu}, \text{Fe}, \text{Ag})_{6.3}(\text{Ti}, \text{K})_2\text{SbS}_4$  | A | 1966-008  | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>181</b> (1967), 13   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 122 |
| Challacolloite  | $\text{KPb}_2\text{Cl}_5$   | A | 2004-028  | Chile                            | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>182</b> (2005), 95   | <i>Mineralogy and Petrology</i> <b>96</b> (2009), 121                     |
| Chambersite     | $\text{Mn}_3\text{B}_7\text{O}_{13}\text{Cl}$   | A | 1967 s.p. | USA                              | <i>American Mineralogist</i> <b>47</b> (1962), 665   |   |

|                    |   |     |           |                      |  |   |
|--------------------|---|-----|-----------|----------------------|--|---|
| Chaméanite         | $(\text{Cu,Fe})_4\text{As}(\text{Se,S})_4$  | A   | 1980-088  | France               | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>29</b> (1982), 151  |   |
| Chamosite          | $(\text{Fe}^{2+},\text{Mg,Al,Fe}^{3+})_6(\text{Si,Al})_4\text{O}_{10}(\text{OH,O})_8$   | G   | 1820      | Switzerland          | <i>Annales des Mines</i> <b>5</b> (1820), 393  | <i>Clays and Clay Minerals</i> <b>40</b> (1992), 319          |
| Chanabayaite       | $\text{Cu}_2\text{Cl}(\text{N}_3\text{C}_2\text{H}_2)_2(\text{NH}_3,\text{Cl,H}_2\text{O},\square)_4$                         | A   | 2013-065  | Chile                | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>144(2)</b> (2015), 36   |   |
| Changbaiite        | $\text{PbNb}_2\text{O}_6$   | A ? | ?         | China                | <i>Acta Geologica Sinica</i> <b>52</b> (1978), 53  |   |
| Changchengite      | $\text{IrBiS}$  | A   | 1995-047  | China                | <i>Acta Geologica Sinica</i> <b>71</b> (1997), 336   |   |
| Changoite          | $\text{Na}_2\text{Zn}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$   | A   | 1997-041  | Chile                | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1999), 97   |   |
| Chantalite         | $\text{CaAl}_2(\text{SiO}_4)(\text{OH})_4$  | A   | 1977-001  | Turkey               | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>57</b> (1977), 149  | <i>Zeitschrift für Kristallographie</i> <b>150</b> (1979), 53 |
| Chaoite            | C   | A   | 1968-019  | Germany              | <i>Science</i> <b>161</b> (1968), 363  | <i>Science</i> <b>216</b> (1982), 984                         |
| Chapmanite         | $\text{Fe}^{3+}_2\text{Sb}^{3+}(\text{SiO}_4)_2(\text{OH})$   | A   | 1968 s.p. | Canada               | <i>University of Toronto Studies, Geological Series</i> <b>17</b> (1924), 5  | <i>Powder Diffraction</i> <b>13</b> (1998), 44                |
| Charleshatchettite | $\text{CaNb}_4\text{O}_{10}(\text{OH})_2 \cdot 8\text{H}_2\text{O}$   | A   | 2015-048  | Canada               | <i>American Mineralogist</i> <b>102</b> (2017), 2333   |   |
| Charlesite         | $\text{Ca}_6\text{Al}_2(\text{SO}_4)_2\text{B}(\text{OH})_4(\text{OH,O})_{12} \cdot 26\text{H}_2\text{O}$                     | A   | 1981-043  | USA                  | <i>American Mineralogist</i> <b>68</b> (1983), 1033  |   |
| Charmarite         | $\text{Mn}_4\text{Al}_2(\text{OH})_{12}(\text{CO}_3) \cdot 3\text{H}_2\text{O}$   | A   | 1992-026  | Canada               | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1541  |   |
| Charoite           | $(\text{K,Sr,Ba,Mn})_{15-16}(\text{Ca,Na})_{32}[\text{Si}_{70}(\text{O,OH})_{180}] (\text{OH,F})_4 \cdot n\text{H}_2\text{O}$ | A   | 1977-019  | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>107</b> (1978), 94   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 159           |
| Chatkalite         | $\text{Cu}_6\text{FeSn}_2\text{S}_8$  | A   | 1981-004  | Uzbekistan           | <i>Mineralogicheskii Zhurnal</i> <b>3</b> (1981), 79   |   |
| Chayesite          | $\text{K}(\text{Mg,Fe}^{2+})_4\text{Fe}^{3+}[\text{Si}_{12}\text{O}_{30}]$  | A   | 1987-059  | USA                  | <i>American Mineralogist</i> <b>74</b> (1989), 1368  |   |
| Chegemite          | $\text{Ca}_7(\text{SiO}_4)_3(\text{OH})_2$  | A   | 2008-038  | Russia               | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 1045   |   |
| Chekhovichite      | $\text{Bi}^{3+}_2\text{Te}^{4+}_4\text{O}_{11}$   | A   | 1986-039  | Armenia / Kazakhstan | <i>Moscow University Geology Bulletin</i> <b>42(6)</b> (1987), 71  | <i>Australian Journal of Chemistry</i> <b>45</b> (1992), 1415 |
| Chelkarite         | $\text{CaMgB}_2\text{O}_4\text{Cl}_2 \cdot 7\text{H}_2\text{O} (?)$   | A ? | 1968      | Kazakhstan           | <i>Geology and Exploration of Solid Mineral Deposits of Kazakhstan</i> (1969), 169   |   |
| Chenevixite        | $\text{Cu}(\text{Fe}^{3+},\text{Al})(\text{AsO}_4)(\text{OH})_2$  | G   | 1866      | United Kingdom       | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>62</b> (1866), 690   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 25            |
| Chengdeite         | $\text{Ir}_3\text{Fe}$  | A   | 1994-023  | China                | <i>Acta Geologica Sinica</i> <b>69</b> (1995), 215   |   |
| Chenguodaite       | $\text{Ag}_9\text{FeTe}_2\text{S}_4$  | A   | 2004-042a | China                | <i>Chinese Science Bulletin</i> <b>53</b> (2008), 3567   | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 147   |
| Chenite            | $\text{CuPb}_4(\text{SO}_4)_2(\text{OH})_6$   | A   | 1983-069  | United Kingdom       | <i>Mineralogical Magazine</i> <b>50</b> (1986), 129  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 259 |
| Chenmingite        | $\text{FeCr}_2\text{O}_4$   | A   | 2017-036  | Morocco (meteorite)  | <i>CNMNC Newsletter</i> 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |   |
| Cheralite          | $\text{CaTh}(\text{PO}_4)_2$  | Rd  | 2005 s.p. | India                | <i>Mineralogical Magazine</i> <b>30</b> (1953), 93   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 503            |
| Cheremnykhite      | $\text{Pb}_3\text{Zn}_3(\text{TeO}_6)(\text{VO}_4)_2$   | A   | 1989-017  | Russia               | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(5)</b> (1990), 50  |   |

|                  |  |   |           |                |  |   |
|------------------|--|---|-----------|----------------|--|---|
| Cherepanovite    | RhAs   | A | 1984-041  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 464  |   |
| Chernikovite     | (H <sub>3</sub> O)(UO <sub>2</sub> )(PO <sub>4</sub> )·3H <sub>2</sub> O   | A | 1988 s.p. | Tajikistan     | <i>Mineralogical Record</i> <b>19</b> (1988), 249  | <i>Acta Crystallographica</i> <b>B34</b> (1978), 3732         |
| Chernovite-(Y)   | Y(AsO <sub>4</sub> )   | A | 1967-027  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>96</b> (1967), 699   | <i>Gazzetta Chimica Italiana</i> <b>64</b> (1932), 662        |
| Chernykhite      | BaV <sub>2</sub> (Si <sub>2</sub> Al <sub>2</sub> )O <sub>10</sub> (OH) <sub>2</sub>   | A | 1972-006  | Kazakhstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>101</b> (1972), 451  |   |
| Chervetite       | Pb <sub>2</sub> V <sup>5+</sup> <sub>2</sub> O <sub>7</sub>  | A | 1967 s.p. | Gabon          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>86</b> (1963), 117                                    | <i>Canadian Journal of Chemistry</i> <b>51</b> (1973), 70     |
| Chesnokovite     | Na <sub>2</sub> SiO <sub>2</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | A | 2006-007  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(2)</b> (2007), 25   |   |
| Chessexite       | Na <sub>4</sub> Ca <sub>2</sub> Mg <sub>3</sub> Al <sub>8</sub> (SiO <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>10</sub> (OH) <sub>10</sub> ·40H <sub>2</sub> O | A | 1981-054  | France         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>62</b> (1982), 337  |   |
| Chesterite       | Mg <sub>17</sub> Si <sub>20</sub> O <sub>54</sub> (OH) <sub>6</sub>  | A | 1977-010  | USA            | <i>American Mineralogist</i> <b>63</b> (1978), 1000  | <i>American Mineralogist</i> <b>63</b> (1978), 1053           |
| Chestermanite    | Mg <sub>2</sub> (Fe <sup>3+</sup> ,Mg,Al,Sb <sup>5+</sup> )O <sub>2</sub> (BO <sub>3</sub> )   | A | 1986-058  | USA            | <i>Canadian Mineralogist</i> <b>26</b> (1988), 911   | <i>Acta Chemica Scandinavica</i> <b>45</b> (1991), 797        |
| Chevkinite-(Ce)  | Ce <sub>4</sub> (Ti,Fe <sup>2+</sup> ,Fe <sup>3+</sup> ) <sub>5</sub> O <sub>8</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>                                      | A | 1987 s.p. | Russia         | Mineralogisch-Geognostische Reise nach dem Ural, dem Altai und dem Kaspischen Meere. Sanderschen, Berlin (1842), 513                   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1013           |
| Chiappinoite-(Y) | Y <sub>2</sub> Mn(Si <sub>3</sub> O <sub>7</sub> ) <sub>4</sub>  | A | 2014-040  | Portugal       | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 91   |   |
| Chiavennite      | CaMn <sup>2+</sup> (BeOH) <sub>2</sub> Si <sub>5</sub> O <sub>13</sub> ·2H <sub>2</sub> O  | A | 1981-038  | Italy          | <i>American Mineralogist</i> <b>68</b> (1983), 623   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 21             |
| Chibaite         | SiO <sub>2</sub> ·n(CH <sub>4</sub> ,C <sub>2</sub> H <sub>6</sub> ,C <sub>3</sub> H <sub>8</sub> ,C <sub>4</sub> H <sub>10</sub> ) (n <sub>max</sub> = 3/17)            | A | 2008-067  | Japan          | <i>Nature Communications</i> <b>2</b> (2011), 196  |   |
| Childrenite      | Fe <sup>2+</sup> Al(PO <sub>4</sub> )(OH) <sub>2</sub> ·H <sub>2</sub> O   | G | 1823      | United Kingdom | <i>Quarterly Journal of Science, Literature, and the Arts</i> <b>16</b> (1823), 274  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 263 |
| Chiluite         | Bi <sub>3</sub> Te <sup>6+</sup> Mo <sup>6+</sup> O <sub>10.5</sub>  | A | 1988-001  | China          | <i>Acta Mineralogica Sinica</i> <b>9</b> (1989), 9   |   |
| Chinchorroite    | Na <sub>2</sub> Mg <sub>5</sub> (As <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (AsO <sub>3</sub> OH) <sub>2</sub> (H <sub>2</sub> O) <sub>10</sub>                       | A | 2017-106  | Chile          | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |   |
| Chinleite-(Y)    | NaY(SO <sub>4</sub> ) <sub>2</sub> ·H <sub>2</sub> O   | A | 2016-017  | USA            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 909  |   |
| Chiolite         | Na <sub>5</sub> Al <sub>3</sub> F <sub>14</sub>  | G | 1846      | Russia         | <i>Journal für Praktische Chemie</i> <b>37</b> (1846), 175   | <i>Journal of Solid State Chemistry</i> <b>36</b> (1981), 297 |
| Chirvinskyite    | (Na,Ca) <sub>13</sub> (Fe,Mn,□) <sub>2</sub> (Ti,Zr) <sub>5</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>4</sub> (OH,O) <sub>12</sub> ·2H <sub>2</sub> O                 | A | 2016-051  | Russia         | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Chistyakovaite   | Al(UO <sub>2</sub> ) <sub>2</sub> (AsO <sub>4</sub> ) <sub>2</sub> F·6.5H <sub>2</sub> O   | A | 2005-003  | Kazakhstan     | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>407</b> (2006), 290                         |   |
| Chivruaiite      | Ca <sub>4</sub> (Ti,Nb) <sub>5</sub> (Si <sub>6</sub> O <sub>17</sub> ) <sub>2</sub> (OH,O) <sub>5</sub> ·13-14H <sub>2</sub> O  | A | 2004-052  | Russia         | <i>American Mineralogist</i> <b>91</b> (2006), 922   |   |
| Chkalovite       | Na <sub>2</sub> BeSi <sub>2</sub> O <sub>6</sub>   | G | 1938      | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>22</b> (1939), 259  | <i>Doklady Akademii Nauk SSSR</i> <b>225</b> (1975), 1319     |



|                    |   |    |           |  |  |   |
|--------------------|---|----|-----------|--|--|---|
| Chladniite         | $\text{Na}_2\text{CaMg}_7(\text{PO}_4)_6$   | A  | 1993-010  | USA  | <i>American Mineralogist</i> <b>79</b> (1994), 375   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 287               |
| Chloraluminite     | $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}$   | G  | 1873      | Italy  | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>6</b> (1873), 1   | <i>Acta Crystallographica</i> <b>B27</b> (1971), 1069                     |
| Chlorapatite       | $\text{Ca}_5(\text{PO}_4)_3\text{Cl}$   | Rn | 2010 s.p. | Austria /<br>Germany /<br>Spain /<br>Switzerland | <i>Annalen der Physik und Chemie</i> <b>85</b> (1827), 185   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 1840                     |
| Chlorargyrite      | $\text{AgCl}$   | A  | 1962 s.p. | Germany  | Synopsis Mineralogica. Engelhart, Freiberg (1875)  | <i>Physical Review B</i> <b>59</b> (1999), 750                            |
| Chlorartinite      | $\text{Mg}_2(\text{CO}_3)\text{Cl}(\text{OH}) \cdot 2.5\text{H}_2\text{O}$                  | A  | 1996-005  | Russia   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(2)</b> (1998), 55                              | <i>Journal of Applied Crystallography</i> <b>39</b> (2006), 739           |
| Chlorbartonite     | $\text{K}_6\text{Fe}_{24}\text{S}_{26}\text{Cl}$  | A  | 2000-048  | Russia   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 503   |   |
| Chlorellestadite   | $\text{Ca}_5(\text{SiO}_4)_{1.5}(\text{SO}_4)_{1.5}\text{Cl}$                               | A  | 2017-013  | Georgia  | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 743   |   |
| Chloritoid         | $\text{Fe}^{2+}\text{Al}_2\text{O}(\text{SiO}_4)(\text{OH})_2$                              | G  | 1835      | Russia   | <i>Journal für Praktische Chemie</i> <b>4</b> (1835), 272  | <i>American Mineralogist</i> <b>65</b> (1980), 534                        |
| Chlorkyuygenite    | $\text{Ca}_{12}\text{Al}_{14}\text{O}_{32}[(\text{H}_2\text{O})_4\text{Cl}_2]$              | Rn | 2012-046  | Russia   | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 113  |   |
| Chlormagaluminite  | $\text{Mg}_4\text{Al}_2(\text{OH})_{12}\text{Cl}_2 \cdot 2\text{H}_2\text{O}$               | A  | 1980-098  | Russia   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 121                                  |   |
| Chlormanganokalite | $\text{K}_4\text{MnCl}_6$   | G  | 1906      | Italy  | <i>Nature</i> <b>74</b> (1906), 103  | <i>Periodico di Mineralogia</i> <b>16</b> (1947), 73                      |
| Chlormayenite      | $\text{Ca}_{12}\text{Al}_{14}\text{O}_{32}[\square_4\text{Cl}_2]$                           | Rd | 1963-016  | Germany  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1964), 22   | <i>Acta Crystallographica</i> <b>B67</b> (2011), 193                      |
| Chlorocalcite      | $\text{KCaCl}_3$  | G  | 1872      | Italy  | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>5</b> (1872), 210 | <i>Atti della Società Toscana di Scienze Naturali</i> <b>54</b> (1947), 5 |
| Chloromagnesite    | $\text{MgCl}_2$   | Q  | 1873      | Italy  | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>6</b> (1873), 1   |   |
| Chloromenite       | $\text{Cu}_9\text{O}_2(\text{Se}^{4+}\text{O}_3)_4\text{Cl}_6$                              | A  | 1996-048  | Russia   | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 119  | <i>Zeitschrift für Kristallographie</i> <b>213</b> (1998), 645            |
| Chlorophoenicite   | $(\text{Mn}, \text{Mg}, \text{Zn})_3\text{Zn}_2(\text{AsO}_4)(\text{OH}, \text{O})_6$       | G  | 1924      | USA  | <i>Journal of the Washington Academy of Sciences</i> <b>14</b> (1924), 362   | <i>American Mineralogist</i> <b>53</b> (1968), 1110                       |
| Chlorothionite     | $\text{K}_2\text{Cu}(\text{SO}_4)\text{Cl}_2$   | G  | 1872      | Italy  | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>5</b> (1872), 210 | <i>Zeitschrift für Kristallographie</i> <b>144</b> (1976), 226            |
| Chloroxiphite      | $\text{Pb}_3\text{CuO}_2\text{Cl}_2(\text{OH})_2$   | G  | 1923      | United Kingdom                                   | <i>Mineralogical Magazine</i> <b>20</b> (1923), 67   | <i>Mineralogical Magazine</i> <b>72</b> (2008), 793                       |
| Choloalite         | $(\text{Pb}, \text{Ca})_3(\text{Cu}, \text{Sb})_3\text{Te}_6\text{O}_{18}\text{Cl}$         | A  | 1980-019  | Mexico   | <i>Mineralogical Magazine</i> <b>44</b> (1981), 55   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 721                        |
| Chondrodite        | $\text{Mg}_5(\text{SiO}_4)_2\text{F}_2$   | G  | 1817      | Finland  | <i>Svenska Vetenskaps-Akademiens Handlingar</i> (1817), 206  | <i>Mineralogical Magazine</i> <b>66</b> (2002), 441                       |
| Chongite           | $\text{Ca}_3\text{Mg}_2(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 4\text{H}_2\text{O}$ | A  | 2015-039  | Chile  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1255   |   |
| Chopinite          | $\text{Mg}_3(\text{PO}_4)_2$  | A  | 2006-004  | Antarctica                                       | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 229  | <i>American Mineralogist</i> <b>95</b> (2010), 260                        |
| Chovanite          | $\text{Pb}_{15-2x}\text{Sb}_{14+2x}\text{S}_{36}\text{O}_x$ ( $x \sim 0.2$ )                | A  | 2009-055  | Slovakia   | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 727  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 811                       |
| Chrisstanleyite    | $\text{Ag}_2\text{Pd}_3\text{Se}_4$   | A  | 1996-044  | United Kingdom                                   | <i>Mineralogical Magazine</i> <b>62</b> (1998), 257  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 497                        |

|                            |  |    |           |                    |  |   |
|----------------------------|--|----|-----------|--------------------|--|---|
| Christelite                | $Zn_3Cu_2(SO_4)_2(OH)_6 \cdot 4H_2O$               | A  | 1995-030  | Chile              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1996), 188                          | <i>Zeitschrift für Kristallographie</i> <b>211</b> (1996), 518                    |
| Christite                  | $TlHgAsS_3$  | A  | 1976-015  | USA                | <i>American Mineralogist</i> <b>62</b> (1977), 421                                     |   |
| Christofschäferite-(Ce)    | $(Ce, La, Ca)_4Mn(Ti, Fe)_3(Fe, Ti)(Si_2O_7)_2O_8$ | A  | 2011-107  | Germany            | <i>New Data on Minerals</i> <b>47</b> (2012), 33                                       |   |
| Chromatite                 | $CaCr^{6+}O_4$                                     | A  | 1967 s.p. | Jordan             | <i>Naturwissenschaften</i> <b>50</b> (1963), 612                                       |   |
| Chrombismite               | $Bi_{16}CrO_{27}$                                  | A  | 1995-044  | China              | <i>Canadian Mineralogist</i> <b>35</b> (1997), 35                                      |   |
| Chromceladonite            | $KMgCr(Si_4O_{10})(OH)_2$                          | A  | 1999-024  | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(1)</b> (2000), 38  |   |
| Chromferide                | $Fe_{1.5}Cr_{0.2}$                                 | A  | 1984-021  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 355      |   |
| Chromio-pargasite          | $NaCa_2(Mg_4Cr)(Si_6Al_2)O_{22}(OH)_2$             | Rd | 2012 s.p. | Japan              | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 1         |   |
| Chromite                   | $Fe^{2+}Cr_2O_4$                                   | G  | 1845      | France             | Handbuch der bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 550         | <i>Mineralogical Magazine</i> <b>79</b> (2015), 755                               |
| Chromium                   | Cr   | A  | 1980-094  | China              | <i>Kexue Tongbao</i> <b>26</b> (1981), 959   |   |
| Chromium-dravite           | $NaMg_3Cr_6(Si_6O_{18})(BO_3)_3(OH)_3(OH)$         | Rd | 1982-055  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 222      | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 345                       |
| Chromo-alumino-povondraite | $NaCr_3(Al_4Mg_2)(Si_6O_{18})(BO_3)_3(OH)_3O$      | A  | 2013-089  | Russia             | <i>American Mineralogist</i> <b>99</b> (2014), 1767                                    |   |
| Chromphyllite              | $KCr_2(AlSi_3O_{10})(OH)_2$                        | A  | 1995-052  | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(2)</b> (1997), 110 |   |
| Chromschieffelinite        | $Pb_{10}Te^{6+}_6O_{20}(OH)_{14}(CrO_4)(H_2O)_5$   | A  | 2011-003  | USA                | <i>American Mineralogist</i> <b>97</b> (2012), 212                                     |   |
| Chrysoberyl                | $BeAl_2O_4$  | G  | 1789      | Brazil             | <i>Bergmannisches Journal</i> <b>1</b> (1789), 369                                     | <i>Physics and Chemistry of Minerals</i> <b>34</b> (2007), 507                    |
| Chrysocolla                | $(Cu_{2-x}Al_x)H_{2-x}Si_2O_5(OH)_4 \cdot nH_2O$   | A  | 1980 s.p. | unknown            | original paper?  | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>271</b> (1970), 1837 |
| Chrysothallite             | $K_6Cu_6Ti^{3+}Cl_{17}(OH)_4 \cdot H_2O$           | A  | 2013-008  | Russia             | <i>Mineralogical Magazine</i> <b>79</b> (2015), 365                                    |   |
| Chrysotile                 | $Mg_3Si_2O_5(OH)_4$                                | Rd | 2007 s.p. | Poland             | <i>Gelehrte Anzeigen</i> <b>17</b> (1845), 945   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 883                                |
| Chubarovite                | $KZn_2(BO_3)Cl_2$                                  | A  | 2014-018  | Russia             | <i>Canadian Mineralogist</i> <b>53</b> (2015), 273                                     |   |
| Chudobaite                 | $Mg_5(AsO_4)_2(AsO_3OH)_2 \cdot 10H_2O$            | A  | 1962 s.p. | Namibia            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1960), 1                            | <i>Naturwissenschaften</i> <b>63</b> (1976), 243                                  |
| Chukanovite                | $Fe_2(CO_3)(OH)_2$                                 | A  | 2005-039  | Russia (meteorite) | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 891                            | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 221                       |
| Chukhrovite-(Ca)           | $Ca_3Ca_{1.5}Al_2(SO_4)F_{13} \cdot 12H_2O$        | A  | 2010-081  | Italy              | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 1069                           |   |
| Chukhrovite-(Ce)           | $Ca_3CeAl_2(SO_4)F_{13} \cdot 12H_2O$              | A  | 1987 s.p. | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 200      | <i>Chemie der Erde</i> <b>38</b> (1978), 331                                      |
| Chukhrovite-(Nd)           | $Ca_3NdAl_2(SO_4)F_{13} \cdot 12H_2O$              | A  | 2004-023  | Kazakhstan         | <i>New Data on Minerals</i> <b>40</b> (2005), 5  |   |
| Chukhrovite-(Y)            | $Ca_3YAl_2(SO_4)F_{13} \cdot 12H_2O$               | A  | 1987 s.p. | Kazakhstan         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>89</b> (1960), 15        | <i>Doklady Akademii Nauk SSSR</i> <b>163</b> (1965), 183                          |
| Churchite-(Y)              | $Y(PO_4) \cdot 2H_2O$                              | A  | 1987 s.p. | United Kingdom     | <i>The Chemical News and Journal of Physical Sciences</i> <b>12</b> (1865), 121        | <i>Acta Crystallographica</i> <b>C50</b> (1994), 1651                             |

|                          |   |    |           |                |  |   |
|--------------------------|---|----|-----------|----------------|--|---|
| Chursinite               | $\text{Hg}^{1+}\text{Hg}^{2+}(\text{AsO}_4)$  | A  | 1982-047a | Kyrgyzstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 341      | <i>Acta Crystallographica</i> <b>B29</b> (1973), 1666   |
| Chvaleticeite            | $\text{Mn}(\text{SO}_4) \cdot 6\text{H}_2\text{O}$  | A  | 1984-059  | Czech Republic | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 121                          |   |
| Chvilevaite              | $\text{Na}(\text{Cu}, \text{Fe}, \text{Zn})_2\text{S}_2$  | A  | 1987-017  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>117</b> (1988), 204      | <i>Doklady Akademii Nauk SSSR</i> <b>310</b> (1990), 90   |
| Cianciulliite            | $\text{Mg}_2\text{Mn}^{2+}\text{Zn}_2(\text{OH})_{10} \cdot 2\text{-}4\text{H}_2\text{O}$   | A  | 1990-042  | USA            | <i>American Mineralogist</i> <b>76</b> (1991), 1708                                    | <i>American Mineralogist</i> <b>76</b> (1991), 1711   |
| Cinnabar                 | HgS   | G  | ?         | unknown        | original paper?  | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>96</b> (1973), 218 |
| Ciprianiite              | $\text{Ca}_4[\text{Th}, \text{U}]\text{Ca}_{12}\text{Al}(\text{Be}_{0.5}\square_{1.5})_{22}[\text{B}_4\text{Si}_4\text{O}_{22}](\text{OH})_2$ | Rd | 2001-021  | Italy          | <i>American Mineralogist</i> <b>87</b> (2002), 739                                     |   |
| Ciriottiite              | $\text{Cu}_4\text{Pb}_{19}(\text{Sb}, \text{As}, \text{Bi})_{22}(\text{As}_2)\text{S}_{56}$   | A  | 2015-027  | Italy          | <i>Minerals</i> <b>6</b> (2016), 8   |   |
| Cirrolite                | $\text{Ca}_3\text{Al}_2(\text{PO}_4)_3(\text{OH})_3$  | Q  | 1868      | Sweden         | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>25</b> (1868), 197 |   |
| Clairite                 | $(\text{NH}_4)_2\text{Fe}^{3+}_3(\text{SO}_4)_4(\text{OH})_3 \cdot 3\text{H}_2\text{O}$   | A  | 1982-093  | South Africa   | <i>Annals of the Geological Survey of South Africa</i> <b>17</b> (1983), 29            |   |
| Claraite                 | $(\text{Cu}, \text{Zn})_{15}(\text{CO}_3)_4(\text{AsO}_4)_2(\text{SO}_4)(\text{OH})_{14} \cdot 7\text{H}_2\text{O}$                           | Rd | 2016 s.p. | Germany        | <i>Chemie der Erde</i> <b>41</b> (1982), 97  | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1031  |
| Claringbullite           | $\text{Cu}^{2+}_4\text{FCl}(\text{OH})_6$   | Rd | 1976-029  | Zambia         | <i>Mineralogical Magazine</i> <b>41</b> (1977), 433                                    | <i>Canadian Mineralogist</i> <b>33</b> (1995), 633  |
| Clarkeite                | $\text{Na}(\text{UO}_2)\text{O}(\text{OH}) \cdot n\text{H}_2\text{O}$   | G  | 1931      | USA            | <i>American Mineralogist</i> <b>16</b> (1931), 213                                     | <i>American Mineralogist</i> <b>82</b> (1997), 607  |
| Claudetite               | $\text{As}_2\text{O}_3$   | G  | 1868      | Portugal       | <i>A System of Mineralogy</i> , 5th ed. Wiley, New York (1868), 796                    | <i>Monatshefte für Chemie</i> <b>106</b> (1975), 755  |
| Clausthalite             | PbSe  | G  | 1832      | Germany        | <i>Traité Élémentaire de Minéralogie</i> , 2nd ed. Verdière, Paris (1832), 531         | <i>Acta Crystallographica</i> <b>C43</b> (1987), 1443   |
| Clearcreekite            | $\text{Hg}^{1+}_3(\text{CO}_3)(\text{OH}) \cdot 2\text{H}_2\text{O}$  | A  | 1999-003  | USA            | <i>Canadian Mineralogist</i> <b>39</b> (2001), 779                                     |   |
| Clerite                  | $\text{MnSb}_2\text{S}_4$   | A  | 1995-029  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(3)</b> (1996), 95  | <i>Zeitschrift für Kristallographie</i> <b>185</b> (1989), 31                                       |
| Cleusonite               | $\text{Pb}(\text{U}^{4+}, \text{U}^{6+})\text{Fe}^{2+}_2(\text{Ti}, \text{Fe}^{2+}, \text{Fe}^{3+})_{18}(\text{O}, \text{OH})_{38}$           | A  | 1998-070  | Switzerland    | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 933                            |   |
| Cliffordite              | $\text{UTe}^{4+}_3\text{O}_9$   | A  | 1966-046  | Mexico         | <i>American Mineralogist</i> <b>54</b> (1969), 697                                     | <i>Acta Crystallographica</i> <b>B27</b> (1971), 608  |
| Clinoatacamite           | $\text{Cu}_2\text{Cl}(\text{OH})_3$   | A  | 1993-060  | Chile          | <i>Canadian Mineralogist</i> <b>34</b> (1996), 61                                      | <i>Canadian Mineralogist</i> <b>34</b> (1996), 73   |
| Clinobeboite             | $\text{Be}(\text{OH})_2$  | A  | 1988-024  | Russia         | <i>Mineralogicheskii Zhurnal</i> <b>11(5)</b> (1989), 88                               |   |
| Clinobisvanite           | $\text{Bi}(\text{VO}_4)$  | A  | 1973-040  | Australia      | <i>Mineralogical Magazine</i> <b>39</b> (1974), 847                                    | <i>Mineralogical Magazine</i> <b>60</b> (1996), 387   |
| Clinocervantite          | $\text{Sb}^{3+}\text{Sb}^{5+}\text{O}_4$  | A  | 1997-017  | Italy          | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 95                             |   |
| Clinochlore              | $\text{Mg}_5\text{Al}(\text{AlSi}_3\text{O}_{10})(\text{OH})_8$   | G  | 1851      | USA            | <i>American Journal of Science and Arts</i> <b>12</b> (1851), 339                      | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 581   |
| Clinoclase               | $\text{Cu}_3(\text{AsO}_4)(\text{OH})_3$  | G  | 1830      | United Kingdom | Übersicht des Mineral-Systems. Engelhardt, Freiberg (1830)                             | <i>Acta Crystallographica</i> <b>C46</b> (1990), 2291   |
| Clinoenstatite           | $\text{Mg}_2\text{Si}_2\text{O}_6$  | A  | 1988 s.p. | unknown        | Die Enstatitaugite, (PhD dissertation). Univ. of Helsinki (1906), 151 p.               | <i>Zeitschrift für Kristallographie</i> <b>114</b> (1960), 120                                      |
| Clino-ferri-holmquistite | $\square\text{Li}_2(\text{Mg}_3\text{Fe}^{3+}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$  | A  | 2014 s.p. | Spain          | <i>American Mineralogist</i> <b>89</b> (2004), 888                                     | CNMNC Newsletter 22 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 1241                          |

|                                |  |    |           |            |   |   |
|--------------------------------|--|----|-----------|------------|---|---|
| Clino-ferro-ferri-holmquistite | $\square\text{Li}_2(\text{Fe}^{2+}_3\text{Fe}^{3+}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$          | Rd | 2012 s.p. | Spain      | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1345   |   |
| Clinoferrosilite               | $\text{Fe}^{2+}_2\text{Si}_2\text{O}_6$  | A  | 1988 s.p. | Kenya      | <i>American Journal of Science</i> <b>30</b> (1935), 481  | <i>American Mineralogist</i> <b>79</b> (1994), 1032   |
| Clinohedrite                   | $\text{CaZn}(\text{SiO}_4)\cdot\text{H}_2\text{O}$   | G  | 1898      | USA        | <i>American Journal of Science</i> <b>5</b> (1898), 289   | <i>Zeitschrift für Kristallographie</i> <b>144</b> (1976), 377                                      |
| Clinohumite                    | $\text{Mg}_9(\text{SiO}_4)_4\text{F}_2$  | G  | 1876      | Italy      | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1876), 640                                   | <i>American Mineralogist</i> <b>58</b> (1973), 43   |
| Clinojimthompsonite            | $\text{Mg}_5\text{Si}_6\text{O}_{16}(\text{OH})_2$   | A  | 1977-012  | USA        | <i>American Mineralogist</i> <b>63</b> (1978), 1000   | <i>American Mineralogist</i> <b>63</b> (1978), 1053   |
| Clinokurchatovite              | $\text{CaMgB}_2\text{O}_5$   | A  | 1982-017  | Kazakhstan | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 483                               | <i>Minerals</i> <b>8</b> (2018), 332  |
| Clinometaborite                | $\text{HBO}_2$   | A  | 2010-022  | Italy      | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1273   |   |
| Clino-oscar Kempffite          | $\text{Ag}_{15}\text{Pb}_6\text{Sb}_{21}\text{Bi}_{18}\text{S}_{72}$                                 | A  | 2012-086  | Bolivia    | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 569   |   |
| Clinophosinaite                | $\text{Na}_3\text{Ca}(\text{SiO}_3)(\text{PO}_4)$  | A  | 1979-083  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 351                               | <i>Soviet Physics - Crystallography</i> <b>25</b> (1980), 138                                       |
| Clinoptilolite-Ca              | $\text{Ca}_3(\text{Si}_{30}\text{Al}_6)\text{O}_{72}\cdot 20\text{H}_2\text{O}$                      | A  | 1997 s.p. | Japan      | <i>Zeitschrift für Kristallographie</i> <b>145</b> (1977), 216  | <i>American Mineralogist</i> <b>78</b> (1993), 260  |
| Clinoptilolite-K               | $\text{K}_6(\text{Si}_{30}\text{Al}_6)\text{O}_{72}\cdot 20\text{H}_2\text{O}$                       | Rn | 1997 s.p. | USA        | <i>American Mineralogist</i> <b>17</b> (1932), 128  | <i>Zeitschrift für Kristallographie, suppl.</i> <b>30</b> (2009), 395                               |
| Clinoptilolite-Na              | $\text{Na}_6(\text{Si}_{30}\text{Al}_6)\text{O}_{72}\cdot 20\text{H}_2\text{O}$                      | A  | 1997 s.p. | USA        | <i>U.S. Geological Survey, Professional Paper</i> <b>634</b> (1969), 1  | <i>Zeitschrift für Kristallographie, suppl.</i> <b>30</b> (2009), 395                               |
| Clinosafflorite                | $\text{CoAs}_2$  | A  | 1970-014  | Canada     | <i>Canadian Mineralogist</i> <b>10</b> (1971), 877  | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>89</b> (1966), 213 |
| Clino-suenoite                 | $\square\text{Mn}^{2+}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$                            | A  | 2016-111  | Italy      | <i>Mineralogical Magazine</i> <b>82</b> (2018), 189   |   |
| Clinotobermorite               | $\text{Ca}_4\text{Si}_6\text{O}_{17}(\text{H}_2\text{O})_2\cdot(\text{Ca}\cdot 3\text{H}_2\text{O})$ | Rd | 2014 s.p. | Japan      | <i>Mineralogical Magazine</i> <b>56</b> (1992), 353   | <i>American Mineralogist</i> <b>84</b> (1999), 1613   |
| Clinoungemachite               | $\text{K}_3\text{Na}_8\text{Fe}^{3+}(\text{SO}_4)_6(\text{OH})_2\cdot 10\text{H}_2\text{O}$          | G  | 1938      | Chile      | <i>American Mineralogist</i> <b>23</b> (1938), 314  |   |
| Clinzoisite                    | $\text{Ca}_2\text{Al}_3[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                     | A  | 2006 s.p. | Austria    | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>26</b> (1896), 156                                   | <i>American Mineralogist</i> <b>53</b> (1968), 1882   |
| Clintonite                     | $\text{CaAlMg}_2(\text{SiAl}_3\text{O}_{10})(\text{OH})_2$   | A  | 1998 s.p. | USA        | <i>Geology of New York. Part I. Geology of the First Geological District. Carroll &amp; Cook, Albany</i> (1843) | <i>American Mineralogist</i> <b>82</b> (1997), 936  |
| Cloncurryite                   | $\text{Cu}_{0.5}(\text{VO})_{0.5}\text{Al}_2(\text{PO}_4)_2\text{F}_2\cdot 5\text{H}_2\text{O}$      | A  | 2005-060  | Australia  | <i>Australian Journal of Mineralogy</i> <b>13</b> (2007), 5   |   |
| Coalingite                     | $\text{Mg}_{10}\text{Fe}^{3+}_2(\text{CO}_3)(\text{OH})_{24}\cdot 2\text{H}_2\text{O}$               | A  | 1965-011  | USA        | <i>American Mineralogist</i> <b>50</b> (1965), 1893   | <i>Mineralogical Magazine</i> <b>38</b> (1971), 286   |
| Cobaltarthurite                | $\text{CoFe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2\cdot 4\text{H}_2\text{O}$                           | A  | 2001-052  | Spain      | <i>Canadian Mineralogist</i> <b>40</b> (2002), 725  | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1387   |
| Cobaltaustinitite              | $\text{CaCo}(\text{AsO}_4)(\text{OH})$   | A  | 1987-042  | Australia  | <i>Australian Mineralogist</i> <b>3</b> (1988), 53  | <i>Acta Crystallographica</i> <b>E63</b> (2007), i53  |
| Cobaltite                      | $\text{CoAsS}$   | G  | 1832      | unknown    | <i>Traité Élémentaire de Minéralogie</i> , 2nd ed. Verdière, Paris (1832), 450                                  | <i>Canadian Mineralogist</i> <b>28</b> (1990), 719  |
| Cobaltkieserite                | $\text{Co}(\text{SO}_4)\cdot\text{H}_2\text{O}$  | A  | 2002-004  | Sweden     | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>124</b> (2002), 117                                  |   |
| Cobaltkoritnigite              | $\text{Co}(\text{AsO}_3\text{OH})\cdot\text{H}_2\text{O}$  | A  | 1980-013  | Germany    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 257   | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>454</b> (1979), 134                    |
| Cobaltlotharmeyerite           | $\text{CaCo}_2(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$   | A  | 1997-027  | Germany    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1999), 505   | <i>Archives des Sciences de Genève</i> <b>53</b> (2000), 49   |

|                     |  |    |           |                                  |  |   |
|---------------------|--|----|-----------|----------------------------------|--|---|
| Cobaltneustädtelite | $\text{Bi}_2\text{Fe}^{3+}(\text{Co},\text{Fe}^{3+})(\text{AsO}_4)_2(\text{O},\text{OH})_4$                      | A  | 2000-012  | Germany                          | <i>American Mineralogist</i> <b>87</b> (2002), 726   |   |
| Cobaltoblödite      | $\text{Na}_2\text{Co}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$  | A  | 2012-059  | USA                              | <i>Mineralogical Magazine</i> <b>77</b> (2013), 367  |   |
| Cobaltomenite       | $\text{Co}(\text{Se}^{4+}\text{O}_3) \cdot 2\text{H}_2\text{O}$  | Rn | 2007 s.p. | Argentina                        | <i>Bulletin de la Société Minéralogique de France</i> <b>5</b> (1882), 90  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 353 |
| Cobaltpentlandite   | $\text{Co}_9\text{S}_8$  | Rn | 1962 s.p. | Finland                          | <i>American Mineralogist</i> <b>44</b> (1959), 897   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 75             |
| Cobalttsumcorite    | $\text{PbCo}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1999-029  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 558  |   |
| Cobaltzippeite      | $\text{Co}(\text{UO}_2)_2(\text{SO}_4)\text{O}_2 \cdot 3.5\text{H}_2\text{O}$                                    | Rn | 1971-006  | USA                              | <i>Canadian Mineralogist</i> <b>14</b> (1976), 429   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 687            |
| Coccinite           | $\text{HgI}_2$   | G  | 1845      | Mexico                           | Handbuch der bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 572                                       | <i>Acta Crystallographica</i> <b>B63</b> (2007), 828          |
| Cochromite          | $\text{CoCr}_2\text{O}_4$  | A  | 1978-049  | South Africa                     | <i>Bulletin du Bureau des Recherches Géologiques et Minières, Sect. II</i> <b>3</b> (1978), 225                      | <i>Mineralogical Magazine</i> <b>58</b> (1994), 247           |
| Coconinoite         | $\text{Fe}^{3+}_2\text{Al}_2(\text{UO}_2)_2(\text{PO}_4)_4(\text{SO}_4)(\text{OH})_2 \cdot 20\text{H}_2\text{O}$ | A  | 1965-003  | USA                              | <i>American Mineralogist</i> <b>51</b> (1966), 651   | <i>Doklady Akademii Nauk SSSR</i> <b>329</b> (1993), 772      |
| Coesite             | $\text{SiO}_2$   | A  | 1962 s.p. | USA                              | <i>Science</i> <b>132</b> (1960), 220  | <i>American Mineralogist</i> <b>92</b> (2007), 57             |
| Coffinite           | $\text{U}(\text{SiO}_4) \cdot n\text{H}_2\text{O}$   | G  | 1956      | USA                              | <i>American Mineralogist</i> <b>41</b> (1956), 675   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 57    |
| Cohenite            | $\text{CFe}_3$   | G  | 1889      | Slovakia                         | <i>Annalen des Kaiserlich-Königlichen Naturhistorischen Hofmuseums</i> <b>4</b> (1889), 93                           | <i>Geochimica et Cosmochimica Acta</i> <b>31</b> (1967), 143  |
| Coiraite            | $(\text{Pb},\text{Sn})_{12.5}\text{As}_3\text{Sn}_5\text{FeS}_{28}$  | A  | 2005-024  | Argentina                        | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1083   |   |
| Coldwellite         | $\text{Pd}_3\text{Ag}_2\text{S}$   | A  | 2014-045  | Canada                           | <i>Canadian Mineralogist</i> <b>53</b> (2015), 845   |   |
| Colemanite          | $\text{CaB}_3\text{O}_4(\text{OH})_3 \cdot \text{H}_2\text{O}$   | G  | 1884      | USA                              | <i>American Journal of Science, Ser. III</i> <b>28</b> (1884), 447   | <i>Canadian Mineralogist</i> <b>31</b> (1993), 297            |
| Colimaite           | $\text{K}_3\text{VS}_4$  | A  | 2007-045  | Mexico                           | <i>Revista Mexicana de Ciencias Geológicas</i> <b>26</b> (2009), 600   |   |
| Colinowensite       | $\text{BaCuSi}_2\text{O}_6$  | A  | 2012-060  | South Africa                     | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1769   |   |
| Collinsite          | $\text{Ca}_2\text{Mg}(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$  | G  | 1927      | Canada                           | <i>Canada Department of Mines, Bulletin</i> <b>46</b> (1927), 2  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1181           |
| Coloradoite         | $\text{HgTe}$  | G  | 1878      | USA                              | <i>Proceedings of the American Philosophical Society</i> <b>17</b> (1878), 113                                       | <i>Zeitschrift für Kristallographie</i> <b>63</b> (1926), 466 |
| Colquiriite         | $\text{CaLiAlF}_6$   | A  | 1980-015  | Bolivia                          | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>27</b> (1980), 275                              |   |
| Columbite-(Fe)      | $\text{Fe}^{2+}\text{Nb}_2\text{O}_6$  | Rn | 2007 s.p. | USA                              | System of Mineralogy, vol. II. Bell & Bradfute, Edinburgh (1805), 582  | <i>American Mineralogist</i> <b>90</b> (2005), 1291           |
| Columbite-(Mg)      | $\text{MgNb}_2\text{O}_6$  | Rn | 1967 s.p. | Tajikistan                       | <i>Doklady Akademii Nauk SSSR</i> <b>148</b> (1963), 420   |   |
| Columbite-(Mn)      | $\text{Mn}^{2+}\text{Nb}_2\text{O}_6$  | Rn | 2007 s.p. | USA                              | The System of Mineralogy of James Dwight Dana 1837-1868, Descriptive Mineralogy, 6th ed. Wiley, New York (1892), 731 | <i>American Mineralogist</i> <b>90</b> (2005), 1291           |
| Colusite            | $\text{Cu}_{13}\text{VAs}_3\text{S}_{16}$  | G  | 1933      | USA                              | <i>American Mineralogist</i> <b>18</b> (1933), 528   | <i>American Mineralogist</i> <b>79</b> (1994), 750            |
| Comancheite         | $\text{Hg}^{2+}_{55}\text{N}^{3-}_{24}(\text{NH}_2,\text{OH})_4(\text{Cl},\text{Br})_{34}$                       | Rd | 1980-077  | USA                              | <i>Canadian Mineralogist</i> <b>19</b> (1981), 393   | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3217          |
| Combeite            | $\text{Na}_{4.5}\text{Ca}_{3.5}\text{Si}_6\text{O}_{17.5}(\text{OH})_{0.5}$                                      | G  | 1957      | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>31</b> (1957), 503  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 49  |

|                 |  |    |           |                                  |   |  |
|-----------------|--|----|-----------|----------------------------------|---|--|
| Comblainite     | $\text{Ni}_4\text{Co}^{3+}_2(\text{CO}_3)(\text{OH})_{12}\cdot 3\text{H}_2\text{O}$                | A  | 1978-009  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 113   |  |
| Compreignacite  | $\text{K}_2(\text{UO}_2)_6\text{O}_4(\text{OH})_6\cdot 7\text{H}_2\text{O}$                        | A  | 1964-026  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>87</b> (1964), 365     | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1061                              |
| Congolite       | $\text{Fe}^{2+}_3\text{B}_7\text{O}_{13}\text{Cl}$   | A  | 1971-030  | Republic of the Congo            | <i>Kali und Steinsalz</i> <b>6</b> (1972), 1  | <i>Canadian Mineralogist</i> <b>35</b> (1997), 189                               |
| Conichalcite    | $\text{CaCu}(\text{AsO}_4)(\text{OH})$   | G  | 1849      | Spain                            | <i>Annalen der Physik und Chemie</i> <b>77</b> (1849), 139  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>104</b> (2009), 125 |
| Connellite      | $\text{Cu}_{36}(\text{SO}_4)(\text{OH})_{62}\text{Cl}_8\cdot 6\text{H}_2\text{O}$                  | G  | 1850      | USA                              | System of Mineralogy, 3rd ed. Putnam, New York (1850), 523  | <i>Axis</i> <b>2</b> (2006), 1   |
| Cookeite        | $(\text{Al},\text{Li})_3\text{Al}_2(\text{Si},\text{Al})_4\text{O}_{10}(\text{OH})_8$              | G  | 1866      | USA                              | <i>American Journal of Science and Arts</i> <b>91</b> (1866) 246  | <i>American Mineralogist</i> <b>89</b> (2004), 1510                              |
| Coombsite       | $\text{KMn}^{2+}_{13}(\text{Si},\text{Al})_{18}\text{O}_{42}(\text{OH})_{14}$                      | A  | 1989-058  | New Zealand                      | <i>New Zealand Journal of Geology and Geophysics</i> <b>34</b> (1991), 329                              |  |
| Cooperite       | PtS  | G  | 1928      | South Africa                     | <i>Journal of Chemical, Metallurgical and Mining Society of South Africa</i> <b>28</b> (1928), 281      | <i>Crystallography Reports</i> <b>53</b> (2008), 391                             |
| Coparsite       | $\text{Cu}^{2+}_4\text{O}_2(\text{AsO}_4)\text{Cl}$  | A  | 1996-064  | Russia                           | <i>Canadian Mineralogist</i> <b>37</b> (1999), 911  | <i>Zeitschrift für Kristallographie</i> <b>213</b> (1998), 650                   |
| Copiapite       | $\text{Fe}^{2+}\text{Fe}^{3+}_4(\text{SO}_4)_6(\text{OH})_2\cdot 20\text{H}_2\text{O}$             | G  | 1833      | Chile                            | <i>Annalen der Physik und Chemie</i> <b>27</b> (1833), 309  | <i>Zeitschrift für Kristallographie</i> <b>135</b> (1972), 34                    |
| Copper          | Cu   | G  | ?         | unknown                          | original paper?   |  |
| Coquandite      | $\text{Sb}^{3+}_{6+x}\text{O}_{8+x}(\text{SO}_4)(\text{OH})_x(\text{H}_2\text{O})_{1-x}$ (x = 0.3) | A  | 1991-024  | Italy                            | <i>Mineralogical Magazine</i> <b>56</b> (1992), 599   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 871                              |
| Coquimbite      | $\text{Fe}^{3+}_2(\text{SO}_4)_3\cdot 9\text{H}_2\text{O}$   | G  | 1841      | Chile                            | Vollständiges Handbuch der Mineralogie, Vol. 2. Arnoldische, Dresden-Leipzig (1841), 100                | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 849                      |
| Coralloite      | $\text{Mn}^{2+}\text{Mn}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2\cdot 4\text{H}_2\text{O}$             | A  | 2010-012  | Italy                            | <i>American Mineralogist</i> <b>97</b> (2012), 727  |  |
| Corderoite      | $\text{Hg}_3\text{S}_2\text{Cl}_2$   | A  | 1973-037  | USA                              | <i>American Mineralogist</i> <b>59</b> (1974), 652  | <i>Acta Crystallographica</i> <b>B24</b> (1968), 156                             |
| Cordierite      | $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$   | G  | 1813      | Germany ?                        | Tableau Méthodique Espèces Minérales, Seconde Partie. D'Hautel, Paris (1813), 219                       | <i>Periodico di Mineralogia</i> <b>76</b> (2006), 113                            |
| Cordylite-(Ce)  | $(\text{Na},\text{Ca},\square)\text{BaCe}_2(\text{CO}_3)_4(\text{F},\text{O})$                     | A  | 1987 s.p. | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 42   | <i>American Mineralogist</i> <b>83</b> (1998), 178                               |
| Cordylite-(La)  | $\text{NaCaBa}_2\text{La}_3\text{Sr}(\text{CO}_3)_8\text{F}_2$                                     | A  | 2010-058  | Russia                           | <i>Canadian Mineralogist</i> <b>50</b> (2012), 1281   |  |
| Corkite         | $\text{PbFe}^{3+}_3(\text{SO}_4)(\text{PO}_4)(\text{OH})_6$  | Rd | 1987 s.p. | Ireland                          | <i>Annales des Mines</i> <b>15</b> (1869), 405  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 71                     |
| Cornetite       | $\text{Cu}_3(\text{PO}_4)(\text{OH})_3$  | G  | 1916      | Democratic Republic of the Congo | Les Minéraux et les Roches. Liège (1916), 452   | <i>Mineralogy and Petrology</i> <b>40</b> (1989), 127                            |
| Cornubite       | $\text{Cu}_5(\text{AsO}_4)_2(\text{OH})_4$   | A  | 1962 s.p. | United Kingdom                   | <i>Mineralogical Magazine</i> <b>32</b> (1959), 1   | <i>Bulletin of the Geological Society of Finland</i> <b>57</b> (1985), 119       |
| Cornwallite     | $\text{Cu}_5(\text{AsO}_4)_2(\text{OH})_4$   | G  | 1847      | United Kingdom                   | <i>Königliche Boehmische Gesellschaft der Wissenschaften, Prague, Abhandlungen</i> <b>4</b> (1847), 649 |  |
| Coronadite      | $\text{Pb}(\text{Mn}^{4+}_6\text{Mn}^{3+}_2)\text{O}_{16}$   | G  | 1904      | USA                              | <i>American Journal of Science</i> <b>18</b> (1904), 448  | <i>American Mineralogist</i> <b>74</b> (1989), 913                               |
| Correianevesite | $\text{Fe}^{2+}\text{Mn}^{2+}_2(\text{PO}_4)_2\cdot 3\text{H}_2\text{O}$                           | A  | 2013-007  | Brasil                           | <i>American Mineralogist</i> <b>99</b> (2014), 811  |  |



|                 |  |    |           |                                  |  |   |
|-----------------|--|----|-----------|----------------------------------|--|---|
| Corrensite      | $(Ca,Na,K)_{1-x}(Mg,Fe,Al)_9(Si,Al)_8O_{20}(OH)_{10}\cdot nH_2O$ | G  | 1954      | Germany                          | <i>Beiträge zur Mineralogie und Petrographie</i> <b>4</b> (1954), 130                  | <i>American Mineralogist</i> <b>82</b> (1997), 109                        |
| Cortesognoite   | $CaV_2Si_2O_7(OH)_2\cdot H_2O$                                   | A  | 2014-029  | Italy                            | CNMNC Newsletter 21 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 797              |   |
| Corundum        | $Al_2O_3$  | G  | 1714 ?    | India ?                          | original paper?  | <i>Acta Crystallographica</i> <b>A46</b> (1990), 271                      |
| Corvusite       | $(Na,Ca,K)_{1-x}(V^{5+},V^{4+},Fe^{2+})_8O_{20}\cdot 4H_2O$      | G  | 1933      | USA                              | <i>American Mineralogist</i> <b>18</b> (1933), 195                                     | <i>Canadian Mineralogist</i> <b>32</b> (1994), 339                        |
| Cosalite        | $Pb_2Bi_2S_5$  | G  | 1868      | Mexico                           | <i>American Journal of Science and Arts</i> <b>95</b> (1868), 305                      | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1081                       |
| Coskrenite-(Ce) | $Ce_2(SO_4)_2(C_2O_4)\cdot 8H_2O$                                | A  | 1996-056  | USA                              | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1453                                    |   |
| Cossaite        | $(Mg_{0.5},\square)Al_6(SO_4)_6(HSO_4)F_6\cdot 36H_2O$           | A  | 2009-031  | Italy                            | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2847                                   |   |
| Costibite       | $CoSbS$  | A  | 1969-014  | Australia                        | <i>American Mineralogist</i> <b>55</b> (1970), 10                                      | <i>Canadian Mineralogist</i> <b>13</b> (1975), 188                        |
| Cotunnite       | $PbCl_2$   | G  | 1825      | Italy                            | Prodromo della mineralogia vesuviana. Da' Torchi del Tramater, Napoli (1825)           | <i>Soviet Physics - Crystallography</i> <b>21</b> (1976), 38              |
| Coulsonite      | $Fe^{2+}V^{3+}_2O_4$   | Rd | 1962 s.p. | India                            | <i>Memoirs of the Geological Survey of India</i> <b>69</b> (1937), 21                  | <i>American Mineralogist</i> <b>47</b> (1962), 1284                       |
| Cousinite       | $MgU^{4+}_2(MoO_4)_2(OH)_6\cdot 2H_2O$ (?)                       | Q  | 1958      | Democratic Republic of the Congo | <i>Geologie en Mijnbouw</i> <b>20</b> (1958), 449                                      | <i>Annales de la Société Géologique de Belgique</i> <b>98</b> (1975), 155 |
| Coutinhoite     | $Th_xBa_{1-2x}(UO_2)_2Si_5O_{13}\cdot 3H_2O$                     | A  | 2003-025  | Brazil                           | <i>American Mineralogist</i> <b>89</b> (2004), 721                                     |   |
| Covellite       | $CuS$  | G  | 1832      | Italy                            | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 409                 | <i>Zeitschrift für Kristallographie</i> <b>184</b> (1988), 111            |
| Cowlesite       | $Ca(Al_2Si_3)O_{10}\cdot 5\cdot 6H_2O$                           | A  | 1975-016  | USA                              | <i>American Mineralogist</i> <b>60</b> (1975), 951                                     |   |
| Coyoteite       | $NaFe_3S_5\cdot 2H_2O$   | A  | 1978-042  | USA                              | <i>American Mineralogist</i> <b>68</b> (1983), 245                                     |   |
| Crandallite     | $CaAl_3(PO_4)(PO_3OH)(OH)_6$                                     | Rd | 1999 s.p. | USA                              | <i>American Journal of Science</i> <b>43</b> (1917), 69                                | <i>American Mineralogist</i> <b>59</b> (1974), 41                         |
| Cranswickite    | $Mg(SO_4)\cdot 4H_2O$  | A  | 2010-016  | Argentina                        | <i>American Mineralogist</i> <b>96</b> (2011), 869                                     |   |
| Crawfordite     | $Na_3Sr(PO_4)(CO_3)$   | A  | 1993-030  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>123(3)</b> (1994), 107 | <i>Doklady Akademii Nauk SSSR</i> <b>322</b> (1992), 531                  |
| Creaseyite      | $Cu_2Pb_2Fe^{3+}_2Si_5O_{17}\cdot 6H_2O$                         | A  | 1974-044  | USA                              | <i>Mineralogical Magazine</i> <b>40</b> (1975), 227                                    |   |
| Crednerite      | $CuMnO_2$  | G  | 1849      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>74</b> (1849), 559                             | <i>Zeitschrift für Kristallographie</i> <b>210</b> (1995), 184            |
| Creedite        | $Ca_3Al_2(SO_4)(OH)_2F_8\cdot 2H_2O$                             | G  | 1916      | USA                              | <i>Proceedings of the National Academy of Sciences</i> <b>2</b> (1916), 360            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 69              |
| Crerarite       | $(Pt,Pb)Bi_3(S,Se)_{4-x}$ (x = 0.4-0.8)                          | A  | 1994-003  | Canada                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 567                          |   |
| Crichtonite     | $Sr(Mn,Y,U)Fe_2(Ti,Fe,Cr,V)_{18}(O,OH)_{38}$                     | A  | 1980 s.p. | France                           | <i>The Monthly Review</i> <b>73</b> (1814), 17   | <i>American Mineralogist</i> <b>61</b> (1976), 1203                       |
| Criddleite      | $Ag_2Au_3TlSb_{10}S_{10}$  | A  | 1987-037  | Canada                           | <i>Mineralogical Magazine</i> <b>52</b> (1988), 691                                    |   |
| Crimsonite      | $PbFe^{3+}_2(PO_4)_2(OH)_2$                                      | A  | 2014-095  | USA                              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 925                                    |   |
| Cristobalite    | $SiO_2$  | G  | 1887      | Mexico                           | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1887), 198          | <i>Physics and Chemistry of Minerals</i> <b>17</b> (1991), 554            |
| Crocoite        | $Pb(CrO_4)$  | G  | 1832      | Russia                           | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 669                 | <i>Acta Crystallographica</i> <b>19</b> (1965), 287                       |
| Cronstedtite    | $(Fe^{2+},Fe^{3+})_3(Si,Fe^{3+})_2O_5(OH)_4$                     | G  | 1821      | Czech Republic                   | <i>Journal für Chemie und Physik</i> <b>32</b> (1821), 69                              | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 197               |
| Cronusite       | $Ca_{0.2}CrS_2\cdot 2H_2O$                                       | A  | 1999-018  | USA (meteorite)                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 29  |   |

|                   |   |    |             |                     |  |   |
|-------------------|---|----|-------------|---------------------|--|---|
| Crookesite        | $\text{Cu}_7\text{TlSe}_4$  | G  | 1867        | Sweden              | <i>Bulletin Mensuel de la Société Chimique de Paris</i> <b>7</b> (1867), 409   | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>304</b> (1987), 1121 |
| Crowningshieldite | $(\text{Ni}_{0.9}\text{Fe}_{0.1})\text{S}$  | A  | 2018-072    | Lesotho             | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Cryobostryxite    | $\text{KZnCl}_3 \cdot 2\text{H}_2\text{O}$  | A  | 2014-058    | Russia              | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 805  |   |
| Cryolite          | $\text{Na}_2\text{NaAlF}_6$   | G  | 1799        | Denmark (Greenland) | <i>Allgemeines Journal der Chemie</i> <b>2</b> (1799), 502   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 377                                |
| Cryolithionite    | $\text{Na}_3\text{Al}_2(\text{LiF}_4)_3$  | G  | 1904        | Denmark (Greenland) | <i>Oversigt over det Kongelige Danske Videnskabernes Selskabs Forhandlinger</i> (1904), 2  | <i>American Mineralogist</i> <b>56</b> (1971), 18                                 |
| Cryptochalcite    | $\text{K}_2\text{Cu}_5\text{O}(\text{SO}_4)_5$  | A  | 2014-106    | Russia              | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 593  |   |
| Cryptohalite      | $(\text{NH}_4)_2\text{SiF}_6$   | G  | 1874        | Italy               | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>6</b> (1874), 1                         | <i>Journal of Chemical Physics</i> <b>44</b> (1966), 2499                         |
| Cryptomelane      | $\text{K}(\text{Mn}^{4+}_7\text{Mn}^{3+})\text{O}_{16}$                                 | A  | 1982 s.p. ? | USA                 | <i>American Mineralogist</i> <b>27</b> (1942), 607   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1056                             |
| Cryptophyllite    | $\text{K}_2\text{Ca}[\text{Si}_4\text{O}_{10}] \cdot 5\text{H}_2\text{O}$               | A  | 2008-061    | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(1)</b> (2010), 37   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 547                       |
| Cualstibite       | $\text{Cu}_2\text{Al}(\text{OH})_6[\text{Sb}(\text{OH})_6]$                             | Rd | 1983-068    | Germany             | <i>Chemie der Erde</i> <b>43</b> (1984), 255   | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 171                            |
| Cubanite          | $\text{CuFe}_2\text{S}_3$   | G  | 1843        | Cuba                | <i>Annalen der Physik und Chemie</i> <b>59</b> (1843), 325   | <i>Zeitschrift für Kristallographie</i> <b>140</b> (1974), 218                    |
| Cuboargyrite      | $\text{AgSbS}_2$  | A  | 1997-004    | Germany             | <i>Lapis</i> <b>23</b> (1998), 21  |   |
| Cumengeite        | $\text{Pb}_{21}\text{Cu}_{20}\text{Cl}_{42}(\text{OH})_{40} \cdot 6\text{H}_2\text{O}$  | Rn | 2007 s.p.   | Mexico              | <i>Bulletin de la Société Française de Minéralogie</i> <b>16</b> (1893), 184   | <i>Mineralogical Magazine</i> <b>69</b> (2005), 1037                              |
| Cumingtonite      | $\square\text{Mg}_2\text{Mg}_5\text{Si}_6\text{O}_{22}(\text{OH})_2$                    | Rd | 2012 s.p.   | Norway              | <i>American Journal of Science and Arts</i> <b>8</b> (1824), 1   | <i>American Mineralogist</i> <b>74</b> (1989), 1091                               |
| Cupalite          | $\text{CuAl}$   | A  | 1983-084    | Russia (meteorite)  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 90   |   |
| Cuprite           | $\text{Cu}_2\text{O}$   | G  | 1845        | Germany             | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 546   | <i>Acta Crystallographica</i> <b>A46</b> (1990), 271                              |
| Cuproauride       | $\text{Cu}_3\text{Au}$  | Q  | 1939        | Russia              | <i>Comptes Rendus (Doklady) de l'Académie des Sciences de l'URSS</i> <b>24</b> (1939), 451   |   |
| Cuprobismutite    | $\text{Cu}_8\text{AgBi}_{13}\text{S}_{24}$  | G  | 1884        | USA                 | <i>American Journal of Science</i> <b>27</b> (1884), 355   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1481                               |
| Cuprocopiapite    | $\text{Cu}^{2+}\text{Fe}^{3+}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$ | G  | 1938        | Chile               | <i>American Mineralogist</i> <b>23</b> (1938), 737   |   |
| Cuproiridsite     | $\text{CuIr}_2\text{S}_4$   | A  | 1984-016    | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 187  |   |
| Cuprokalininite   | $\text{CuCr}_2\text{S}_4$   | A  | 2010-008    | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(6)</b> (2010), 39   |   |
| Cupromakopavonite | $\text{Cu}_8\text{Pb}_4\text{Ag}_3\text{Bi}_{19}\text{S}_{38}$                          | A  | 2005-036    | Austria             | <i>Canadian Mineralogist</i> <b>50</b> (2012), 295   |   |

|                   |  |     |           |                                  |   |   |
|-------------------|--|-----|-----------|----------------------------------|---|---|
| Cupromakovickyite | $\text{Cu}_4\text{AgPb}_2\text{Bi}_9\text{S}_{18}$   | A   | 2002-058  | Austria                          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 503  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 515  |
| Cupromolybdite    | $\text{Cu}^{2+}_3\text{O}(\text{Mo}^{6+}\text{O}_4)_2$   | A   | 2011-005  | Russia                           | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 749   |   |
| Cuproneite        | $\text{Cu}_7\text{Pb}_{27}\text{Bi}_{25}\text{S}_{68}$   | A   | 2008-053  | Romania                          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 353  |   |
| Cupropavonite     | $\text{Cu}_{0.9}\text{Ag}_{0.5}\text{Pb}_{0.6}\text{Bi}_{2.5}\text{S}_5$                         | A   | 1978-033  | USA                              | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 351   | <i>Canadian Mineralogist</i> <b>18</b> (1980), 181  |
| Cupropearceite    | $[\text{Cu}_6\text{As}_2\text{S}_7][\text{Ag}_9\text{CuS}_4]$                                    | A   | 2007-046  | Kazakhstan                       | <i>Mineralogical Magazine</i> <b>71</b> (2007), 641   | <i>American Mineralogist</i> <b>98</b> (2013), 1279   |
| Cupropolybasite   | $[\text{Cu}_6\text{Sb}_2\text{S}_7][\text{Ag}_9\text{CuS}_4]$                                    | A   | 2008-004  | Canada                           | <i>Mineralogical Magazine</i> <b>71</b> (2007), 641   | <i>American Mineralogist</i> <b>98</b> (2013), 1279   |
| Cuprorhodsite     | $(\text{Cu}^{1+}_{0.5}\text{Fe}^{3+}_{0.5})\text{Rh}^{3+}_2\text{S}_4$                           | Rd  | 1984-017  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 187                   |   |
| Cuprorivaite      | $\text{CaCuSi}_4\text{O}_{10}$   | Rd  | 1962 s.p. | Italy                            | <i>Periodico di Mineralogia</i> <b>9</b> (1938), 333  | <i>American Mineralogist</i> <b>47</b> (1962), 409  |
| Cuprosklodowskite | $\text{Cu}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2 \cdot 6\text{H}_2\text{O}$                    | G   | 1933      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>56</b> (1933), B331                          | <i>American Mineralogist</i> <b>66</b> (1981), 610  |
| Cuprospinel       | $\text{Cu}^{2+}\text{Fe}^{3+}_2\text{O}_4$   | A   | 1971-020  | Canada                           | <i>Canadian Mineralogist</i> <b>11</b> (1973), 1003   | <i>American Mineralogist</i> <b>100</b> (2015), 1752  |
| Cuprostibite      | $\text{Cu}_2(\text{Sb},\text{Ti})$   | A ? | 1969      | Denmark (Greenland)              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>98</b> (1969), 716                    |   |
| Cuprotungstite    | $\text{Cu}^{2+}_3(\text{WO}_4)_2(\text{OH})_2$   | G   | 1869      | Mexico                           | Tableau minéralogique. Hatier, Paris (1869), 32   | <i>Mineralogical Magazine</i> <b>43</b> (1979), 448   |
| Curetonite        | $\text{Ba}(\text{Al},\text{Ti})(\text{PO}_4)(\text{OH},\text{O})\text{F}$                        | A   | 1978-065  | USA                              | <i>Mineralogical Record</i> <b>10</b> (1979), 219   | <i>American Mineralogist</i> <b>79</b> (1994), 545  |
| Curienite         | $\text{Pb}(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 5\text{H}_2\text{O}$                              | Rn  | 1967-049  | Gabon                            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>91</b> (1968), 453 | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 8 |
| Curite            | $\text{Pb}_{3+x}[(\text{UO}_2)_4\text{O}_{4+x}(\text{OH})_{3-x}]_2 \cdot 2\text{H}_2\text{O}$    | G   | 1921      | Democratic Republic of the Congo | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>173</b> (1921), 1186  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 727  |
| Currierite        | $\text{Na}_4\text{Ca}_3\text{MgAl}_4(\text{AsO}_3\text{OH})_{12} \cdot 9\text{H}_2\text{O}$      | A   | 2016-030  | Chile                            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1141  |   |
| Cuspidine         | $\text{Ca}_8(\text{Si}_2\text{O}_7)_2\text{F}_4$   | G   | 1876      | Italy                            | <i>Rendiconto dell'Accademia delle Scienze Fisiche e Matematiche</i> <b>15</b> (1876), 208          | <i>Canadian Mineralogist</i> <b>26</b> (1988), 933  |
| Cuzticiticite     | $\text{Fe}^{3+}_2\text{Te}^{6+}\text{O}_6 \cdot 3\text{H}_2\text{O}$                             | A   | 1980-071  | Mexico                           | <i>Mineralogical Magazine</i> <b>46</b> (1982), 257   |   |
| Cyanochroite      | $\text{K}_2\text{Cu}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$                                   | G   | 1855      | Italy                            | Memoria sullo incendio vesuviano del mese di maggio 1855. Nobile, Napoli (1855)                     | <i>Mineralogica et Petrographica Acta</i> <b>14</b> (1968), 23                                    |
| Cyanotrichite     | $\text{Cu}_4\text{Al}_2(\text{SO}_4)(\text{OH})_{12}(\text{H}_2\text{O})_2$                      | A   | 1967 s.p. | Romania                          | Handbuch der Mineralogie, 2nd. ed. Schrag, Nürnberg (1839), 587                                     | <i>Mineralogical Magazine</i> <b>79</b> (2015), 321   |
| Cylindrite        | $\text{FePb}_3\text{Sn}_4\text{Sb}_2\text{S}_{14}$   | G   | 1893      | Bolivia                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>2</b> (1893), 125              | <i>American Mineralogist</i> <b>77</b> (1992), 758  |
| Cymrite           | $\text{Ba}(\text{Si},\text{Al})_4(\text{O},\text{OH})_8 \cdot \text{H}_2\text{O}$                | G   | 1949      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>28</b> (1949), 676   | <i>Crystallography Reports</i> <b>55</b> (2010), 569  |
| Cyprine           | $\text{Ca}_{19}\text{Cu}^{2+}(\text{Al},\text{Mg})_{12}\text{Si}_{18}\text{O}_{69}(\text{OH})_9$ | A   | 2015-044  | South Africa                     | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 295   |   |
| Cyrlilovite       | $\text{NaFe}^{3+}_3(\text{PO}_4)_2(\text{OH})_4 \cdot 2\text{H}_2\text{O}$                       | G   | 1953      | Czech Republic                   | <i>Acta Academiae Scientiarum Naturalium Moravo-Silesiacae</i> <b>25</b> (1953), 325                | <i>Mineralogy and Petrology</i> <b>37</b> (1987), 1   |
| Czochralskiite    | $\text{Na}_4\text{Ca}_3\text{Mg}(\text{PO}_4)_4$   | A   | 2015-011  | Poland (meteorite)               | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 969   |   |

|                    |  |     |           |                        |  |   |
|--------------------|--|-----|-----------|------------------------|--|---|
| Dachiardite-Ca     | $\text{Ca}_2(\text{Si}_{20}\text{Al}_4)\text{O}_{48} \cdot 13\text{H}_2\text{O}$                           | Rn  | 1997 s.p. | Italy                  | <i>Atti della Società Toscana di Scienze Naturali, Processi Verbali</i> <b>22</b> (1906), 150  | <i>Zeitschrift für Kristallographie</i> <b>166</b> (1984), 63   |
| Dachiardite-K      | $\text{K}_4(\text{Si}_{20}\text{Al}_4)\text{O}_{48} \cdot 13\text{H}_2\text{O}$                            | A   | 2015-041  | Bulgaria               | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(1)</b> (2016), 68   |   |
| Dachiardite-Na     | $\text{Na}_4(\text{Si}_{20}\text{Al}_4)\text{O}_{48} \cdot 13\text{H}_2\text{O}$                           | Rn  | 1997 s.p. | Italy                  | <i>Contributions to Mineralogy and Petrology</i> <b>49</b> (1975) 63   |   |
| Dadsonite          | $\text{Pb}_{23}\text{Sb}_{25}\text{S}_{60}\text{Cl}$   | A   | 1968-011  | Canada / Germany / USA | <i>Mineralogical Magazine</i> <b>37</b> (1969), 437  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1499   |
| Dagenaisite        | $\text{Zn}_3\text{Te}^{6+}\text{O}_6$  | A   | 2017-017  | USA                    | <i>Canadian Mineralogist</i> <b>55</b> (2017), 867   |   |
| Daliranite         | $\text{PbHgAs}_2\text{S}_6$  | A   | 2007-010  | Iran                   | <i>Mineralogical Magazine</i> <b>73</b> (2009), 871  |   |
| Dalnegorskite      | $\text{Ca}_5\text{Mn}(\text{Si}_3\text{O}_9)_2$  | A   | 2018-007  | Russia                 | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Dalnegroite        | $\text{Ti}_4\text{Pb}_2(\text{As}, \text{Sb})_{20}\text{S}_{34}$   | A   | 2009-058  | Switzerland            | <i>Mineralogical Magazine</i> <b>73</b> (2009), 1027   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 999   |
| Dalyite            | $\text{K}_2\text{ZrSi}_6\text{O}_{15}$   | G   | 1952      | United Kingdom         | <i>Mineralogical Magazine</i> <b>29</b> (1952), 850  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 547   |
| Damaraite          | $\text{Pb}_3\text{O}_2(\text{OH})\text{Cl}$  | A   | 1989-013  | Namibia                | <i>Mineralogical Magazine</i> <b>54</b> (1990), 593  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 326   |
| Damiaoite          | $\text{PtIn}_2$  | A   | 1995-041  | China                  | <i>Acta Mineralogica Sinica</i> <b>71</b> (1997), 328  |   |
| Danalite           | $\text{Be}_3\text{Fe}^{2+}_4(\text{SiO}_4)_3\text{S}$  | G   | 1866      | USA                    | <i>American Journal of Science and Arts</i> <b>92</b> (1866), 73   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1413   |
| Danbaite           | $\text{CuZn}_2$  | A   | 1981-041  | China                  | <i>Kexue Tongbao</i> <b>22</b> (1983), 1383  |   |
| Danburite          | $\text{CaB}_2\text{Si}_2\text{O}_8$  | G   | 1839      | USA                    | <i>American Journal of Science and Arts</i> <b>35</b> (1839), 137  | <i>Zeitschrift für Kristallographie</i> <b>173</b> (1985), 293  |
| Danielsite         | $(\text{Cu}, \text{Ag})_{14}\text{HgS}_8$  | A   | 1984-044  | Australia              | <i>American Mineralogist</i> <b>72</b> (1987), 401   | <i>American Mineralogist</i> <b>73</b> (1988), 187  |
| D'ansite           | $\text{Na}_{21}\text{Mg}(\text{SO}_4)_{10}\text{Cl}_3$   | Rn  | 2007 s.p. | Austria                | <i>Naturwissenschaften</i> <b>45</b> (1958), 362   | <i>Kexue Tongbao</i> <b>32</b> (1987), 478  |
| D'ansite-(Fe)      | $\text{Na}_{21}\text{Fe}(\text{SO}_4)_{10}\text{Cl}_3$   | A   | 2011-065  | Italy                  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2773   |   |
| D'ansite-(Mn)      | $\text{Na}_{21}\text{Mn}(\text{SO}_4)_{10}\text{Cl}_3$   | A   | 2011-064  | Italy                  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2773   |   |
| Dantopaite         | $\text{Ag}_5\text{Bi}_3\text{S}_{22}$  | A   | 2008-058  | Austria                | <i>Canadian Mineralogist</i> <b>48</b> (2010), 467   |   |
| Daomanite          | $\text{CuPtAsS}_2$   | A ? | ?         | China                  | <i>Acta Geologica Sinica</i> <b>4</b> (1978), 320  | <i>Acta Geologica Sinica</i> <b>75</b> (2001), 458  |
| Daqingshanite-(Ce) | $\text{Sr}_3\text{Ce}(\text{PO}_4)(\text{CO}_3)_3$   | A   | 1981-063  | China                  | <i>Geochemistry</i> <b>2</b> (1983), 180   | <i>Mineralogical Magazine</i> <b>58</b> (1994), 493   |
| Darapiosite        | $\text{KNa}_2\text{Mn}_2(\text{Li}_2\text{ZnSi}_{12})\text{O}_{30}$  | A   | 1974-056  | Tajikistan             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 583  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 769  |
| Darapskite         | $\text{Na}_3(\text{SO}_4)(\text{NO}_3) \cdot \text{H}_2\text{O}$   | Rd  | 1967 s.p. | Chile                  | <i>Zeitschrift für Kristallographie</i> <b>19</b> (1891), 445  | <i>American Mineralogist</i> <b>55</b> (1970), 1500   |
| Dargaite           | $\text{BaCa}_{12}(\text{SiO}_4)_4(\text{SO}_4)_2\text{O}_3$  | A   | 2015-068  | Israel                 | CNMNC Newsletter 28 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1859   | <a href="https://doi.org/10.1180/minmag.2017.081.095">https://doi.org/10.1180/minmag.2017.081.095</a> |
| Darrellhenryite    | $\text{Na}(\text{Al}_2\text{Li})\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$ | A   | 2012-026  | Czech Republic         | <i>American Mineralogist</i> <b>98</b> (2013), 1886  |   |
| Dashkovaite        | $\text{Mg}(\text{HCOO})_2 \cdot 2\text{H}_2\text{O}$   | A   | 2000-006  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(6)</b> (2000), 49  |   |
| Datolite           | $\text{CaB}(\text{SiO}_4)(\text{OH})$  | G   | 1806      | Norway                 | <i>Neues Allgemeines Journal der Chemie</i> <b>6</b> (1806), 107   | <i>American Mineralogist</i> <b>95</b> (2010), 1413   |
| Daubréeite         | $\text{BiO}(\text{OH})$  | G   | 1876      | Bolivia                | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>82</b> (1876), 922  | <i>Mineralogical Magazine</i> <b>24</b> (1935), 49  |

|                    |   |    |           |                                  |  |   |
|--------------------|---|----|-----------|----------------------------------|--|---|
| Daubréelite        | $\text{FeCr}_2\text{S}_4$   | G  | 1876      | Mexico                           | <i>American Journal of Science and Arts</i> <b>12</b> (1876), 107  | <i>Arkiv för Mineralogi och Geologi</i> <b>17B(12)</b> (1943), 31   |
| Davanite           | $\text{K}_2\text{TiSi}_6\text{O}_{15}$  | A  | 1982-100  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 95   |   |
| Davidite-(Ce)      | $\text{Ce}(\text{Y,U})\text{Fe}_2(\text{Ti,Fe,Cr,V})_{18}(\text{O,OH,F})_{38}$  | Rn | 1966 s.p. | Norway                           | <i>Norsk Geologisk Tidsskrift</i> <b>40</b> (1960), 277  | <i>Bulletin de liaison de la Société Française de Minéralogie et de Cristallographie</i> <b>16</b> (2004), 76 |
| Davidite-(La)      | $\text{La}(\text{Y,U})\text{Fe}_2(\text{Ti,Fe,Cr,V})_{18}(\text{O,OH,F})_{38}$  | Rn | 1987 s.p. | Australia                        | <i>Transactions of the Royal Society of South Australia</i> <b>30</b> (1906), 188  | <i>American Mineralogist</i> <b>64</b> (1979), 1010   |
| Davidlloydite      | $\text{Zn}_3(\text{AsO}_4)_2 \cdot 4\text{H}_2\text{O}$   | A  | 2011-053  | Namibia                          | <i>Mineralogical Magazine</i> <b>76</b> (2012), 45   |   |
| Davidsmithite      | $(\text{Ca}, \square)_2\text{Na}_6\text{Al}_8\text{Si}_8\text{O}_{32}$  | A  | 2016-070  | Norway                           | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1005   |   |
| Davinciite         | $\text{Na}_{12}\text{K}_3\text{Ca}_6\text{Fe}^{2+}_3\text{Zr}_3(\text{Si}_{26}\text{O}_{73}\text{OH})\text{Cl}_2$                           | A  | 2011-019  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(2)</b> (2012), 10   | <i>Doklady Chemistry</i> <b>424</b> (2009), 11  |
| Davisite           | $\text{CaScAlSiO}_6$  | A  | 2008-030  | Mexico (meteorite)               | <i>American Mineralogist</i> <b>94</b> (2009), 845   |   |
| Davreuxite         | $\text{Mn}^{2+}\text{Al}_6\text{Si}_4\text{O}_{17}(\text{OH})_2$  | G  | 1878      | Belgium                          | <i>Bulletin de l'Académie Royale de Belgique, Sér.II</i> <b>46</b> (1878), 240   | <i>American Mineralogist</i> <b>69</b> (1984), 783  |
| Davyne             | $[(\text{Na,K})_6(\text{SO}_4)_{0.5}\text{Cl}][\text{Ca}_2\text{Cl}_2][(\text{Si}_6\text{Al}_6\text{O}_{24})]$                              | G  | 1825      | Italy                            | Prodromo della mineralogia vesuviana. Da' Torchi del Tramater, Napoli (1825)   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 97  |
| Dawsonite          | $\text{NaAl}(\text{CO}_3)(\text{OH})_2$   | G  | 1874      | Canada                           | <i>Canadian Naturalist and Quarterly Journal of Science</i> <b>7</b> (1874), 305   | <i>Canadian Mineralogist</i> <b>9</b> (1967), 51  |
| Deanesmithite      | $\text{Hg}^{1+}_2\text{Hg}^{2+}_3\text{S}_2\text{O}(\text{CrO}_4)$  | A  | 1991-001  | USA                              | <i>Canadian Mineralogist</i> <b>31</b> (1993), 787   | <i>Canadian Mineralogist</i> <b>35</b> (1997), 765  |
| Debattistiite      | $\text{Ag}_9\text{Hg}_{0.5}\text{As}_6\text{S}_{12}\text{Te}_2$   | A  | 2011-098  | Switzerland                      | <i>Mineralogical Magazine</i> <b>76</b> (2012), 743  |   |
| Decagonite         | $\text{Al}_{71}\text{Ni}_{24}\text{Fe}_5$   | A  | 2015-017  | Russia (meteorite)               | <i>American Mineralogist</i> <b>100</b> (2015), 2340   |   |
| Decrespignyite-(Y) | $\text{Y}_4\text{Cu}(\text{CO}_3)_4\text{Cl}(\text{OH})_5 \cdot 2\text{H}_2\text{O}$  | A  | 2001-027  | Australia                        | <i>Mineralogical Magazine</i> <b>66</b> (2002), 181  |   |
| Deerite            | $\text{Fe}^{2+}_6\text{Fe}^{3+}_3(\text{Si}_6\text{O}_{17})\text{O}_3(\text{OH})_5$   | A  | 1964-016  | USA                              | <i>American Mineralogist</i> <b>50</b> (1965), 278   | <i>American Mineralogist</i> <b>62</b> (1977), 990  |
| Defernite          | $\text{Ca}_6(\text{CO}_3)_{1.58}(\text{Si}_2\text{O}_7)_{0.21}(\text{OH})_7[\text{Cl}_{0.50}(\text{OH})_{0.08}(\text{H}_2\text{O})_{0.42}]$ | A  | 1978-057  | Turkey                           | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 185  | <i>American Mineralogist</i> <b>81</b> (1996), 625  |
| Dekatriasartorite  | $\text{TlPb}_{58}\text{As}_{97}\text{S}_{204}$  | A  | 2017-071  | Switzerland                      | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |   |
| Delafossite        | $\text{Cu}^{1+}\text{Fe}^{3+}\text{O}_2$  | G  | 1873      | Russia                           | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>77</b> (1873), 211   |   |
| Delhayelite        | $\text{K}_7\text{Na}_3\text{Ca}_5\text{Al}_2\text{Si}_{14}\text{O}_{38}\text{F}_4\text{Cl}_2$   | A  | 1962 s.p. | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>32</b> (1959), 6  | <i>Rendiconti della Società Italiana di Mineralogia e Petrologia</i> <b>26</b> (1970), 63                     |
| Delhuyarite-(Ce)   | $\text{Ce}_4\text{Mg}(\text{Fe}^{3+}_2\text{W})\square(\text{Si}_2\text{O}_7)_2\text{O}_6(\text{OH})_2$                                     | A  | 2016-091  | Sweden                           | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 897  |   |
| Deliensite         | $\text{Fe}^{2+}(\text{UO}_2)_2(\text{SO}_4)_2(\text{OH})_2 \cdot 7\text{H}_2\text{O}$   | A  | 1996-013  | France                           | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1021  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2837  |
| Delindeite         | $\text{Ba}_2\text{Ti}_2(\text{Na}_2\square)\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{OH})_2(\text{H}_2\text{O})_2\text{O}_2$                 | Rd | 1987-004  | USA                              | <i>Mineralogical Magazine</i> <b>51</b> (1987), 417  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1307   |
| Dellagiustaitite   | $\text{V}^{2+}\text{Al}_2\text{O}_4$  | A  | 2017-101  | Argentina                        | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405   |   |
| Dellaite           | $\text{Ca}_6(\text{Si}_2\text{O}_7)(\text{SiO}_4)(\text{OH})_2$   | A  | 1964-005  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>34</b> (1965), 1  | <i>Mineralogical Magazine</i> <b>75</b> (2011), 379   |

|                   |   |    |           |                                  |  |   |
|-------------------|---|----|-----------|----------------------------------|--|---|
| Deloneite         | $(\text{Na}_{0.5}\text{REE}_{0.25}\text{Ca}_{0.25})(\text{Ca}_{0.75}\text{REE}_{0.25})\text{Sr}_{1.5}$<br>$(\text{CaNa}_{0.25}\text{REE}_{0.25})(\text{PO}_4)_3\text{F}_{0.5}(\text{OH})_{0.5}$ | Rd | 1995-036  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(5)</b> (1996), 83  | <i>Doklady Akademii Nauk</i> <b>349</b> (1996), 354                                     |
| Deloryite         | $\text{Cu}_4(\text{UO}_2)\text{Mo}_2\text{O}_8(\text{OH})_6$  | A  | 1990-037  | France                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 58   | <i>Journal of Alloys and Compounds</i> <b>239</b> (1996), 23                            |
| Delrioite         | $\text{Sr}(\text{VO}_3)_2 \cdot 4\text{H}_2\text{O}$  | Rd | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>44</b> (1959), 261   | <i>American Mineralogist</i> <b>55</b> (1970), 185                                      |
| Deltalumite       | $(\text{Al}_{0.67}\square_{0.33})\text{Al}_2\text{O}_4$   | A  | 2016-027  | Russia                           | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  |   |
| Delvauxite        | $\text{CaFe}^{3+}_4(\text{PO}_4)_2(\text{OH})_8 \cdot 4\text{-}5\text{H}_2\text{O}$   | Q  | 1838      | Belgium                          | <i>Bulletin de l'Académie Royale des Sciences de Belgique</i> <b>5</b> (1938), 296   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 79  |
| Demagistrisite    | $\text{BaCa}_2\text{Mn}^{3+}_4(\text{Si}_3\text{O}_{10})(\text{Si}_2\text{O}_7)(\text{OH})_4 \cdot 3\text{H}_2\text{O}$   | A  | 2018-059  | Italy                            | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Demartinite       | $\text{K}_2\text{SiF}_6$  | A  | 2006-034  | Italy                            | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1275  |   |
| Demesmaekerite    | $\text{Pb}_2\text{Cu}_5(\text{UO}_2)_2(\text{Se}^{4+}\text{O}_3)_6(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | A  | 1965-019  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>88</b> (1965), 422                                      | <i>Acta Crystallographica</i> <b>C39</b> (1983), 824                                    |
| Demicheleite-(Br) | BiSBr   | Rn | 2007-022  | Italy                            | <i>American Mineralogist</i> <b>93</b> (2008), 1603  |   |
| Demicheleite-(Cl) | BiSCl   | A  | 2008-020  | Italy                            | <i>American Mineralogist</i> <b>94</b> (2009), 1045  |   |
| Demicheleite-(I)  | BiSI  | A  | 2009-049  | Italy                            | <i>Mineralogical Magazine</i> <b>74</b> (2010), 141  |   |
| Denisovite        | $\text{KCa}_2\text{Si}_3\text{O}_8\text{F}$   | A  | 1982-031  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 718  | <i>IUCrJ</i> <b>4</b> (2017), 223   |
| Denningite        | $\text{CaMn}^{2+}\text{Te}^{4+}_4\text{O}_{10}$   | A  | 1967 s.p. | Mexico                           | <i>Canadian Mineralogist</i> <b>7</b> (1963), 443  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>10</b> (1965), 241 |
| Depmeierite       | $\text{Na}_8[\text{Al}_6\text{Si}_6\text{O}_{24}](\text{PO}_4, \text{CO}_3)_{1-x} \cdot 3\text{H}_2\text{O}$ ( $x < 0.5$ )  | A  | 2009-075  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(4)</b> (2010), 63   |   |
| Derbylite         | $\text{Fe}^{3+}_4\text{Ti}^{4+}_3\text{Sb}^{3+}\text{O}_{13}(\text{OH})$  | G  | 1897      | Brazil                           | <i>Mineralogical Magazine</i> <b>11</b> (1897), 176  | <i>Canadian Mineralogist</i> <b>21</b> (1987), 513                                      |
| Derriksite        | $\text{Cu}_4(\text{UO}_2)(\text{Se}^{4+}\text{O}_3)_2(\text{OH})_6$   | A  | 1971-033  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 534                                      | <i>Acta Crystallographica</i> <b>C39</b> (1983), 1605                                   |
| Dervillite        | $\text{Ag}_2\text{AsS}_2$   | Rd | 1983 s.p. | France                           | <i>Revue des Sciences Naturelles d'Auvergne</i> <b>7</b> (1941), 110   | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3105                                    |
| Desautelsite      | $\text{Mg}_6\text{Mn}^{3+}_2(\text{CO}_3)(\text{OH})_{16} \cdot 4\text{H}_2\text{O}$  | A  | 1978-016  | USA                              | <i>American Mineralogist</i> <b>64</b> (1979), 127   |   |
| Descloizite       | $\text{PbZn}(\text{VO}_4)(\text{OH})$   | G  | 1854      | Argentina                        | <i>Annales de Chimie et de Physique</i> <b>41</b> (1854), 72   | <i>Acta Crystallographica</i> <b>B35</b> (1979), 717                                    |
| Despujolsite      | $\text{Ca}_3\text{Mn}^{4+}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$   | A  | 1967-039  | Morocco                          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>91</b> (1968), 43                                       |   |
| Dessauite-(Y)     | $\text{Sr}(\text{Y}, \text{U}, \text{Mn})\text{Fe}_2(\text{Ti}, \text{Fe}, \text{Cr}, \text{V})_{18}(\text{O}, \text{OH})_{38}$   | A  | 1994-057  | Italy                            | <i>American Mineralogist</i> <b>82</b> (1997), 807   |   |
| Destinezite       | $\text{Fe}^{3+}_2(\text{PO}_4)(\text{SO}_4)(\text{OH}) \cdot 6\text{H}_2\text{O}$   | Rd | 2000 s.p. | Belgium                          | <i>Bulletin de la Société Belge de Géologie</i> <b>7</b> (1881), 117   | <i>Clays and Clay Minerals</i> <b>47</b> (1999), 1                                      |
| Deveroite-(Ce)    | $\text{Ce}_2(\text{C}_2\text{O}_4)_3 \cdot 10\text{H}_2\text{O}$  | A  | 2013-003  | Italy                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3019   |   |
| Devilline         | $\text{CaCu}_4(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$   | A  | 1971 s.p. | United Kingdom                   | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>59</b> (1864), 813   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 1182                                   |



|                      |   |    |           |                                  |   |   |
|----------------------|---|----|-----------|----------------------------------|---|---|
| Devitoite            | [Ba <sub>6</sub> (PO <sub>4</sub> ) <sub>2</sub> (CO <sub>3</sub> )] [Fe <sup>2+</sup> <sub>7</sub> (OH) <sub>4</sub> Fe <sup>3+</sup> <sub>2</sub> O <sub>2</sub> (SiO <sub>3</sub> ) <sub>8</sub> ] | A  | 2009-010  | USA                              | <i>Canadian Mineralogist</i> <b>48</b> (2010), 29   |   |
| Dewindtite           | H <sub>2</sub> Pb <sub>3</sub> (UO <sub>2</sub> ) <sub>6</sub> O <sub>4</sub> (PO <sub>4</sub> ) <sub>4</sub> ·12H <sub>2</sub> O   | G  | 1922      | Democratic Republic of the Congo | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>174</b> (1922), 623 | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 399                          |
| Diaboleite           | CuPb <sub>2</sub> Cl <sub>2</sub> (OH) <sub>4</sub>   | Rn | 2007 s.p. | United Kingdom                   | <i>Mineralogical Magazine</i> <b>20</b> (1923), 67  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1125                                 |
| Diadochite           | Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> )(SO <sub>4</sub> )(OH)·6H <sub>2</sub> O  | G  | 1837      | Germany                          | <i>Journal für Praktische Chemie</i> <b>10</b> (1837), 503  | <i>Clays and Clay Minerals</i> <b>47</b> (1999), 1                                  |
| Diamond              | C   | G  | ?         | unknown                          | original paper?   | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1063                                 |
| Diaoyudaoite         | NaAl <sub>11</sub> O <sub>17</sub>  | A  | 1985-005  | Taiwan                           | <i>Kuangwu Xuebao (Acta Mineralogica Sinica)</i> <b>6</b> (1986), 224                             | <i>Huaxue Xuebao</i> <b>50</b> (1992), 527  |
| Diaphorite           | Ag <sub>3</sub> Pb <sub>2</sub> Sb <sub>3</sub> S <sub>8</sub>  | G  | 1871      | Czech Republic / Germany         | <i>Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften</i> <b>63</b> (1871), 130        | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 137                         |
| Diaspore             | AlO(OH)   | G  | 1801      | Russia                           | Traité de Minéralogie, Vol. 4. Chez Louis, Paris (1801), 358                                      | <i>Physics and Chemistry of Minerals</i> <b>5</b> (1979), 179                       |
| Dickinsonite-(KMnNa) | K(NaMn)CaNa <sub>3</sub> AlMn <sub>13</sub> (PO <sub>4</sub> ) <sub>12</sub> (OH) <sub>2</sub>  | A  | 2005-048  | USA                              | <i>American Mineralogist</i> <b>91</b> (2006), 1260   | <i>American Mineralogist</i> <b>91</b> (2006), 1249                                 |
| Dickite              | Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>  | G  | 1930      | United Kingdom                   | <i>American Mineralogist</i> <b>15</b> (1930), 34   | <i>American Mineralogist</i> <b>103</b> (2018), 812                                 |
| Dickthomssenite      | MgV <sub>2</sub> O <sub>6</sub> ·7H <sub>2</sub> O  | A  | 2000-047  | USA                              | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1691   |   |
| Diegogattaite        | Na <sub>2</sub> CaCu <sub>2</sub> Si <sub>8</sub> O <sub>20</sub> ·H <sub>2</sub> O   | A  | 2012-096  | South Africa                     | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3155  |   |
| Dietrichite          | ZnAl <sub>2</sub> (SO <sub>4</sub> ) <sub>4</sub> ·22H <sub>2</sub> O   | G  | 1878      | Romania                          | <i>Verhandlungen der Kaiserlich-Königlichen Geologischen Reichsanstalt</i> (1878), 189            | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1043                        |
| Dietzeite            | Ca <sub>2</sub> (IO <sub>3</sub> ) <sub>2</sub> (CrO <sub>4</sub> )·H <sub>2</sub> O  | G  | 1894      | Chile                            | <i>Zeitschrift für Kristallographie</i> <b>23</b> (1894), 588                                     | <i>Canadian Mineralogist</i> <b>31</b> (1993), 313                                  |
| Digenite             | Cu <sub>1.8</sub> S   | A  | 1962 s.p. | Germany                          | <i>Annalen der Physik und Chemie</i> <b>137</b> (1844), 671                                       | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 591                         |
| Dimorphite           | As <sub>4</sub> S <sub>3</sub>  | G  | 1849      | Italy                            | Memorie Geologiche sulla Campania. Gabinetto Bibliografico e Tipografico, Napoli (1849), 83       | <i>Zeitschrift für Kristallographie</i> <b>138</b> (1973), 161                      |
| Dingdaohengite-(Ce)  | (Ce,La) <sub>4</sub> Fe <sup>2+</sup> (Ti,Fe <sup>2+</sup> ,Mg,Fe <sup>3+</sup> ) <sub>2</sub> Ti <sub>2</sub> Si <sub>4</sub> O <sub>22</sub>  | A  | 2005-014  | China                            | <i>American Mineralogist</i> <b>93</b> (2008), 740  | <i>Acta Mineralogica Sinica</i> <b>25</b> (2005), 313                               |
| Dinite               | C <sub>20</sub> H <sub>36</sub>   | G  | 1852      | Italy                            | <i>Gazzetta Medica Italiana, Toscana, Ser. II</i> <b>4</b> (1852), 233                            | <i>European Journal of Mineralogy</i> <b>3</b> (1991), 855                          |
| Diopside             | CaMgSi <sub>2</sub> O <sub>6</sub>  | A  | 1988 s.p. | Italy                            | <i>Allgemeines Journal der Chemie</i> <b>4</b> (1800), 29   | <i>American Mineralogist</i> <b>93</b> (2008), 177                                  |
| Diopside             | CuSiO <sub>3</sub> ·H <sub>2</sub> O  | G  | 1798      | Kazakhstan                       | <i>Journal des Mines</i> <b>5</b> (1797), 274   | <i>Doklady Akademii Nauk SSSR</i> <b>239</b> (1978) 842                             |
| Dioskouriite         | CaCu <sub>4</sub> Cl <sub>6</sub> (OH) <sub>4</sub> ·4H <sub>2</sub> O  | A  | 2015-106  | Russia                           | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407                         |   |
| Direnzoite           | NaK <sub>6</sub> MgCa <sub>2</sub> (Al <sub>13</sub> Si <sub>47</sub> )O <sub>120</sub> ·36H <sub>2</sub> O   | A  | 2006-044  | France                           | <i>American Mineralogist</i> <b>93</b> (2008), 95   |   |
| Dissakisite-(Ce)     | CaCe(Al <sub>2</sub> Mg)[Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)   | A  | 1990-004  | Antarctica                       | <i>American Mineralogist</i> <b>76</b> (1991), 1990   | <i>Canadian Mineralogist</i> <b>31</b> (1993), 153                                  |
| Dissakisite-(La)     | CaLa(Al <sub>2</sub> Mg)[Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)   | A  | 2003-007  | Italy                            | <i>American Mineralogist</i> <b>90</b> (2005), 1177   | <i>American Mineralogist</i> <b>91</b> (2006), 104                                  |
| Disulfodadsonite     | Pb <sub>11</sub> Sb <sub>13</sub> S <sub>30</sub> (S <sub>2</sub> ) <sub>0.5</sub>  | A  | 2011-076  | Italy                            | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 1005                                      |   |
| Dittmarite           | (NH <sub>4</sub> )Mg(PO <sub>4</sub> )·H <sub>2</sub> O   | G  | 1887      | Australia                        | <i>Chemical News and Journal of Industrial Science</i> <b>55</b> (1887), 215                      |   |
| Diversilite-(Ce)     | Na <sub>2</sub> Ba <sub>6</sub> Ce <sub>2</sub> Fe <sup>2+</sup> Ti <sub>3</sub> Si <sub>12</sub> O <sub>36</sub> (OH) <sub>10</sub> ·nH <sub>2</sub> O   | A  | 2002-043  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(5)</b> (2003), 34             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(1)</b> (2005), 113 |

|                 |   |    |           |                          |  |  |
|-----------------|---|----|-----------|--------------------------|--|--|
| Dixenite        | $\text{Cu}^+\text{Fe}^{3+}\text{Mn}^{2+}_{14}(\text{As}^{5+}\text{O}_4)(\text{As}^{3+}\text{O}_3)_5(\text{SiO}_4)_2(\text{OH})_6$ | G  | 1920      | Sweden                   | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>42</b> (1920), 436  | <i>American Mineralogist</i> <b>66</b> (1981), 1263                  |
| Djerfisherite   | $\text{K}_6(\text{Fe,Cu,Ni})_{25}\text{S}_{26}\text{Cl}$  | A  | 1965-028  | South Africa (meteorite) | <i>Science</i> <b>153</b> (1966), 166  | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1201                  |
| Djurleite       | $\text{Cu}_{31}\text{S}_{16}$   | A  | 1967 s.p. | Mexico                   | <i>American Mineralogist</i> <b>47</b> (1962), 1181  | <i>Zeitschrift für Kristallographie</i> <b>150</b> (1979), 299       |
| Dmisokolovite   | $\text{K}_3\text{Cu}_5\text{AlO}_2(\text{AsO}_4)_4$   | A  | 2013-079  | Russia                   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1737   |  |
| Dmisteinbergite | $\text{Ca}(\text{Al}_2\text{Si}_2\text{O}_8)$   | A  | 1989-010  | Russia                   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(5)</b> (1990), 43  | <i>American Mineralogist</i> <b>98</b> (2013), 1368                  |
| Dmitryivanovite | $\text{CaAl}_2\text{O}_4$   | A  | 2006-035  | Morocco (meteorite)      | <i>American Mineralogist</i> <b>94</b> (2009), 746   | <i>Materials Research Bulletin</i> <b>15</b> (1980), 925             |
| Dokuchaevite    | $\text{Cu}_8\text{O}_2(\text{VO}_4)_3\text{Cl}_3$   | A  | 2018-012  | Russia                   | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |  |
| Dolerophanite   | $\text{Cu}_2\text{O}(\text{SO}_4)$  | G  | 1873      | Italy                    | <i>Atti dell'Accademia delle Scienze Fische e Matematiche</i> <b>5</b> (1873), 22  | <i>Monatshefte für Chemie</i> <b>116</b> (1985), 927                 |
| Dollaseite-(Ce) | $\text{CaCe}(\text{Mg}_2\text{Al})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{F}(\text{OH})$                                       | Rd | 1987 s.p. | Sweden                   | <i>Sveriges Geologiska Undersökning</i> <b>20</b> (1927), 1  | <i>American Mineralogist</i> <b>73</b> (1988), 838                   |
| Dolomite        | $\text{CaMg}(\text{CO}_3)_2$  | G  | 1792      | Italy                    | <i>Observations sur la Physique, sur l'Histoire Naturelle et sur les Arts</i> <b>40</b> (1792), 161                                    | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1255                  |
| Doloresite      | $\text{V}^{4+}_3\text{O}_4(\text{OH})_4$  | G  | 1957      | USA                      | <i>American Mineralogist</i> <b>42</b> (1957), 587   | <i>American Mineralogist</i> <b>45</b> (1960), 1144                  |
| Domerokite      | $\text{Cu}_4(\text{AsO}_4)(\text{AsO}_3\text{OH})(\text{OH})_3\cdot\text{H}_2\text{O}$  | A  | 2009-016  | Australia                | <i>Mineralogical Magazine</i> <b>77</b> (2013), 509  |  |
| Domeykite       | $\text{Cu}_3\text{As}$  | G  | 1845      | Chile                    | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Zeitschrift für Kristallographie</i> <b>145</b> (1977), 334       |
| Domeykite-β     | $\text{Cu}_3\text{As}$  | Rd | 1949      | Iran                     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>78</b> (1949), 3   | <i>Zeitschrift für Kristallographie</i> <b>122</b> (1965), 399       |
| Donbassite      | $\text{Al}_2(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_2\cdot\text{Al}_{2.33}(\text{OH})_6$                                   | G  | 1940      | Ukraine                  | <i>Comptes Rendus de l'Academie des Sciences de Russie</i> <b>28</b> (1940), 519   | <i>Clays and Clay Minerals</i> <b>37</b> (1989), 193                 |
| Donharrisite    | $\text{Ni}_8\text{Hg}_3\text{S}_9$  | A  | 1987-007  | Austria                  | <i>Canadian Mineralogist</i> <b>27</b> (1989), 257   |  |
| Donnayite-(Y)   | $\text{NaSr}_3\text{CaY}(\text{CO}_3)_6\cdot 3\text{H}_2\text{O}$   | Rn | 1978-007  | Canada                   | <i>Canadian Mineralogist</i> <b>16</b> (1978), 335   | <i>Acta Crystallographica</i> <b>C40</b> suppl. (1984), C257         |
| Donpeacorite    | $(\text{Mn,Mg})\text{MgSi}_2\text{O}_6$   | A  | 1982-045  | USA                      | <i>American Mineralogist</i> <b>69</b> (1984), 472   |  |
| Dorallcharite   | $\text{TlFe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | A  | 1992-041  | Macedonia                | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 255   |  |
| Dorfmanite      | $\text{Na}_2(\text{PO}_3\text{OH})\cdot 2\text{H}_2\text{O}$  | A  | 1979-053  | Russia                   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 211  | <i>Acta Crystallographica</i> <b>B33</b> (1977), 3449                |
| Dorrite         | $\text{Ca}_4[\text{Mg}_3\text{Fe}^{3+}_9]\text{O}_4[\text{Si}_3\text{Al}_8\text{Fe}^{3+}\text{O}_{36}]$                           | A  | 1987-054  | USA                      | <i>American Mineralogist</i> <b>73</b> (1988), 1440  | <i>Journal of Mineralogy and Geochemistry</i> <b>193</b> (2016), 275 |
| Douglasite      | $\text{K}_2\text{Fe}^{2+}\text{Cl}_4\cdot 2\text{H}_2\text{O}$  | G  | 1880      | Germany                  | <i>Berichte der Deutschen Chemischen Gesellschaft Berlin</i> <b>13</b> (1880), 2326  |  |
| Dovyrenite      | $\text{Ca}_6\text{Zr}(\text{Si}_2\text{O}_7)_2(\text{OH})_4$  | A  | 2007-002  | Russia                   | <i>Mineralogia Polonica</i> <b>38</b> (2007), 15   | <i>American Mineralogist</i> <b>93</b> (2008), 456                   |
| Downeyite       | $\text{SeO}_2$  | A  | 1974-063  | USA                      | <i>American Mineralogist</i> <b>62</b> (1977), 316   |  |
| Doyleite        | $\text{Al}(\text{OH})_3$  | A  | 1980-041  | Canada                   | <i>Canadian Mineralogist</i> <b>23</b> (1985), 21  | <i>Zeitschrift für Kristallographie</i> <b>213</b> (1998), 96        |

|              |  |    |           |                                  |   |   |
|--------------|--|----|-----------|----------------------------------|---|---|
| Dozyite      | $Mg_7Al_2(Si_4Al_2)O_{15}(OH)_{12}$  | A  | 1993-042  | Indonesia                        | <i>American Mineralogist</i> <b>80</b> (1995), 65   | <i>American Mineralogist</i> <b>81</b> (1996), 79             |
| Dravertite   | $CuMg(SO_4)_2$   | A  | 2014-104  | Russia                           | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 323   |   |
| Dravite      | $NaMg_3Al_6(Si_6O_{18})(BO_3)_3(OH)_3(OH)$   | G  | 1884      | Slovenia                         | Lehrbuch der Mineralogie. Hölder, Wien (1884), 470  | <i>Canadian Mineralogist</i> <b>49</b> (2011), 29             |
| Dresserite   | $Ba_2Al_4(CO_3)_4(OH)_8 \cdot 3H_2O$   | A  | 1968-027  | Canada                           | <i>Canadian Mineralogist</i> <b>10</b> (1969), 84   |   |
| Dreyerite    | $Bi(VO_4)$   | A  | 1978-077  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 151                                       |   |
| Drobecite    | $Cd(SO_4) \cdot 4H_2O$   | A  | 2002-034  | Greece                           | 20th General Meeting of IMA. Budapest, August 2010 (abstr.)   |   |
| Droninoite   | $Ni_6Fe^{3+}_2Cl_2(OH)_{16} \cdot 4H_2O$   | A  | 2008-003  | Russia (meteorite)               | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>137(6)</b> (2008), 38                  |   |
| Drugmanite   | $Pb_2Fe^{3+}(PO_4)(PO_3OH)(OH)_2$  | A  | 1978-081  | Belgium                          | <i>Mineralogical Magazine</i> <b>43</b> (1979), 463   | <i>Bulletin de Minéralogie</i> <b>111</b> (1988), 431         |
| Drysdallite  | $MoSe_2$   | A  | 1973-027  | Zambia                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1973), 433                                       |   |
| Dualite      | $Na_{30}(Ca, Na, Ce, Sr)_{12}(Na, Mn, Fe, Ti)_6Zr_3Ti_3MnSi_{51}O_{144}(OH, H_2O, Cl)_9$ | A  | 2005-019  | Russia                           | <i>Proceedings of the Russian Mineralogical Society</i> <b>136(4)</b> (2007), 31                    | <i>Zeitschrift für Kristallographie</i> <b>214</b> (1999) 271 |
| Dufrénite    | $Ca_{0.5}Fe^{2+}Fe^{3+}_5(PO_4)_4(OH)_6 \cdot 2H_2O$                                     | G  | 1833      | Germany                          | Tableau des espèces minérales. Librairie Encyclopédique De Roret, Paris (1833), 20                  | <i>Mineralogical Magazine</i> <b>54</b> (1990), 419           |
| Dufrénoysite | $Pb_2As_2S_5$  | G  | 1845      | Switzerland                      | <i>Annales de Chimie et de Physique</i> <b>14</b> (1845), 379                                       | <i>Zeitschrift für Kristallographie</i> <b>130</b> (1969), 15 |
| Duftite      | $PbCu(AsO_4)(OH)$  | G  | 1920      | Namibia                          | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1920), 289                         | <i>Mineralogical Magazine</i> <b>62</b> (1998), 121           |
| Dugganite    | $Pb_3Zn_3(TeO_6)(AsO_4)_2$   | A  | 1978-034  | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 1016   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 823            |
| Dukeite      | $Bi^{3+}_{24}Cr^{6+}_8O_{57}(OH)_6 \cdot 3H_2O$  | A  | 1999-021  | Brazil                           | <i>American Mineralogist</i> <b>85</b> (2000), 1822   |   |
| Dumontite    | $Pb_2(UO_2)_3O_2(PO_4)_2 \cdot 5H_2O$  | G  | 1924      | Democratic Republic of the Congo | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>179</b> (1924), 693   | <i>Bulletin de Minéralogie</i> <b>111</b> (1988), 439         |
| Dumortierite | $AlAl_6BSi_3O_{18}$  | Rd | 2013 s.p. | France                           | <i>Bulletin de la Société Minéralogique de France</i> <b>4</b> (1881), 2                            | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 173   |
| Dundasite    | $PbAl_2(CO_3)_2(OH)_4 \cdot H_2O$  | G  | 1894      | Australia                        | Papers and Proceedings of the Royal Society of Tasmania for 1893. The Mercury, Hobart (1984), 26    | <i>Mineralogical Magazine</i> <b>38</b> (1972), 564           |
| Durangite    | $NaAl(AsO_4)F$   | G  | 1869      | Mexico                           | <i>American Journal of Science and Arts</i> <b>98</b> (1869), 179                                   | <i>Canadian Mineralogist</i> <b>23</b> (1985), 241            |
| Duranusite   | $As_4S$  | A  | 1973-003  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>96</b> (1973), 131 | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 147   |
| Dusmatovite  | $KK_2Mn_2(Zn_2LiSi_{12})O_{30}$  | A  | 1994-010  | Tajikistan                       | <i>Vestnik Moskovskogo Universiteta, Geologiya Seriya</i> <b>4</b> (1996), 54                       | <i>Doklady Akademii Nauk</i> <b>344</b> (1995), 607           |
| Dussertite   | $BaFe^{3+}_3(AsO_4)(AsO_3OH)(OH)_6$  | Rd | 1999 s.p. | Algeria                          | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>180</b> (1925), 299                    | <i>Mineralogical Magazine</i> <b>63</b> (1999), 17            |
| Duttonite    | $V^{4+}O(OH)_2$  | G  | 1957      | USA                              | <i>American Mineralogist</i> <b>42</b> (1957), 455  | <i>Acta Crystallographica</i> <b>11</b> (1958), 56            |
| Dwornikite   | $Ni(SO_4) \cdot H_2O$  | A  | 1981-031  | Peru                             | <i>Mineralogical Magazine</i> <b>46</b> (1982), 351   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 296 |
| Dymkovite    | $Ni(UO_2)_2(As^{3+}O_3)_2 \cdot 7H_2O$   | A  | 2010-087  | Russia                           | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 923   |   |

|                 |   |    |           |                        |   |   |
|-----------------|---|----|-----------|------------------------|---|---|
| Dypingite       | $Mg_5(CO_3)_4(OH)_2 \cdot 5H_2O$              | A  | 1970-011  | Norway                 | <i>American Mineralogist</i> <b>55</b> (1970), 1457   |   |
| Dyrnaesite-(La) | $Na_8Ce^{4+}(La, REE)_2(PO_4)_6$              | A  | 2014-070  | Denmark<br>(Greenland) | <i>Mineralogical Magazine</i> <b>81</b> (2017), 103   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 199   |
| Dyscrasite      | $Ag_{3+x}Sb_{1-x}$ ( $x \approx 0.2$ )        | G  | 1832      | Germany                | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 613  | <i>Canadian Mineralogist</i> <b>14</b> (1976), 139  |
| Dzhalindite     | $In(OH)_3$                                    | A  | 1967 s.p. | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 445  | <i>Journal of Inorganic and Nuclear Chemistry</i> <b>41</b> (1979), 277                     |
| Dzharkenite     | $FeSe_2$                                      | A  | 1993-054  | Kazakhstan             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(1)</b> (1995), 85   |   |
| Dzhuluite       | $Ca_3(SbSn)(Fe^{3+}O_4)_3$                    | Rn | 2010-064  | Russia                 | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 231   |   |
| Dzierzanowskite | $CaCu_2S_2$                                   | A  | 2014-032  | Israel                 | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1073  |   |
| Eakerite        | $Ca_2Sn^{4+}Al_2Si_6O_{18}(OH)_2 \cdot 2H_2O$ | A  | 1969-019  | USA                    | <i>Mineralogical Record</i> <b>1</b> (1970), 92   | <i>Acta Crystallographica</i> <b>E63</b> (2007), i47  |
| Earlandite      | $Ca_3(C_6H_5O_7)_2 \cdot 4H_2O$               | G  | 1936      | Antarctica             | <i>Discovery Reports</i> <b>13</b> (1936), 67   | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>637</b> (2011), 655            |
| Earlshannonite  | $Mn^{2+}Fe^{3+}_2(PO_4)_2(OH)_2 \cdot 4H_2O$  | A  | 1983-010  | USA                    | <i>Canadian Mineralogist</i> <b>22</b> (1984), 471  |   |
| Eastonite       | $KAlMg_2(Si_2Al_2)O_{10}(OH)_2$               | Rd | 1998 s.p. | USA                    | <i>American Journal of Science</i> <b>9</b> (1925), 309   | <i>American Mineralogist</i> <b>72</b> (1987), 113  |
| Ecandrewsite    | $ZnTiO_3$                                     | A  | 1978-082  | Australia              | <i>Mineralogical Magazine</i> <b>52</b> (1988), 237   | <i>Acta Crystallographica</i> <b>B60</b> (2004), 496  |
| Ecdemite        | $Pb_6As^{3+}_2O_7Cl_4$                        | G  | 1877      | Sweden                 | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1877), 379  |   |
| Eckerite        | $Ag_2CuAsS_3$                                 | A  | 2014-063  | Switzerland            | <i>Mineralogical Magazine</i> <b>79</b> (2015), 687   |   |
| Eckermannite    | $NaNa_2(Mg_4Al)Si_8O_{22}(OH)_2$              | A  | 2013-136  | Myanmar                | <i>American Mineralogist</i> <b>100</b> (2015), 909   |   |
| Eckhardtite     | $(Ca,Pb)Cu^{2+}Te^{6+}O_5(H_2O)$              | A  | 2012-085  | USA                    | <i>American Mineralogist</i> <b>98</b> (2013), 1617   |   |
| Eclarite        | $(Cu,Fe)Pb_9Bi_{12}S_{28}$                    | A  | 1982-092  | Austria                | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>32</b> (1983), 103   | <i>Canadian Mineralogist</i> <b>50</b> (2012), 371  |
| Écrinsite       | $AgTi_3Pb_4As_{11}Sb_9S_{36}$                 | A  | 2015-099  | France                 | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 689   |   |
| Eddavidite      | $Pb_2Cu_{12}O_{15}Br_2$                       | A  | 2018-018  | USA                    | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Edenharterite   | $TlPbAs_3S_6$                                 | A  | 1987-026  | Switzerland            | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 1265   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>76</b> (1996), 147 |
| Edenite         | $NaCa_2Mg_5(Si_7Al)O_{22}(OH)_2$              | Rd | 2012 s.p. | USA                    | Grundriss der Mineralogie, mit Einschluss der Geognosie und Petrefactenkunde. Schrag, Nurnberg (1839), 410                              | <i>American Mineralogist</i> <b>65</b> (1980), 557  |
| Edgarbaileyite  | $Hg^{1+}_6Si_2O_7$                            | A  | 1988-028  | USA                    | <i>Mineralogical Record</i> <b>21</b> (1990), 215   | <i>American Mineralogist</i> <b>75</b> (1990), 1192   |
| Edgarite        | $FeNb_3S_6$                                   | A  | 1995-017  | Russia                 | <i>Contributions to Mineralogy and Petrology</i> <b>138</b> (2000), 229   | <i>Canadian Mineralogist</i> <b>56</b> (2018), 259  |
| Edgrewite       | $Ca_9(SiO_4)_4F_2$                            | A  | 2011-058  | Russia                 | <i>American Mineralogist</i> <b>97</b> (2012), 1998   |   |
| Edingtonite     | $Ba(Si_3Al_2)O_{10} \cdot 4H_2O$              | G  | 1825      | United Kingdom         | <i>Edinburgh Journal of Science</i> <b>3</b> (1825), 316  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 373                               |
| Edoylerite      | $Hg^{2+}_3(Cr^{6+}O_4)_2S_2$                  | A  | 1987-008  | USA                    | <i>Mineralogical Record</i> <b>24</b> (1993), 471   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 113  |

|                |   |    |           |                     |  |   |
|----------------|---|----|-----------|---------------------|--|---|
| Edtollite      | $K_2NaCu_5Fe^{3+}O_2(AsO_4)_4$  | A  | 2016-010  | Russia              | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691  | <a href="https://doi.org/10.1180/mgm.2018.155">https://doi.org/10.1180/mgm.2018.155</a> |
| Edwardsite     | $Cu_3Cd_2(SO_4)_2(OH)_6 \cdot 4H_2O$  | A  | 2009-048  | Australia           | <i>Mineralogical Magazine</i> <b>74</b> (2010), 39   |   |
| Effenbergerite | $BaCuSi_4O_{10}$  | A  | 1993-036  | South Africa        | <i>Mineralogical Magazine</i> <b>58</b> (1994), 663  | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 411                             |
| Efremovite     | $(NH_4)_2Mg_2(SO_4)_3$  | A  | 1987-033a | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(3)</b> (1989), 84  |   |
| Eggletonite    | $(Na,K,Ca)_xMn_6(Si,Al)_{10}O_{24}(OH)_4 \cdot nH_2O$<br>( $x = 1-2$ ; $n = 7-11$ ) | A  | 1982-059  | USA                 | <i>Mineralogical Magazine</i> <b>48</b> (1984), 93   |   |
| Eglestonite    | $([Hg^{1+}]_2)_3OCl_3(OH)$  | G  | 1904      | USA                 | <i>Zeitschrift für Kristallographie</i> <b>39</b> (1904), 3  | <i>American Mineralogist</i> <b>77</b> (1992), 839                                      |
| Ehrleite       | $Ca_2ZnBe(PO_4)_2(PO_3OH) \cdot 4H_2O$  | A  | 1983-039  | USA                 | <i>Canadian Mineralogist</i> <b>23</b> (1985), 507   | <i>Canadian Mineralogist</i> <b>25</b> (1987), 767                                      |
| Eifelite       | $KNa_2(MgNa)(Mg_3Si_{12})O_{30}$  | A  | 1980-097  | Germany             | <i>Contributions to Mineralogy and Petrology</i> <b>82</b> (1983), 252   |   |
| Eirikite       | $KNa_6Be_2(Si_{15}Al_3)O_{39}F_2$   | A  | 2007-017  | Norway              | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 875  | <i>American Mineralogist</i> <b>95</b> (2010), 519                                      |
| Eitelite       | $Na_2Mg(CO_3)_2$  | G  | 1955      | USA                 | <i>American Mineralogist</i> <b>40</b> (1955), 326   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 230                           |
| Ekanite        | $Ca_2ThSi_8O_{20}$  | A  | 1967 s.p. | Sri Lanka           | <i>Nature</i> <b>190</b> (1961), 997   | <i>Canadian Mineralogist</i> <b>20</b> (1982), 65                                       |
| Ekaterinite    | $Ca_2B_4O_7Cl_2 \cdot 2H_2O$  | A  | 1979-067  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 469  |   |
| Ekatite        | $(Fe^{3+}, Fe^{2+}, Zn)_{12}(AsO_3)_6(AsO_3, SiO_3OH)_2(OH)_6$                      | A  | 1998-024  | Namibia             | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 769  |   |
| Ekplexite      | $(Nb, Mo)S_2 \cdot (Mg_{1-x}Al_x)(OH)_{2+2x}$                                       | A  | 2011-082  | Russia              | <i>Mineralogical Magazine</i> <b>78</b> (2014), 663  |   |
| Elasmochloite  | $Na_3Cu_6BiO_4(SO_4)_5$   | A  | 2018-015  | Russia              | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Elbaite        | $Na(Al_{1.5}Li_{1.5})Al_6(Si_6O_{18})(BO_3)_3(OH)_3(OH)$                            | G  | 1913      | Italy               | <i>Zeitschrift für Kristallographie</i> <b>53</b> (1913), 273  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 31                                       |
| Elbrusite      | $Ca_3(U^{6+}_{0.5}Zr_{1.5})(Fe^{3+}O_4)_3$  | Rn | 2009-051  | Russia              | <i>American Mineralogist</i> <b>95</b> (2010), 1172  |   |
| Eldfellite     | $NaFe^{3+}(SO_4)_2$   | A  | 2007-051  | Iceland             | <i>Mineralogical Magazine</i> <b>73</b> (2009), 51   |   |
| Eldragónite    | $Cu_6BiSe_4(Se_2)$  | A  | 2010-077  | Bolivia             | <i>Canadian Mineralogist</i> <b>50</b> (2012), 281   |   |
| Eleomelanite   | $(K_2Pb)Cu_4O_2(SO_4)_4$  | A  | 2015-118  | Russia              | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  |   |
| Eleonorite     | $Fe^{3+}_6(PO_4)_4O(OH)_4 \cdot 6H_2O$  | A  | 2015-003  | Germany             | <i>Mineralogical Magazine</i> <b>81</b> (2017), 61   |   |
| Eliseevite     | $Na_{1.5}Li\{Ti_2O_2[Si_4O_{10.5}(OH)_{1.5}]\} \cdot 2H_2O$                         | A  | 2010-031  | Russia              | <i>American Mineralogist</i> <b>96</b> (2011), 1624  |   |
| Ellenbergerite | $Mg_6(Mg, Ti, Zr, \square)_2(Al, Mg)_6Si_8O_{28}(OH)_{10}$                          | A  | 1984-066  | Italy               | <i>Contributions to Mineralogy and Petrology</i> <b>92</b> (1986), 316   | <i>Crystallography Reports</i> <b>52</b> (2007), 199                                    |
| Ellingsenite   | $Na_5Ca_6Si_{18}O_{38}(OH)_{13} \cdot 6H_2O$  | A  | 2009-041  | Namibia             | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1165  |   |
| Ellisite       | $Tl_3AsS_3$   | A  | 1977-041  | USA                 | <i>American Mineralogist</i> <b>64</b> (1979), 701   | <i>Zeitschrift für Kristallographie</i> <b>151</b> (1980), 249                          |
| Elpasolite     | $K_2NaAlF_6$  | G  | 1883      | USA                 | <i>U.S. Geological Survey Bulletin</i> <b>20</b> (1883), 40  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 481                           |
| Elpidite       | $Na_2ZrSi_6O_{15} \cdot 3H_2O$  | G  | 1894      | Denmark (Greenland) | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>16</b> (1894), 330  | <i>American Mineralogist</i> <b>58</b> (1973), 106                                      |
| Eltyubuyite    | $Ca_{12}Fe^{3+}_{10}Si_4O_{32}Cl_6$   | A  | 2011-022  | Russia              | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 221  | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 137                             |

|                |   |    |           |                        |   |   |
|----------------|---|----|-----------|------------------------|---|---|
| Elyite         | $\text{CuPb}_4(\text{SO}_4)\text{O}_2(\text{OH})_4 \cdot \text{H}_2\text{O}$  | A  | 1971-043  | USA                    | <i>American Mineralogist</i> <b>57</b> (1972), 364  | <i>American Mineralogist</i> <b>85</b> (2000), 1816                                     |
| Embreyite      | $\text{Pb}_5(\text{CrO}_4)_2(\text{PO}_4)_2 \cdot \text{H}_2\text{O}$   | A  | 1971-048  | Russia                 | <i>Mineralogical Magazine</i> <b>38</b> (1972), 790   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 275                                     |
| Emeausite      | $\text{Na}_2\text{LiFe}^{3+}\text{Si}_6\text{O}_{15}$   | A  | 1977-021  | Denmark<br>(Greenland) | <i>Mineralogical Magazine</i> <b>42</b> (1978), 31  | <i>Zeitschrift für Kristallographie</i> <b>147</b> (1978), 297                          |
| Emilite        | $\text{Cu}_{10.7}\text{Pb}_{10.7}\text{Bi}_{21.3}\text{S}_{48}$   | A  | 2001-015  | Austria                | <i>Canadian Mineralogist</i> <b>44</b> (2006), 459  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 239                                      |
| Emmerichite    | $\text{Ba}_2\text{Ti}_2\text{Na}_3\text{Fe}^{3+}(\text{Si}_2\text{O}_7)_2\text{O}_2\text{F}_2$                            | Rd | 2013-064  | Germany                | <i>New Data on Minerals</i> <b>49</b> (2014), 5   | <i>Zeitschrift für Kristallographie</i> <b>229</b> (2014), 1                            |
| Emmonsite      | $\text{Fe}^{3+}_2(\text{Te}^{4+}\text{O}_3)_3 \cdot 2\text{H}_2\text{O}$  | G  | 1885      | USA                    | <i>Proceedings of the Colorado Scientific Society</i> <b>2</b> (1885), 20                       | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>18</b> (1972), 157 |
| Emplectite     | $\text{CuBiS}_2$  | G  | 1855      | Germany                | Uebersicht der Resultate Mineralogischer Forschungen im Jahre 1853. Weigel, Leipzig (1855), 125 | <i>American Mineralogist</i> <b>90</b> (2005), 162                                      |
| Empressite     | $\text{AgTe}$   | Rd | 1964 s.p. | USA                    | <i>American Journal of Science</i> <b>38</b> (1914), 163  | <i>American Mineralogist</i> <b>89</b> (2004), 1043                                     |
| Enargite       | $\text{Cu}_3\text{AsS}_4$   | G  | 1850      | Peru                   | <i>Annalen der Physik und Chemie</i> <b>80</b> (1850), 383                                      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 241                           |
| Engelhauptite  | $\text{KCu}_3(\text{V}_2\text{O}_7)(\text{OH})_2\text{Cl}$  | A  | 2013-009  | Germany                | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 705  |   |
| Englishite     | $\text{K}_3\text{Na}_2\text{Ca}_{10}\text{Al}_{15}(\text{OH})_7(\text{PO}_4)_{21} \cdot 26\text{H}_2\text{O}$             | G  | 1930      | USA                    | <i>American Mineralogist</i> <b>15</b> (1930), 307  | <i>Canadian Mineralogist</i> <b>22</b> (1984), 469                                      |
| Enneasartorite | $\text{Ti}_6\text{Pb}_{32}\text{As}_{70}\text{S}_{140}$   | A  | 2015-074  | Switzerland            | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 701                                     | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 149                             |
| Enstatite      | $\text{Mg}_2\text{Si}_2\text{O}_6$  | A  | 1988 s.p. | Czech Republic         | <i>Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften</i> <b>16</b> (1855), 152      | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 365                             |
| Eosphorite     | $\text{Mn}^{2+}\text{Al}(\text{PO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$  | G  | 1878      | USA                    | <i>American Journal of Science and Arts</i> <b>116</b> (1878), 33                               | <i>American Mineralogist</i> <b>98</b> (2013), 1297                                     |
| Ephesite       | $\text{NaLiAl}_2(\text{Si}_2\text{Al}_2)\text{O}_{10}(\text{OH})_2$   | A  | 1998 s.p. | Turkey                 | <i>American Journal of Science</i> <b>11</b> (1851), 53   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 275                           |
| Epididymite    | $\text{Na}_2\text{Be}_2\text{Si}_6\text{O}_{15} \cdot \text{H}_2\text{O}$   | G  | 1893      | Denmark<br>(Greenland) | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>15</b> (1893), 195                   | <i>American Mineralogist</i> <b>93</b> (2008), 1158                                     |
| Epidote        | $\text{Ca}_2(\text{Al}_2\text{Fe}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                          | G  | 1801      | unknown                | Traité de Minéralogie, Vol. 3. Chez Louis, Paris (1801), 102                                    | <i>American Mineralogist</i> <b>95</b> (2010), 1237                                     |
| Epidote-(Sr)   | $\text{CaSr}(\text{Al}_2\text{Fe}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                          | A  | 2006-055  | Japan                  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>103</b> (2008), 400                |   |
| Epifanovite    | $\text{NaCaCu}_5(\text{PO}_4)_4[\text{AsO}_2(\text{OH})_2] \cdot 7\text{H}_2\text{O}$                                     | A  | 2016-063  | Russia                 | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>146(3)</b> (2017), 30              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>146(3)</b> (2017), 39      |
| Epistilbite    | $\text{Ca}_3[\text{Si}_{18}\text{Al}_6\text{O}_{48}] \cdot 16\text{H}_2\text{O}$  | A  | 1997 s.p. | Iceland                | <i>Annalen der Physik und Chemie</i> <b>6</b> (1826), 183                                       | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 263                              |
| Epistolite     | $(\text{Na}\square)\text{Nb}_2\text{Na}_3\text{Ti}(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_4$ | Rd | 2016 s.p. | Denmark<br>(Greenland) | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 183  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 797                                      |
| Epsomite       | $\text{Mg}(\text{SO}_4) \cdot 7\text{H}_2\text{O}$  | G  | 1806      | United Kingdom         | <i>Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts</i> <b>62</b> (1806), 319   | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 449                             |
| Erazoite       | $\text{Cu}_4\text{SnS}_6$   | A  | 2014-061  | Chile                  | <i>Journal of Mineralogy and Geochemistry</i> <b>194</b> (2017), 91                             |   |
| Ercitite       | $\text{NaMn}^{3+}(\text{PO}_4)(\text{OH}) \cdot 2\text{H}_2\text{O}$  | A  | 1999-036  | Canada                 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 893  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 173                                      |
| Erdite         | $\text{NaFeS}_2 \cdot 2\text{H}_2\text{O}$  | A  | 1977-048  | USA                    | <i>American Mineralogist</i> <b>65</b> (1980), 509  | <i>American Mineralogist</i> <b>65</b> (1980), 516                                      |
| Ericaitite     | $\text{Fe}^{2+}_3\text{B}_7\text{O}_{13}\text{Cl}$  | G  | 1950      | Germany                | <i>Aufschluss</i> <b>1</b> (1950), 24   | <i>Chemie der Erde</i> <b>17</b> (1955), 211  |



|                 |   |    |           |                     |  |  |
|-----------------|---|----|-----------|---------------------|--|--|
| Ericlaxmanite   | $\text{Cu}_4\text{O}(\text{AsO}_4)_2$   | A  | 2013-022  | Russia              | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1553   |  |
| Ericssonite     | $\text{BaMn}^{2+}_2\text{Fe}^{3+}(\text{Si}_2\text{O}_7)\text{O}(\text{OH})$  | Rd | 1966-013  | Sweden              | <i>Lithos</i> <b>4</b> (1971), 137   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 569   |
| Erikapohlite    | $\text{Cu}^{2+}_3(\text{Zn}, \text{Cu}, \text{Mg})_4\text{Ca}_2(\text{AsO}_4)_6 \cdot 2\text{H}_2\text{O}$                          | A  | 2010-090  | Namibia             | <i>Journal of Mineralogy and Geochemistry</i> <b>190</b> (2013), 319   |  |
| Erikjonssonite  | $(\text{Pb}_{32}\text{O}_{21})[(\text{V}, \text{Si}, \text{Mo}, \text{As})\text{O}_4]_4\text{Cl}_9$                                 | A  | 2018-058  | Namibia             | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Eringaite       | $\text{Ca}_3\text{Sc}_2(\text{SiO}_4)_3$  | A  | 2009-054  | Russia              | <i>Mineralogical Magazine</i> <b>74</b> (2010), 365  |  |
| Eriochalcite    | $\text{CuCl}_2 \cdot 2\text{H}_2\text{O}$   | G  | 1870      | Italy               | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>9</b> (1870), 86                                | <i>Zeitschrift für Kristallographie</i> <b>189</b> (1989), 13                                |
| Erionite-Ca     | $\text{Ca}_5[\text{Si}_{26}\text{Al}_{10}\text{O}_{72}] \cdot 30\text{H}_2\text{O}$   | A  | 1997 s.p. | Japan               | <i>American Mineralogist</i> <b>52</b> (1967), 1785  | <i>American Mineralogist</i> <b>83</b> (1998), 590   |
| Erionite-K      | $\text{K}_{10}[\text{Si}_{26}\text{Al}_{10}\text{O}_{72}] \cdot 30\text{H}_2\text{O}$   | A  | 1997 s.p. | USA                 | <i>American Mineralogist</i> <b>49</b> (1964), 30  | <i>American Mineralogist</i> <b>83</b> (1998), 577   |
| Erionite-Na     | $\text{Na}_{10}[\text{Si}_{26}\text{Al}_{10}\text{O}_{72}] \cdot 30\text{H}_2\text{O}$  | Rn | 1997 s.p. | USA                 | <i>American Journal of Science</i> <b>156</b> (1898), 66   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 3265  |
| Erlianite       | $\text{Fe}^{2+}_4\text{Fe}^{3+}_2\text{Si}_6\text{O}_{15}(\text{OH})_8$   | A  | 1985-042  | China               | <i>Mineralogical Magazine</i> <b>50</b> (1986), 285  |  |
| Erlichmanite    | $\text{OsS}_2$  | A  | 1970-048  | USA                 | <i>American Mineralogist</i> <b>56</b> (1971), 1501  | <i>Zeitschrift für Kristallographie</i> <b>202</b> (1992), 161                               |
| Erniennickelite | $\text{NiMn}^{4+}_3\text{O}_7 \cdot 3\text{H}_2\text{O}$  | A  | 1993-002  | Australia           | <i>Canadian Mineralogist</i> <b>32</b> (1994), 333   |  |
| Erniggliite     | $\text{Ti}_2\text{SnAs}_2\text{S}_6$  | A  | 1987-025  | Switzerland         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>72</b> (1992), 293  |  |
| Ernstburkeite   | $\text{Mg}(\text{CH}_3\text{SO}_3)_2 \cdot 12\text{H}_2\text{O}$  | A  | 2010-059  | Antarctica          | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 79   |  |
| Ernstite        | $(\text{Mn}^{2+}, \text{Fe}^{3+})\text{Al}(\text{PO}_4)(\text{OH}, \text{O})_2$   | A  | 1970-012  | Namibia             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1970), 289  |  |
| Ershovite       | $\text{K}_3\text{Na}_4(\text{Fe}, \text{Mn}, \text{Ti})_2\text{Si}_8\text{O}_{20}(\text{OH}, \text{O})_4 \cdot 4\text{H}_2\text{O}$ | A  | 1991-014  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(1)</b> (1993), 116   | <i>Kristallografiya</i> <b>36</b> (1991), 892  |
| Ertixiite       | $\text{Na}_2\text{Si}_4\text{O}_9$  | A  | 1983-042  | China               | <i>Geochemistry</i> <b>4</b> (1985), 192   |  |
| Erythrite       | $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$   | G  | 1832      | France / Germany ?  | <i>Traité Élémentaire de Minéralogie</i> , 2nd ed. Verdière, Paris (1832), 596   | <i>Zeitschrift für Kristallographie</i> <b>222</b> (2007), 676                               |
| Erythrosiderite | $\text{K}_2\text{Fe}^{3+}\text{Cl}_5 \cdot \text{H}_2\text{O}$  | G  | 1872      | Italy               | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>5</b> (1873), 210                               | <i>Periodico di Mineralogia</i> <b>17</b> (1948), 59   |
| Erzwiesite      | $\text{Ag}_8\text{Pb}_{12}\text{Bi}_{16}\text{S}_{40}$  | A  | 2012-082  | Austria             | CNMNC Newsletter 15 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 1  |  |
| Eskebornite     | $\text{CuFeSe}_2$   | G  | 1949      | Germany             | <i>Fortschritte der Mineralogie</i> <b>28</b> (1949), 69   | <i>Materials Research Bulletin</i> <b>27</b> (1992), 367                                     |
| Eskimoite       | $\text{Ag}_7\text{Pb}_{10}\text{Bi}_{15}\text{S}_{36}$  | A  | 1976-005  | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>131</b> (1977), 56   | <i>Mitteilungen der Österreichischen Mineralogischen Gesellschaft</i> <b>139</b> (1994), 135 |
| Eskolaite       | $\text{Cr}_2\text{O}_3$   | G  | 1958      | Finland             | <i>American Mineralogist</i> <b>43</b> (1958), 1098  | <i>Materials Research Bulletin</i> <b>29</b> (1994), 239                                     |
| Esperanzaite    | $\text{NaCa}_2\text{Al}_2(\text{AsO}_4)_2\text{F}_4(\text{OH}) \cdot 2\text{H}_2\text{O}$   | A  | 1998-025  | Mexico              | <i>Canadian Mineralogist</i> <b>37</b> (1999), 67  |  |
| Esperite        | $\text{PbCa}_2(\text{ZnSiO}_4)_3$   | A  | 1964-027  | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 1170  | <i>American Mineralogist</i> <b>95</b> (2010), 699   |
| Esquireite      | $\text{BaSi}_6\text{O}_{13} \cdot 7\text{H}_2\text{O}$  | A  | 2014-066  | USA                 | <i>Canadian Mineralogist</i> <b>53</b> (2015), 3   |  |

|               |  |   |           |                                  |   |   |
|---------------|--|---|-----------|----------------------------------|---|---|
| Esseneite     | $\text{CaFe}^{3+}\text{AlSiO}_6$   | A | 1985-048  | USA                              | <i>American Mineralogist</i> <b>72</b> (1987), 148  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>146(5)</b> (2017), 105         |
| Ettringite    | $\text{Ca}_6\text{Al}_2(\text{SO}_4)_3(\text{OH})_{12}\cdot 26\text{H}_2\text{O}$  | A | 1962 s.p. | Germany                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1874), 273                               | <i>Cement and Concrete Research</i> <b>36</b> (2006), 364                                   |
| Eucairite     | $\text{CuAgSe}$  | G | 1818      | Sweden                           | <i>Afhandlingar i Fysik, Kemi och Mineralogi</i> <b>6</b> (1818), 140                                       | <i>Zeitschrift für Kristallographie</i> <b>108</b> (1957), 389                              |
| Euchlorine    | $\text{KNaCu}_3\text{O}(\text{SO}_4)_3$  | G | 1884      | Italy                            | <i>Rendiconti della Regia Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>23</b> (1884), 158 | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>161</b> (1990), 241                   |
| Euchroite     | $\text{Cu}_2(\text{AsO}_4)(\text{OH})\cdot 3\text{H}_2\text{O}$  | G | 1823      | Slovakia                         | Vollständige Charakteristik des Mineral-Systems. Arnoldischen Buchhandlung, Dresden (1823), 266             | <i>Mineralogy and Petrology</i> <b>110</b> (2016), 877                                      |
| Euclase       | $\text{BeAlSiO}_4(\text{OH})$  | G | 1792      | Brazil                           | <i>Observations sur la Physique, sur l'Histoire Naturelle et sur les Arts</i> <b>41</b> (1792), 155         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>72</b> (1992), 159 |
| Eucryptite    | $\text{LiAlSiO}_4$   | G | 1880      | USA                              | <i>American Journal of Science</i> <b>120</b> (1880), 258   | <i>Zeitschrift für Kristallographie</i> <b>172</b> (1985), 147                              |
| Eudialyte     | $\text{Na}_{15}\text{Ca}_6\text{Fe}_3\text{Zr}_3\text{Si}(\text{Si}_{25}\text{O}_{73})(\text{O},\text{OH},\text{H}_2\text{O})_3(\text{Cl},\text{OH})_2$                                | A | 2003 s.p. | Denmark (Greenland)              | <i>Göttingische Gelehrte Anzeigen</i> <b>3</b> (1819), 1993   | <i>Crystallography Reports</i> <b>54</b> (2009), 413  |
| Eudidymite    | $\text{Na}_2\text{Be}_2\text{Si}_6\text{O}_{15}\cdot \text{H}_2\text{O}$   | G | 1887      | Norway                           | <i>Nyt Magazin for Naturvidenskabena Kristiana</i> <b>31</b> (1887), 196                                    | <i>American Mineralogist</i> <b>93</b> (2008), 1158   |
| Eugenite      | $\text{Ag}_{11}\text{Hg}_2$  | A | 1981-037  | Poland                           | <i>Mineralogia Polonica</i> <b>17(2)</b> (1986), 3  |   |
| Eugsterite    | $\text{Na}_4\text{Ca}(\text{SO}_4)_3\cdot 2\text{H}_2\text{O}$   | A | 1980-008  | Kenya / Turkey                   | <i>American Mineralogist</i> <b>66</b> (1981), 632  |   |
| Eulytine      | $\text{Bi}_4(\text{SiO}_4)_3$  | G | 1827      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>9</b> (1827), 275   | <i>Zeitschrift für Kristallographie</i> <b>212</b> (1997), 48                               |
| Eurekadumpite | $(\text{Cu},\text{Zn})_{16}(\text{Te}^{4+}\text{O}_3)_2(\text{AsO}_4)_3\text{Cl}(\text{OH})_{18}\cdot 7\text{H}_2\text{O}$   | A | 2009-072  | USA                              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(4)</b> (2010), 26                          |   |
| Euxenite-(Y)  | $(\text{Y},\text{Ca},\text{Ce},\text{U},\text{Th})(\text{Nb},\text{Ta},\text{Ti})_2\text{O}_6$   | A | 1987 s.p. | Norway                           | <i>Annalen der Physik und Chemie</i> <b>50</b> (1840), 149  | <i>Zeitschrift für Kristallographie</i> <b>152</b> (1980), 69                               |
| Evansite      | $\text{Al}_3(\text{PO}_4)(\text{OH})_6\cdot 8\text{H}_2\text{O}$   | G | 1864      | Slovakia                         | <i>Philosophical Magazine and Journal of Science</i> <b>28</b> (1864), 341                                  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 59   |
| Evdokimovite  | $\text{Ti}_4(\text{VO})_3(\text{SO}_4)_5(\text{H}_2\text{O})_5$  | A | 2013-041  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1711  |   |
| Eveite        | $\text{Mn}^{2+}_2(\text{AsO}_4)(\text{OH})$  | A | 1966-047  | Sweden                           | <i>Arkiv för Mineralogi och Geologi</i> <b>4</b> (1968), 473  | <i>American Mineralogist</i> <b>53</b> (1968), 1841   |
| Evenkite      | $\text{C}_{23}\text{H}_{48}$   | G | 1953      | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>88</b> (1953), 717   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(3)</b> (2004), 80       |
| Eveslogite    | $(\text{Ca},\text{K},\text{Na},\text{Sr},\text{Ba})_{48}(\text{Ti},\text{Nb},\text{Fe},\text{Mn})_{12}(\text{OH})_{12}\text{Si}_{48}\text{O}_{144}(\text{OH},\text{F},\text{Cl})_{14}$ | A | 2001-023  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(1)</b> (2003), 59                       |   |
| Ewaldite      | $\text{Ba}(\text{Na},\text{Ca},\text{Y},\text{Ce},\text{K})(\text{CO}_3)_2\cdot 2.6\text{H}_2\text{O}$   | A | 1969-013  | USA                              | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>15</b> (1971), 185                     | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>15</b> (1971), 201     |
| Ewingite      | $\text{Mg}_8\text{Ca}_8(\text{UO}_2)_{24}(\text{CO}_3)_{30}\text{O}_4(\text{OH})_{12}(\text{H}_2\text{O})_{138}$   | A | 2016-012  | Czech Republic                   | <i>Geology</i> <b>45</b> (2017), 1007   |   |
| Eylettersite  | $\text{Th}_{0.75}\text{Al}_3(\text{PO}_4)_2(\text{OH})_6$  | A | 1969-035  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 98          |   |
| Eyselite      | $\text{Fe}^{3+}\text{Ge}^{4+}_3\text{O}_7(\text{OH})$  | A | 2003-052  | Namibia                          | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1771   |   |

|               |  |    |           |                    |  |   |
|---------------|--|----|-----------|--------------------|--|---|
| Ezcurrite     | $\text{Na}_2\text{B}_5\text{O}_7(\text{OH})_3 \cdot 2\text{H}_2\text{O}$   | G  | 1957      | Argentina          | <i>Economic Geology</i> <b>52</b> (1957), 426  | <i>American Mineralogist</i> <b>58</b> (1973), 110                                      |
| Eztlite       | $\text{Pb}_2\text{Fe}^{3+}_3(\text{Te}^{4+}\text{O}_3)_3(\text{SO}_4)\text{O}_2\text{Cl}$  | Rd | 1980-072  | Mexico             | <i>Mineralogical Magazine</i> <b>46</b> (1982), 257  | <a href="https://doi.org/10.1180/mgm.2018.108">https://doi.org/10.1180/mgm.2018.108</a> |
| Fabianite     | $\text{CaB}_3\text{O}_5(\text{OH})$  | A  | 1967 s.p. | Germany            | <i>Kali und Steinsalz</i> <b>3</b> (1962), 285   | <i>Zeitschrift für Kristallographie</i> <b>132</b> (1970), 241                          |
| Fabrièsite    | $\text{Na}_3\text{Al}_3\text{Si}_3\text{O}_{12} \cdot 2\text{H}_2\text{O}$   | Rn | 2012-080  | Myanmar            | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 257  |   |
| Faheyite      | $\text{Be}_2\text{Mn}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_4 \cdot 6\text{H}_2\text{O}$   | G  | 1953      | Brazil             | <i>American Mineralogist</i> <b>38</b> (1953), 263   | <i>Canadian Mineralogist</i> <b>53</b> (2015), 199                                      |
| Fahleite      | $\text{CaZn}_5\text{Fe}^{3+}_2(\text{AsO}_4)_6 \cdot 14\text{H}_2\text{O}$   | A  | 1982-061  | Namibia            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 167  |   |
| Fairbankite   | $\text{Pb}(\text{Te}^{4+}\text{O}_3)$  | A  | 1979-003  | USA                | <i>Mineralogical Magazine</i> <b>43</b> (1979), 453  |   |
| Fairchildite  | $\text{K}_2\text{Ca}(\text{CO}_3)_2$   | G  | 1947      | USA                | <i>American Mineralogist</i> <b>32</b> (1947), 607   | <i>Zeitschrift für Kristallographie</i> <b>157</b> (1981), 199                          |
| Fairfieldite  | $\text{Ca}_2\text{Mn}^{2+}(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$   | G  | 1879      | USA                | <i>American Journal of Science and Arts</i> <b>17</b> (1879), 359  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1181                                     |
| Faizievite    | $\text{Li}_6\text{K}_2\text{Na}(\text{Ca}_6\text{Na})\text{Ti}_4(\text{Si}_6\text{O}_{18})_2(\text{Si}_{12}\text{O}_{30})\text{F}_2$                   | A  | 2006-037  | Tajikistan         | <i>New Data on Minerals</i> <b>42</b> (2007), 5  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 163                                      |
| Falcondoite   | $\text{Ni}_4\text{Si}_6\text{O}_{15}(\text{OH})_2 \cdot 6\text{H}_2\text{O}$   | A  | 1976-018  | Dominican Republic | <i>Canadian Mineralogist</i> <b>14</b> (1976), 407   |   |
| Falgarite     | $\text{K}_4(\text{VO})_3(\text{SO}_4)_5$   | A  | 2018-069  | Tajikistan         | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Falkmanite    | $\text{Pb}_3\text{Sb}_2\text{S}_6$   | G  | 1940      | Germany            | <i>Neues Jahrbuch für Mineralogie, Abt. A Beih.</i> <b>75</b> (1940), 315  | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 411                             |
| Falottaite    | $\text{MnC}_2\text{O}_4 \cdot 3\text{H}_2\text{O}$   | A  | 2013-044  | Switzerland        | <i>Schweizer Strahler</i> <b>3</b> (2016), 20  |   |
| Falsterite    | $\text{Ca}_2\text{MgMn}^{2+}_2\text{Fe}^{2+}_2\text{Fe}^{3+}_2\text{Zn}_4(\text{PO}_4)_8(\text{OH})_4(\text{H}_2\text{O})_{14}$                        | A  | 2011-061  | USA                | <i>American Mineralogist</i> <b>97</b> (2012), 496   |   |
| Famatinite    | $\text{Cu}_3\text{SbS}_4$  | G  | 1873      | Argentina          | <i>Mineralogische Mittheilungen</i> <b>4</b> (1873), 219   | <i>Zeitschrift für Kristallographie</i> <b>219</b> (2004), 20                           |
| Fanfaniite    | $\text{Ca}_4\text{MnAl}_4(\text{PO}_4)_6(\text{OH})_4 \cdot 12\text{H}_2\text{O}$  | A  | 2018-053  | USA / Germany      | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Fangite       | $\text{Ti}_3\text{AsS}_4$  | A  | 1991-047  | USA                | <i>American Mineralogist</i> <b>78</b> (1993), 1096  |   |
| Fantappièite  | $[\text{Na}_{82.5}\text{Ca}_{33}\text{K}_{16.5}]_{\Sigma=132}(\text{Si}_{99}\text{Al}_{99}\text{O}_{396})(\text{SO}_4)_{33} \cdot 6\text{H}_2\text{O}$ | A  | 2008-006  | Italy              | <i>American Mineralogist</i> <b>95</b> (2010), 472   |   |
| Farneseite    | $\text{Na}_{46}\text{Ca}_{10}(\text{Si}_{42}\text{Al}_{42}\text{O}_{168})(\text{SO}_4)_{12} \cdot 6\text{H}_2\text{O}$                                 | A  | 2004-043  | Italy              | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 839  |   |
| Farringtonite | $\text{Mg}_3(\text{PO}_4)_2$   | A  | 1967 s.p. | Canada             | <i>Geochimica et Cosmochimica Acta</i> <b>24</b> (1961), 198   | <i>Acta Chemica Scandinavica</i> <b>22</b> (1968), 1466                                 |
| Fassinaite    | $\text{Pb}_2(\text{CO}_3)(\text{S}_2\text{O}_3)$   | A  | 2011-048  | Italy              | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2721   |   |
| Faujasite-Ca  | $(\text{Ca}, \text{Na}, \text{Mg})_2(\text{Si}, \text{Al})_{12}\text{O}_{24} \cdot 15\text{H}_2\text{O}$   | A  | 1997 s.p. | Germany            | <i>American Mineralogist</i> <b>67</b> (1982), 794   | <i>Materials Research Bulletin</i> <b>7</b> (1972), 1311                                |
| Faujasite-Mg  | $(\text{Mg}, \text{Na}, \text{K}, \text{Ca})_2(\text{Si}, \text{Al})_{12}\text{O}_{24} \cdot 15\text{H}_2\text{O}$                                     | A  | 1997 s.p. | Germany            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1975), 433  |   |
| Faujasite-Na  | $(\text{Na}, \text{Ca}, \text{Mg})_2(\text{Si}, \text{Al})_{12}\text{O}_{24} \cdot 15\text{H}_2\text{O}$   | Rn | 1997 s.p. | Germany            | <i>Annales des Mines, Ser. 4</i> <b>1</b> (1842), 395  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 515                             |
| Faustite      | $\text{ZnAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$  | G  | 1953      | USA                | <i>American Mineralogist</i> <b>38</b> (1953), 964   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 905                                     |
| Favreauite    | $\text{PbBiCu}_6\text{O}_4(\text{SeO}_3)_4(\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 2014-013  | Bolivia            | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 771  |   |
| Fayalite      | $\text{Fe}^{2+}_2(\text{SiO}_4)$   | G  | 1840      | Portugal           | <i>Annalen der Physik und Chemie</i> <b>51</b> (1840), 160   | <i>American Mineralogist</i> <b>62</b> (1977), 286                                      |

|                    |   |    |           |                     |  |  |
|--------------------|---|----|-----------|---------------------|--|--|
| Fedorite           | $(K,Na)_{2.5}(Ca,Na)_7Si_{16}O_{38}(OH,F)_2 \cdot 3.5H_2O$                | A  | 1967 s.p. | Russia              | Caledonian Complex of Ultrabasic Alkaline Rocks and Carbonatites of the Kola Peninsula and Northern Karelia. Nedra Press, Leningrad (1965) | <i>Canadian Mineralogist</i> <b>39</b> (2001), 769           |
| Fedorovskite       | $Ca_2Mg_2B_4O_7(OH)_6$  | A  | 1975-006  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 71   |  |
| Fedotovite         | $K_2Cu_3O(SO_4)_3$  | A  | 1986-013  | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>299</b> (1988), 961   | <i>Mineralogical Magazine</i> <b>55</b> (1991), 613          |
| Feinglosite        | $Pb_2Zn(AsO_4)_2 \cdot H_2O$  | A  | 1995-013  | Namibia             | <i>Mineralogical Magazine</i> <b>61</b> (1997), 285  |  |
| Feitknechtite      | $Mn^{3+}O(OH)$  | A  | 1968 s.p. | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 1296  |  |
| Feklichevite       | $Na_{11}Ca_9(Fe^{3+}, Fe^{2+})_2Zr_3Nb(Si_{25}O_{73})(OH, H_2O, Cl, O)_5$ | A  | 2000-017  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 55  |  |
| Felbertalite       | $Cu_2Pb_6Bi_8S_{19}$  | A  | 1999-042  | Austria             | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 961  | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 825  |
| Felsőbányaite      | $Al_4(SO_4)(OH)_{10} \cdot 4H_2O$   | G  | 1854      | Romania             | <i>Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften</i> <b>12</b> (1854), 183 | <i>Acta Mineralogica-Petrographica</i> <b>38</b> (1997), 5   |
| Fenaksite          | $KNaFe^{2+}Si_4O_{10}$  | A  | 1962 s.p. | Russia              | <i>Trudy Mineralogicheskogo Muzeya Akademii Nauk SSSR</i> <b>9</b> (1959), 152   | <i>Doklady Akademii Nauk</i> <b>398</b> (2004), 1029         |
| Fencooperite       | $Ba_6Fe^{3+}_3Si_8O_{23}(CO_3)_2Cl_3 \cdot H_2O$                          | A  | 2000-023  | USA                 | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1059  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1065          |
| Fengchengite       | $Na_{12}\square_3Ca_6Fe^{3+}_3Zr_3Si(Si_{25}O_{73})(H_2O)_3(OH)_2$        | A  | 2007-018a | China               | <i>Acta Mineralogica Sinica</i> <b>37</b> (2017), 140  |  |
| Feodosiyite        | $Cu_{11}Mg_2Cl_{18}(OH)_8 \cdot 16H_2O$                                   | A  | 2015-063  | Russia              | CNMNC Newsletter 28 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1859   |  |
| Ferberite          | $Fe^{2+}(WO_4)$   | G  | 1863      | Spain               | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1863), 641  | <i>American Mineralogist</i> <b>56</b> (1971), 489           |
| Ferchromide        | $Cr_{1.5}Fe_{0.2}$  | A  | 1984-022  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 355  |  |
| Ferdowsiite        | $Ag_8(Sb_5As_3)S_{16}$  | A  | 2012-062  | Iran                | <i>Canadian Mineralogist</i> <b>51</b> (2013), 727   |  |
| Fergusonite-(Ce)   | $CeNbO_4 \cdot 0.3H_2O$   | Q  | ?         | Ukraine             | <i>Novye Dannye o Mineralakh</i> <b>33</b> (1986), 43  | <i>American Mineralogist</i> <b>74</b> (1989), 946           |
| Fergusonite-(Ce)-β | $CeNbO_4$   | A  | 1975 s.p. | China               | <i>Geochimica</i> <b>2</b> (1973), 86  |  |
| Fergusonite-(Nd)-β | $NdNbO_4$   | A  | 1987 s.p. | China               | <i>Scientia Geologica Sinica</i> <b>1</b> (1983), 78   |  |
| Fergusonite-(Y)    | $YNbO_4$  | A  | 1987 s.p. | Denmark (Greenland) | <i>Edinburgh Journal of Science</i> <b>2</b> (1825), 375   | <i>Soviet Physics - Crystallography</i> <b>4</b> (1959), 796 |
| Fergusonite-(Y)-β  | $YNbO_4$  | A  | 1987 s.p. | Tajikistan          | <i>Geologiya Rudnykh Mestorozhdenii</i> <b>9</b> (1961), 28  | <i>American Mineralogist</i> <b>95</b> (2010), 487           |
| Ferhodsitite       | $(Fe, Rh, Ni, Ir, Cu, Co, Pt)_{9-x}S_8$                                   | A  | 2009-056  | Russia              | <i>New Data on Minerals</i> <b>51</b> (2016), 8  |  |
| Fermitite          | $Na_4(UO_2)(SO_4)_3 \cdot 3H_2O$  | A  | 2014-068  | USA                 | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1123   |  |
| Fernandinite       | $(Ca, Na, K)_{0.9}(V^{5+}, V^{4+}, Fe^{2+}, Ti)_8O_{20} \cdot 4H_2O$      | Rd | 1994 s.p. | Peru                | <i>Journal of the Washington Academy of Sciences</i> <b>5</b> (1915), 7  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 339           |
| Feroxyhyte         | $Fe^{3+}O(OH)$  | A  | 1975-032  | Ukraine             | <i>Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya</i> <b>5</b> (1976), 5   | <i>Clay Minerals</i> <b>28</b> (1993), 209                   |
| Ferraioloite       | $MgMn^{2+}_4(Fe^{2+}_{0.5}Al_{0.5})_4Zn_4(PO_4)_8(OH)_4(H_2O)_{20}$       | A  | 2015-066  | USA                 | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 655  |  |

|                            |   |    |           |                |  |  |
|----------------------------|---|----|-----------|----------------|--|--|
| Ferrarisite                | $\text{Ca}_5(\text{AsO}_3\text{OH})_2(\text{AsO}_4)_2 \cdot 9\text{H}_2\text{O}$  | A  | 1979-020  | France         | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 533  | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 541          |
| Ferriakasakaite-(La)       | $\text{CaLa}(\text{Fe}^{3+}\text{AlMn}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                   | A  | 2013-126  | Japan          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 735  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 323    |
| Ferriallanite-(Ce)         | $\text{CaCe}(\text{Fe}^{3+}\text{AlFe}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                   | A  | 2000-041  | Mongolia       | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1641  |  |
| Ferriallanite-(La)         | $\text{CaLa}(\text{Fe}^{3+}\text{AlFe}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                   | A  | 2010-066  | Germany        | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 741  |  |
| Ferriandrosite-(La)        | $\text{MnLa}(\text{Fe}^{3+}\text{AlMn}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                   | A  | 2013-127  | Japan          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 735  |  |
| Ferribushmakinite          | $\text{Pb}_2\text{Fe}^{3+}(\text{PO}_4)(\text{VO}_4)(\text{OH})$  | A  | 2014-055  | USA            | <i>Mineralogical Magazine</i> <b>79</b> (2015), 661  |  |
| Ferricopiapite             | $\text{Fe}^{3+}_{0.67}\text{Fe}^{3+}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$                          | G  | 1939      | Chile          | <i>American Mineralogist</i> <b>24</b> (1939), 182   | <i>American Mineralogist</i> <b>58</b> (1973), 314             |
| Ferricoronadite            | $\text{Pb}(\text{Mn}^{4+}_6\text{Fe}^{3+}_2)\text{O}_{16}$  | A  | 2015-093  | Macedonia      | <i>Physics and Chemistry of Minerals</i> <b>43</b> (2016), 503   |  |
| Ferrierite-K               | $(\text{K},\text{Na})_5(\text{Si}_{31}\text{Al}_5)\text{O}_{72} \cdot 18\text{H}_2\text{O}$                             | A  | 1997 s.p. | USA            | <i>American Mineralogist</i> <b>61</b> (1976), 60  |  |
| Ferrierite-Mg              | $[\text{Mg}_2(\text{K},\text{Na})_2\text{Ca}_{0.5}](\text{Si}_{29}\text{Al}_7)\text{O}_{72} \cdot 18\text{H}_2\text{O}$ | Rn | 1997 s.p. | Canada         | <i>Transactions of the Royal Society of Canada Ser. 3</i> <b>12</b> (1918), 185  | <i>Zeitschrift für Kristallographie</i> <b>178</b> (1987), 249 |
| Ferrierite-Na              | $(\text{Na},\text{K})_5(\text{Si}_{31}\text{Al}_5)\text{O}_{72} \cdot 18\text{H}_2\text{O}$                             | A  | 1997 s.p. | USA            | <i>American Mineralogist</i> <b>61</b> (1976), 60  |  |
| Ferrierite-NH <sub>4</sub> | $(\text{NH}_4,\text{Mg}_{0.5})_5(\text{Al}_5\text{Si}_{31}\text{O}_{72}) \cdot 22\text{H}_2\text{O}$                    | A  | 2017-099  | Czech Republic | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |  |
| Ferri-fluoro-katophorite   | $\text{Na}(\text{NaCa})(\text{Mg}_4\text{Fe}^{3+})(\text{Si}_7\text{Al})\text{O}_{22}\text{F}_2$                        | A  | 2015-096  | Canada         | CNMNC Newsletter 29 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 199  |  |
| Ferri-fluoro-leakeite      | $\text{NaNa}_2(\text{Mg}_2\text{Fe}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}\text{F}_2$                                 | Rd | 2012 s.p. | Kazakhstan     | <i>Mineralogical Magazine</i> <b>74</b> (2010), 521  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 861            |
| Ferri-ghoseite             | $\square(\text{NaMn}^{2+})(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$                             | Rd | 2012 s.p. | India          | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 1153  |  |
| Ferrihollandite            | $\text{Ba}(\text{Mn}^{4+}_6\text{Fe}^{3+}_2)\text{O}_{16}$  | A  | 2012 s.p. | India          | <i>Transactions of the Mining and Geological Institute of India</i> <b>1</b> (1906), 69  | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 171    |
| Ferrihydrite               | $\text{Fe}^{3+}_{10}\text{O}_{14}(\text{OH})_2$   | A  | 1971-015  | Kazakhstan     | <i>Izvestiya Akademii Nauk SSSR</i> <b>4</b> (1973), 33  | <i>American Mineralogist</i> <b>98</b> (2013), 848             |
| Ferri-kaersutite           | $\text{NaCa}_2(\text{Mg}_3\text{Fe}^{3+}\text{Ti})(\text{Si}_6\text{Al}_2)\text{O}_{22}\text{O}_2$                      | A  | 2014-051  | Antarctica     | <i>American Mineralogist</i> <b>101</b> (2016), 461  |  |
| Ferri-katophorite          | $\text{Na}(\text{NaCa})(\text{Mg}_4\text{Fe}^{3+})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$                     | Rd | 2012 s.p. | Russia         | <i>Crystallography Reports</i> <b>48</b> (2003), 16  |  |
| Ferri-leakeite             | $\text{NaNa}_2(\text{Mg}_2\text{Fe}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$                              | Rd | 2012 s.p. | India          | <i>American Mineralogist</i> <b>77</b> (1992), 1112  |  |
| Ferrilotharmeyerite        | $\text{CaZnFe}^{3+}(\text{AsO}_4)_2(\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1986-024  | Namibia        | <i>Canadian Mineralogist</i> <b>30</b> (1992), 225   | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179    |
| Ferrimolybdate             | $\text{Fe}^{3+}_2(\text{Mo}^{6+}\text{O}_4)_3 \cdot 7\text{H}_2\text{O}$  | G  | 1913      | Russia         | K mineralogii Alekseevskogo rudnika Minusinskogo uezda. Moscow (1913), 26 p.   | <i>American Mineralogist</i> <b>48</b> (1963), 14              |
| Ferrinatrite               | $\text{Na}_3\text{Fe}^{3+}(\text{SO}_4)_3 \cdot 3\text{H}_2\text{O}$  | G  | 1889      | Chile          | <i>American Journal of Science</i> <b>38</b> (1889), 244   | <i>Mineralogical Magazine</i> <b>41</b> (1977), 375            |
| Ferri-obertiite            | $\text{NaNa}_2(\text{Mg}_3\text{Fe}^{3+}\text{Ti})\text{Si}_8\text{O}_{22}\text{O}_2$                                   | A  | 2015-079  | Germany        | <i>Mineralogical Magazine</i> <b>81</b> (2017), 641  |  |
| Ferri-pedrizite            | $\text{NaLi}_2(\text{Mg}_2\text{Fe}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$                              | Rd | 2012 s.p. | Spain          | <i>American Mineralogist</i> <b>87</b> (2002), 976   |  |
| Ferriperbøeite-(Ce)        | $(\text{CaCe}_3)(\text{Fe}^{3+}\text{Al}_2\text{Fe}^{2+})(\text{Si}_2\text{O}_7)(\text{SiO}_4)_3\text{O}(\text{OH})_2$  | A  | 2017-037  | Sweden         | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 537  |  |

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|-----------------------------|--|----|-----------|----------------|--|--|
| Ferripyrophyllite           | $\text{Fe}^{3+}\text{Si}_2\text{O}_5(\text{OH})$   | A  | 1978-062  | Germany        | <i>Chemie der Erde</i> <b>38</b> (1979), 324   | <i>Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya</i> <b>2</b> (1980), 5 |
| Ferricrockbridgeite         | $(\text{Fe}^{3+}_{0.67}\square_{0.33})_2(\text{Fe}^{3+})_3(\text{PO}_4)_3(\text{OH})_4(\text{H}_2\text{O})$                                  | A  | 2018-065  | USA            | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Ferrisepiolite              | $(\text{Fe}^{3+}, \text{Fe}^{2+}, \text{Mg})_4[(\text{Si}, \text{Fe}^{3+})_6\text{O}_{15}](\text{O}, \text{OH})_2 \cdot 6\text{H}_2\text{O}$ | A  | 2010-061  | China          | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 177  |  |
| Ferrisicklerite             | $\text{Li}_{1-x}(\text{Fe}^{3+}, \text{Mn}^{2+})(\text{PO}_4)$   | G  | 1937      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>59</b> (1937), 77   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 2761                          |
| Ferristrunzite              | $\text{Fe}^{3+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_3 \cdot 5\text{H}_2\text{O}$   | A  | 1986-023  | Belgium        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 453  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 176                  |
| Ferrisurite                 | $\text{Pb}_{2.4}\text{Fe}^{3+}_2\text{Si}_4\text{O}_{10}(\text{CO}_3)_{1.7}(\text{OH})_3 \cdot n\text{H}_2\text{O}$                          | A  | 1990-056  | USA            | <i>American Mineralogist</i> <b>77</b> (1992), 1107  |  |
| Ferrisymplesite             | $\text{Fe}^{3+}_3(\text{AsO}_4)_2(\text{OH})_3 \cdot 5\text{H}_2\text{O}$  | Q  | 1924      | Canada         | <i>University of Toronto Studies, Geological Series</i> <b>17</b> (1924), 16   |  |
| Ferrivauxite                | $\text{Fe}^{3+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_3 \cdot 5\text{H}_2\text{O}$  | A  | 2014-003  | Bolivia        | <i>Mineralogical Magazine</i> <b>80</b> (2016), 311  |  |
| Ferri-winchite              | $\square(\text{NaCa})(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(3)</b> (2005), 74   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 171                             |
| Ferro-actinolite            | $\square\text{Ca}_2(\text{Mg}_{2.5-0.0}\text{Fe}^{2+}_{2.5-5.0})\text{Si}_8\text{O}_{22}(\text{OH})_2$                                       | Rd | 2012 s.p. | unknown        | <i>Sveriges Geologiska Undersökning</i> <b>40</b> (1946), 1  | <i>American Mineralogist</i> <b>85</b> (2000), 1239                            |
| Ferroalluaudite             | $\text{NaFe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_3$  | Rn | 2007 s.p. | France / USA ? | <i>American Mineralogist</i> <b>42</b> (1957), 661   | <i>Mineralogical Magazine</i> <b>43</b> (1979), 227                            |
| Ferroaluminoceladonite      | $\text{KFe}^{2+}\text{AlSi}_4\text{O}_{10}(\text{OH})_2$   | Rn | 1995-019  | New Zealand    | <i>American Mineralogist</i> <b>82</b> (1997), 503   |  |
| Ferro-anthophyllite         | $\square\text{Fe}^{2+}_2\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | USA            | <i>Proceedings of the United States National Museum</i> <b>59</b> (1921), 397  |  |
| Ferrobobfergusonite         | $\text{Na}_2\text{Fe}^{2+}_5\text{Fe}^{3+}\text{Al}(\text{PO}_4)_6$  | A  | 2017-006  | USA            | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529   |  |
| Ferrobustamite              | $\text{CaFe}^{2+}\text{Si}_2\text{O}_6$  | G  | 1937      | United Kingdom | <i>Mineralogical Magazine</i> <b>24</b> (1937), 569  | <i>Zeitschrift für Kristallographie</i> <b>138</b> (1973), 419                 |
| Ferrocapholite              | $\text{Fe}^{2+}\text{Al}_2\text{Si}_2\text{O}_6(\text{OH})_4$  | G  | 1951      | Indonesia      | <i>American Mineralogist</i> <b>36</b> (1951), 736   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 337                  |
| Ferroceladonite             | $\text{KFe}^{2+}\text{Fe}^{3+}\text{Si}_4\text{O}_{10}(\text{OH})_2$   | A  | 1995-018  | New Zealand    | <i>American Mineralogist</i> <b>82</b> (1997), 503   |  |
| Ferrochiavennite            | $\text{Ca}_{1-2}\text{Fe}[(\text{Si}, \text{Al}, \text{Be})_5\text{Be}_2\text{O}_{13}(\text{OH})_2] \cdot 2\text{H}_2\text{O}$               | A  | 2012-039  | Norway         | <i>Canadian Mineralogist</i> <b>51</b> (2013), 285   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 21                              |
| Ferro-edenite               | $\text{NaCa}_2\text{Fe}^{2+}_5(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Canada         | <i>Sveriges Geologiska Undersökning</i> <b>40</b> (1946), 1  | <i>Canadian Mineralogist</i> <b>23</b> (1985), 447                             |
| Ferroericssonite            | $\text{BaFe}^{2+}_2\text{Fe}^{3+}(\text{Si}_2\text{O}_7)\text{O}(\text{OH})$   | A  | 2010-025  | USA            | <i>Canadian Mineralogist</i> <b>49</b> (2011), 587   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 569                             |
| Ferro-ferri-fluoro-leakeite | $\text{NaNa}_2(\text{Fe}^{2+}_2\text{Fe}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}\text{F}_2$   | Rd | 2012 s.p. | USA            | <i>American Mineralogist</i> <b>81</b> (1996), 226   |  |
| Ferro-ferri-hornblende      | $\square\text{Ca}_2(\text{Fe}^{2+}_4\text{Fe}^{3+})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$   | A  | 2015-054  | Italy          | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1233   |  |
| Ferro-ferri-katophorite     | $\text{Na}(\text{NaCa})(\text{Fe}^{2+}_4\text{Fe}^{3+})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$                                     | A  | 2016-008  | Argentina      | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691  |  |
| Ferro-ferri-nybøite         | $\text{NaNa}_2(\text{Fe}^{2+}_3\text{Fe}^{3+}_2)(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$  | A  | 2013-072  | Canada         | <i>Canadian Mineralogist</i> <b>52</b> (2014), 1019  | <i>Canadian Mineralogist</i> <b>55</b> (2017), 515                             |
| Ferro-ferri-obertiite       | $\text{NaNa}_2(\text{Fe}^{2+}_3\text{Fe}^{3+}\text{Ti})\text{Si}_8\text{O}_{22}\text{O}_2$   | Rd | 2012 s.p. | USA            | <i>Canadian Mineralogist</i> <b>48</b> (2010), 301   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1253                            |
| Ferro-ferri-pedrizite       | $\text{NaLi}_2(\text{Fe}^{2+}_2\text{Fe}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Spain          | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1345  |  |



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|------------------------|---|----|-----------|-------------------|---|---|
| Ferro-fluoro-pedrizite | $\text{NaLi}_2(\text{Fe}^{2+}_2\text{Al}_2\text{Li})\text{Si}_8\text{O}_{22}\text{F}_2$   | Rd | 2012 s.p. | Russia            | <i>Mineralogical Magazine</i> <b>73</b> (2009), 487   |   |
| Ferro-gedrite          | $\square\text{Fe}^{2+}_2(\text{Fe}^{2+}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | France            | <i>Geological Magazine</i> <b>76</b> (1939), 326  | <i>Bulletin of the National Science Museum, Ser. C</i> <b>6</b> (1979), 107 |
| Ferro-glaucophane      | $\square\text{Na}_2(\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Italy             | <i>Journal of The Faculty of Sciences, University of Tokyo, Section II</i> <b>11</b> (1957), 57 | <i>Canadian Mineralogist</i> <b>17</b> (1979), 1                            |
| Ferrohexahydrite       | $\text{Fe}^{2+}(\text{SO}_4)\cdot 6\text{H}_2\text{O}$  | A  | 1967 s.p. | Ukraine           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 490                |   |
| Ferrohögbomite-2N2S    | $(\text{Fe},\text{Mg},\text{Zn},\text{Al})_3(\text{Al},\text{Ti},\text{Fe})_8\text{O}_{15}(\text{OH})$  | A  | 2001-048  | Algeria           | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 957                                     | <i>American Mineralogist</i> <b>67</b> (1982), 373                          |
| Ferro-holmquistite     | $\square\text{Li}_2(\text{Fe}^{2+}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Australia         | <i>American Mineralogist</i> <b>90</b> (2005), 1167   |   |
| Ferro-hornblende       | $\square\text{Ca}_2(\text{Fe}^{2+}_4\text{Al})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | unknown           | original paper?   |   |
| Ferroindialite         | $(\text{Fe}^{2+},\text{Mg})_2\text{Al}_4\text{Si}_5\text{O}_{18}$   | A  | 2013-016  | Germany           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>143(1)</b> (2014), 46              |   |
| Ferro-katophorite      | $\text{Na}(\text{NaCa})(\text{Fe}^{2+}_4\text{Al})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Norway            | <i>Videnskabssekabets Skrifter. I. Matematisk-Naturvidenskabelig Klasse</i> <b>4</b> (1894), 27 |   |
| Ferrokentbrooksit      | $\text{Na}_{15}\text{Ca}_6\text{Fe}^{2+}_3\text{Zr}_3\text{Nb}(\text{Si}_{25}\text{O}_{73})(\text{O},\text{OH},\text{H}_2\text{O})_3(\text{F},\text{Cl})_2$ | A  | 1999-046  | Canada            | <i>Canadian Mineralogist</i> <b>41</b> (2003), 55   |   |
| Ferrokösterite         | $\text{Cu}_2(\text{Fe},\text{Zn})\text{SnS}_4$  | Rn | 1985-012  | United Kingdom    | <i>Canadian Mineralogist</i> <b>27</b> (1989), 673  |   |
| Ferrokinositalite      | $\text{BaFe}^{2+}_3(\text{Si}_2\text{Al}_2)\text{O}_{10}(\text{OH})_2$  | A  | 1999-026  | South Africa      | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1445   |   |
| Ferrolaueite           | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2\cdot 8\text{H}_2\text{O}$   | A  | 1987-046a | USA               | <i>Australian Journal of Mineralogy</i> <b>16</b> (2012), 69                                    |   |
| Ferromerrillite        | $\text{Ca}_9\text{NaFe}^{2+}(\text{PO}_4)_7$  | A  | 2006-039  | India (meteorite) | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 125                                     |   |
| Ferronickelplatinum    | $\text{Pt}_2\text{FeNi}$  | A  | 1982-071  | Russia            | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 487               |   |
| Ferronigerite-2N1S     | $(\text{Al},\text{Fe},\text{Zn})_2(\text{Al},\text{Sn})_6\text{O}_{11}(\text{OH})$  | Rn | 2001 s.p. | Nigeria           | <i>Mineralogical Magazine</i> <b>28</b> (1947), 118   | <i>Crystallography Reports</i> <b>40</b> (1995), 587                        |
| Ferronigerite-6N6S     | $(\text{Al},\text{Fe},\text{Zn})_3(\text{Al},\text{Sn},\text{Fe})_8\text{O}_{15}(\text{OH})$  | Rn | 2001 s.p. | Finland           | <i>Bulletin of the Geological Society of Finland</i> <b>49</b> (1977), 151                      | <i>American Mineralogist</i> <b>64</b> (1979), 1255                         |
| Ferronordite-(Ce)      | $\text{Na}_3\text{SrCeFe}^{2+}\text{Si}_6\text{O}_{17}$   | A  | 1997-008  | Russia            | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(1)</b> (1998), 32           | <i>Crystallography Reports</i> <b>44</b> (1999), 565                        |
| Ferronordite-(La)      | $\text{Na}_3\text{SrLaFe}^{2+}\text{Si}_6\text{O}_{17}$   | A  | 2000-015  | Russia            | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(2)</b> (2001), 53           |   |
| Ferro-pargasite        | $\text{NaCa}_2(\text{Fe}^{2+}_4\text{Al})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | United Kingdom    | <i>American Mineralogist</i> <b>46</b> (1961), 340  | <i>American Mineralogist</i> <b>78</b> (1993), 746                          |
| Ferro-pedrizite        | $\text{NaLi}_2(\text{Fe}^{2+}_2\text{Al}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$  | A  | 2014-037  | Russia            | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 417                                     |   |
| Ferrohodonite          | $\text{CaMn}_3\text{Fe}(\text{Si}_5\text{O}_{15})$  | A  | 2016-016  | Australia         | <i>Physics and Chemistry of Minerals</i> <b>44</b> (2017), 323                                  |   |
| Ferro-richterite       | $\text{Na}(\text{NaCa})\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | unknown           | <i>Årsbok Sveriges Geologiska Undersökning</i> <b>40</b> (1946), 16                             |   |

|                      |  |    |           |                     |  |   |
|----------------------|--|----|-----------|---------------------|--|---|
| Ferrorockbridgeite   | $(\text{Fe}^{2+}, \text{Mn}^{2+})_2(\text{Fe}^{3+})_3[\text{PO}_{3.67}(\text{OH})_{0.33}]_3(\text{OH})_5$                                  | A  | 2018-004  | Germany             | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Ferrorosemaryite     | $\square\text{NaFe}^{2+}\text{Fe}^{3+}\text{Al}(\text{PO}_4)_3$  | A  | 2003-063  | Rwanda              | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 749  |   |
| Ferrosaponite        | $\text{Ca}_{0.3}(\text{Fe}^{2+}, \text{Mg}, \text{Fe}^{3+})_3(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$ | A  | 2002-028  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(2)</b> (2003), 68  |   |
| Ferroselite          | $\text{FeSe}_2$  | G  | 1955      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>105</b> (1955), 812   | <i>U.S.G.S. Professional Paper</i> <b>550-C</b> (1966), C133  |
| Ferrosilite          | $\text{Fe}^{2+}_2\text{Si}_2\text{O}_6$  | Rn | 1988 s.p. | unknown             | <i>American Journal of Science</i> <b>30</b> (1935), 481   | <i>American Mineralogist</i> <b>61</b> (1976), 38             |
| Ferroskutterudite    | $\text{FeAs}_3$  | A  | 2006-032  | Russia              | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>417</b> (2007), 1278                        |   |
| Ferrostalderite      | $\text{CuFe}_2\text{TlAs}_2\text{S}_6$   | A  | 2014-090  | Switzerland         | <i>Mineralogical Magazine</i> <b>80</b> (2016), 175  |   |
| Ferrostrunzite       | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 6\text{H}_2\text{O}$   | A  | 1983-003  | USA                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 524  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 207 |
| Ferrotaafeite-2N'2S  | $(\text{Fe}^{2+}, \text{Mg}, \text{Zn})_3\text{Al}_6\text{BeO}_{16}$   | A  | 2011-025  | China               | <i>Canadian Mineralogist</i> <b>50</b> (2012), 21  |   |
| Ferrotaafeite-6N'3S  | $\text{BeFe}^{2+}_2\text{Al}_6\text{O}_{12}$   | Rn | 2001 s.p. | Finland             | <i>Canadian Mineralogist</i> <b>19</b> (1981), 311   |   |
| Ferro-taramite       | $\text{Na}(\text{NaCa})(\text{Fe}^{2+}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$                                    | Rd | 2012 s.p. | Norway              | <i>American Mineralogist</i> <b>92</b> (2007), 1428  |   |
| Ferrotellurite       | $\text{Fe}(\text{Te}^{6+}\text{O}_4)$ (?)  | Q  | 1877      | USA                 | <i>Proceedings of the American Philosophical Society</i> <b>17</b> (1877), 119   | <i>American Journal of Science</i> <b>14</b> (1877), 423      |
| Ferrotitanowodginite | $\text{Fe}^{2+}\text{TiTa}_2\text{O}_8$  | A  | 1998-028  | Argentina           | <i>American Mineralogist</i> <b>84</b> (1999), 773   |   |
| Ferrotchilinite      | $[\text{FeS}] \cdot \approx 0.85[\text{Fe}^{2+}(\text{OH})_2]$   | A  | 2010-080  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(4)</b> (2012), 1  |   |
| Ferro-tschermakite   | $\square\text{Ca}_2(\text{Fe}^{2+}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | A  | 2016-116  | France              | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 171  |   |
| Ferrotychite         | $\text{Na}_6\text{Fe}^{2+}_2(\text{CO}_3)_4(\text{SO}_4)$  | A  | 1980-050  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 600  |   |
| Ferrovalleriite      | $2[(\text{Fe}, \text{Cu})\text{S}] \cdot 1.53[(\text{Fe}, \text{Al}, \text{Mg})(\text{OH})_2]$   | A  | 2011-068  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(6)</b> (2012), 29   |   |
| Ferrovorontsovite    | $(\text{Fe}_5\text{Cu})_{26}\text{TlAs}_4\text{S}_{12}$  | A  | 2017-007  | Russia              | <i>Minerals</i> <b>8</b> (2018), 185   |   |
| Ferrowodginite       | $\text{Fe}^{2+}\text{Sn}^{4+}\text{Ta}_2\text{O}_8$  | A  | 1984-006  | Finland             | <i>Canadian Mineralogist</i> <b>30</b> (1992), 633   |   |
| Ferrowyllieite       | $(\text{Na}, \text{Ca}, \text{Mn}^{2+})_2\text{Fe}^{2+}_2\text{Al}(\text{PO}_4)_3$   | A  | 1979 s.p. | USA                 | <i>Mineralogical Record</i> <b>4</b> (1973), 131   | <i>Mineralogical Magazine</i> <b>43</b> (1979), 227           |
| Ferruccite           | $\text{NaBF}_4$  | G  | 1933      | Italy               | <i>Periodico di Mineralogia</i> <b>4</b> (1933), 410   | <i>Acta Crystallographica</i> <b>B24</b> (1968), 1703         |
| Fersmanite           | $\text{Ca}_4(\text{Na}, \text{Ca})_4(\text{Ti}, \text{Nb})_4(\text{Si}_2\text{O}_7)_2\text{O}_8\text{F}_3$                                 | G  | 1929      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>12</b> (1929), 297  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1421           |
| Fersmite             | $(\text{Ca}, \text{Ce}, \text{Na})(\text{Nb}, \text{Ta}, \text{Ti})_2(\text{O}, \text{OH}, \text{F})_6$                                    | G  | 1946      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>52</b> (1946), 69   | <i>Crystallography Reports</i> <b>46</b> (2001), 194          |
| Feruvite             | $\text{CaFe}^{2+}_3(\text{Al}_5\text{Mg})(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$                                | A  | 1987-057  | New Zealand         | <i>Canadian Mineralogist</i> <b>27</b> (1989), 199   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 285            |
| Fervanite            | $\text{Fe}^{3+}_4\text{V}^{5+}_4\text{O}_{16} \cdot 5\text{H}_2\text{O}$   | G  | 1933      | USA                 | <i>American Mineralogist</i> <b>16</b> (1931), 273   | <i>American Mineralogist</i> <b>75</b> (1990), 508            |
| Fetiasite            | $(\text{Fe}^{2+}, \text{Fe}^{3+}, \text{Ti}^{4+})_3\text{O}_2\text{As}^{3+}_2\text{O}_5$   | A  | 1991-019  | Italy / Switzerland | <i>American Mineralogist</i> <b>79</b> (1994), 996   |   |

|                 |  |    |           |                |   |   |
|-----------------|--|----|-----------|----------------|---|---|
| Fettelite       | [Ag <sub>6</sub> As <sub>2</sub> S <sub>7</sub> ][Ag <sub>10</sub> HgAs <sub>2</sub> S <sub>8</sub> ]  | A  | 1994-056  | Germany        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1996), 313   | <i>American Mineralogist</i> <b>96</b> (2011), 792                                      |
| Feynmanite      | Na(UO <sub>2</sub> )(SO <sub>4</sub> )(OH)·3.5H <sub>2</sub> O   | A  | 2017-035  | USA            | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 | <a href="https://doi.org/10.1180/mgm.2018.117">https://doi.org/10.1180/mgm.2018.117</a> |
| Fianelite       | Mn <sup>2+</sup> <sub>2</sub> V <sub>2</sub> O <sub>7</sub> ·2H <sub>2</sub> O   | A  | 1995-016  | Switzerland    | <i>American Mineralogist</i> <b>81</b> (1996), 1270   |   |
| Fibroferrite    | Fe <sup>3+</sup> (SO <sub>4</sub> )(OH)·5H <sub>2</sub> O  | G  | 1833      | Chile          | <i>Annalen der Physik und Chemie</i> <b>27</b> (1833), 309  | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 943                             |
| Fichtelite      | C <sub>19</sub> H <sub>34</sub>  | G  | 1841      | Germany        | <i>Justus Liebigs Annalen der Chemie</i> <b>37</b> (1841), 304  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 7  |
| Fiedlerite      | Pb <sub>3</sub> Cl <sub>4</sub> F(OH)·H <sub>2</sub> O   | Rd | 1994 s.p. | Greece         | <i>Sitzungsberichte der Niederrheinischen Gesellschaft für Natur- und Heilkunde zu Bonn</i> <b>102</b> (1887), 149                      | <i>Mineralogical Magazine</i> <b>58</b> (1994), 69                                      |
| Fiemmeite       | Cu <sub>2</sub> (C <sub>2</sub> O <sub>4</sub> )(OH) <sub>2</sub> ·2H <sub>2</sub> O   | A  | 2017-115  | Italy          | <i>Minerals</i> <b>8</b> (2018), 248  |   |
| Filatovite      | K(Al,Zn) <sub>2</sub> (As,Si) <sub>2</sub> O <sub>8</sub>  | A  | 2002-052  | Russia         | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 533   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 537                             |
| Filipstadite    | (Fe <sup>3+</sup> <sub>0.5</sub> Sb <sup>5+</sup> <sub>0.5</sub> )Mn <sup>2+</sup> <sub>2</sub> O <sub>4</sub>   | Rd | 1987-010  | Sweden         | <i>American Mineralogist</i> <b>73</b> (1988), 413  | <i>American Mineralogist</i> <b>98</b> (2013), 361                                      |
| Fillowite       | Na <sub>2</sub> CaMn <sup>2+</sup> <sub>7</sub> (PO <sub>4</sub> ) <sub>6</sub>  | G  | 1879      | USA            | <i>American Journal of Science and Arts</i> <b>17</b> (1879), 359   | <i>American Mineralogist</i> <b>66</b> (1981), 827                                      |
| Finchite        | Sr(UO <sub>2</sub> ) <sub>2</sub> (V <sub>2</sub> O <sub>8</sub> )·5H <sub>2</sub> O   | A  | 2017-052  | USA            | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |   |
| Fingerite       | Cu <sub>11</sub> O <sub>2</sub> (VO <sub>4</sub> ) <sub>6</sub>  | A  | 1983-064  | El Salvador    | <i>American Mineralogist</i> <b>70</b> (1985), 193  | <i>American Mineralogist</i> <b>70</b> (1985), 197                                      |
| Finnemanite     | Pb <sub>5</sub> (As <sup>3+</sup> O <sub>3</sub> ) <sub>3</sub> Cl   | G  | 1923      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>45</b> (1923), 160   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 95  |
| Fischesserite   | Ag <sub>3</sub> AuSe <sub>2</sub>  | A  | 1971-010  | Czech Republic | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 381                                     | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1733                                     |
| Fivegite        | K <sub>4</sub> Ca <sub>2</sub> [AlSi <sub>7</sub> O <sub>17</sub> (O <sub>2-x</sub> (OH) <sub>x</sub> )][(H <sub>2</sub> O) <sub>2-x</sub> (OH) <sub>x</sub> ]Cl (x = 0-2) | A  | 2009-067  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(4)</b> (2010), 47  |   |
| Fizélyite       | Ag <sub>5</sub> Pb <sub>14</sub> Sb <sub>21</sub> S <sub>48</sub>  | G  | 1923      | Romania        | <i>Mathematikai és Természet-tudományi Értesítő</i> <b>40</b> (1923), 18  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 1257                                     |
| Flagstaffite    | C <sub>10</sub> H <sub>22</sub> O <sub>3</sub>   | G  | 1920      | USA            | <i>American Mineralogist</i> <b>5</b> (1920), 169   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1965), 19                            |
| Flamite         | Ca <sub>8-x</sub> (Na,K) <sub>x</sub> (SiO <sub>4</sub> ) <sub>4-x</sub> (PO <sub>4</sub> ) <sub>x</sub>   | A  | 2013-122  | Israel         | <i>Mineralogical Magazine</i> <b>79</b> (2015), 583   | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 755                             |
| Fleischerite    | Pb <sub>3</sub> Ge(SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub> ·3H <sub>2</sub> O   | A  | 1962 s.p. | Namibia        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1960), 132   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>123</b> (1975), 160               |
| Fleisstalite    | Fe <sup>2+</sup> (SO <sub>3</sub> )·3H <sub>2</sub> O  | A  | 2016-038  | Austria        | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135  |   |
| Fletcherite     | CuNi <sub>2</sub> S <sub>4</sub>   | A  | 1976-044  | USA            | <i>Economic Geology</i> <b>72</b> (1977), 480   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 35                            |
| Flinkite        | Mn <sup>2+</sup> <sub>2</sub> Mn <sup>3+</sup> (AsO <sub>4</sub> )(OH) <sub>4</sub>  | G  | 1889      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>11</b> (1889), 212   | <i>Acta Crystallographica</i> <b>E57</b> (2001), i115                                   |
| Flinteite       | K <sub>2</sub> ZnCl <sub>4</sub>   | A  | 2014-009  | Russia         | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 581   |   |
| Florencite-(Ce) | CeAl <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>  | A  | 1987 s.p. | Brazil         | <i>Nature</i> <b>61</b> (1899), 119   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 227                           |

|                           |  |    |           |   |  |  |
|---------------------------|--|----|-----------|---|--|--|
| Florencite-(La)           | $\text{LaAl}_3(\text{PO}_4)_2(\text{OH})_6$  | A  | 1987 s.p. | Democratic Republic of the Congo        | <i>Canadian Mineralogist</i> <b>18</b> (1980), 301   |  |
| Florencite-(Nd)           | $\text{NdAl}_3(\text{PO}_4)_2(\text{OH})_6$  | A  | 1987 s.p. | USA                                     | <i>Mineralogical Record</i> <b>2</b> (1971), 166   |  |
| Florencite-(Sm)           | $\text{SmAl}_3(\text{PO}_4)_2(\text{OH})_6$  | A  | 2009-074  | Russia                                  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(4)</b> (2010), 16   |  |
| Florenskyite              | $\text{FeTiP}$   | A  | 1999-013  | Yemen (meteorite)                       | <i>American Mineralogist</i> <b>85</b> (2000), 1082  |  |
| Florensovite              | $\text{Cu}(\text{Cr}_{1.5}\text{Sb}_{0.5})\text{S}_4$  | A  | 1987-012  | Russia                                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(1)</b> (1990), 57  |  |
| Flörkeite                 | $(\text{K}_3\text{Ca}_2\text{Na})[\text{Al}_8\text{Si}_8\text{O}_{32}] \cdot 12\text{H}_2\text{O}$                                     | A  | 2008-036  | Germany                                 | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 901  |  |
| Fluckite                  | $\text{CaMn}^{2+}(\text{AsO}_3\text{OH})_2 \cdot 2\text{H}_2\text{O}$  | A  | 1978-054  | France                                  | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 122  | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 129                                  |
| Fuellite                  | $\text{Al}_2(\text{PO}_4)\text{F}_2(\text{OH}) \cdot 7\text{H}_2\text{O}$  | G  | 1824      | United Kingdom                          | <i>Annals of Philosophy</i> <b>8</b> (1824), 241   | <i>American Mineralogist</i> <b>51</b> (1966), 1579                                    |
| Fluoborite                | $\text{Mg}_3(\text{BO}_3)\text{F}_3$   | G  | 1926      | Sweden                                  | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>48</b> (1926), 84   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>21</b> (1974), 94 |
| Fluocerite-(Ce)           | $\text{CeF}_3$   | A  | 1987 s.p. | Sweden                                  | Treatise on Mineralogy. Hezekiah Howe, New Haven (1832), 302   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 94                                    |
| Fluocerite-(La)           | $\text{LaF}_3$   | A  | 1987 s.p. | Kazakhstan                              | <i>Trudy Mineralogicheskogo Muzeya Akademiyi Nauk SSSR</i> <b>19</b> (1969), 236   | <i>Acta Crystallographica</i> <b>B41</b> (1985), 91                                    |
| Fluorannite               | $\text{KFe}^{2+}_3(\text{Si}_3\text{Al})\text{O}_{10}\text{F}_2$   | A  | 1999-048  | China                                   | <i>Acta Petrologica et Mineralogica</i> <b>19</b> (2000), 355  |  |
| Fluorapatite              | $\text{Ca}_5(\text{PO}_4)_3\text{F}$   | Rn | 2010 s.p. | Austria / Germany / Spain / Switzerland | <i>Annalen der Physik und Chemie</i> <b>85</b> (1827), 185   |  |
| Fluorapophyllite-(K)      | $\text{KCa}_4\text{Si}_8\text{O}_{20}\text{F} \cdot 8\text{H}_2\text{O}$   | Rn | 1978 s.p. | India                                   | Tableau Méthodique des Espèces Minérales, Première Partie. Levraut, Paris (1806), 266  | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 845                             |
| Fluorapophyllite-(Na)     | $\text{NaCa}_4\text{Si}_8\text{O}_{20}\text{F} \cdot 8\text{H}_2\text{O}$  | Rn | 1976-032  | Japan                                   | <i>American Mineralogist</i> <b>66</b> (1981), 410   | <i>American Mineralogist</i> <b>66</b> (1981), 416                                     |
| Fluorarrojadite-(BaFe)    | $\text{Na}_2\text{CaBaFe}^{2+}\text{Fe}^{2+}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})\text{F}_2$                          | A  | 2005-058a | Morocco                                 | <i>American Mineralogist</i> <b>91</b> (2006), 1260  | <i>American Mineralogist</i> <b>91</b> (2006), 1249                                    |
| Fluorarrojadite-(BaNa)    | $\text{BaNa}_4\text{CaFe}_{13}\text{Al}(\text{PO}_4)_{11}(\text{PO}_3\text{OH})\text{F}_2$   | A  | 2016-075  | Slovakia                                | <i>Mineralogical Magazine</i> <b>82</b> (2018), 863  |  |
| Fluorbarytolamprophyllite | $(\text{Ba},\text{Sr})_2[(\text{Na},\text{Fe}^{2+})_3(\text{Ti},\text{Mg})\text{F}_2][\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2]$ | A  | 2016-089  | Russia                                  | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149 |  |
| Fluorbritholite-(Ce)      | $(\text{Ce},\text{Ca})_5(\text{SiO}_4)_3\text{F}$  | A  | 1991-027  | Canada                                  | <i>Journal of Wuhan University of Technology</i> <b>9(3)</b> (1994), 9   |  |
| Fluorbritholite-(Y)       | $(\text{Y},\text{Ca})_5(\text{SiO}_4)_3\text{F}$   | A  | 2009-005  | Norway                                  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>188</b> (2011), 191  |  |
| Fluor-buergerite          | $\text{NaFe}^{3+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3\text{O}_3\text{F}$   | Rd | 1965-005  | Mexico                                  | <i>American Mineralogist</i> <b>51</b> (1966), 198   | <i>Acta Crystallographica</i> <b>B25</b> (1969), 1524                                  |
| Fluorcalciobrihtholite    | $(\text{Ca},\text{REE})_5(\text{SiO}_4,\text{PO}_4)_3\text{F}$   | A  | 2006-010  | Russia                                  | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 95   |  |
| Fluorcalciomicrolite      | $(\text{Ca},\text{Na},\square)_2\text{Ta}_2\text{O}_6\text{F}$   | A  | 2012-036  | Brazil                                  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2989   |  |
| Fluorcalciopyrochlore     | $(\text{Ca},\text{Na})_2(\text{Nb},\text{Ti})_2\text{O}_6\text{F}$   | A  | 2013-055  | China                                   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1285  |  |
| Fluorcalcioroméite        | $(\text{Ca},\text{Na})_2\text{Sb}^{5+}_2\text{O}_6\text{F}$  | A  | 2012-093  | Switzerland                             | <i>Mineralogical Magazine</i> <b>77</b> (2013), 467  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1287                                   |

|                      |   |    |           |            |   |  |
|----------------------|---|----|-----------|------------|---|--|
| Fluorcanasite        | $K_3Na_3Ca_5Si_{12}O_{30}F_4 \cdot H_2O$                  | A  | 2007-031  | Russia     | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(2)</b> (2009), 52    |  |
| Fluorcaphite         | $SrCaCa_3(PO_4)_3F$                                       | A  | 1996-022  | Russia     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(3)</b> (1997), 87 | <i>Crystallography Reports</i> <b>41</b> (1996), 789           |
| Fluorcarmoite-(BaNa) | $Ba\Box Na_2Na_2\Box CaMg_{13}Al(PO_4)_{11}(PO_3OH)_2F_2$ | A  | 2015-062  | Italy      | CNMNC Newsletter 27 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1223            |  |
| Fluorchegemite       | $Ca_7(SiO_4)_3F_2$  | A  | 2011-112  | Russia     | <i>Canadian Mineralogist</i> <b>53</b> (2015), 325                                    |  |
| Fluor-dravite        | $NaMg_3Al_6(Si_6O_{18})(BO_3)_3(OH)_3F$                   | A  | 2009-089  | USA        | <i>Canadian Mineralogist</i> <b>49</b> (2011), 57                                     |  |
| Fluor-elbaite        | $Na(Li_{1.5}Al_{1.5})Al_6(Si_6O_{18})(BO_3)_3(OH)_3F$     | A  | 2011-071  | Brazil     | <i>American Mineralogist</i> <b>98</b> (2013), 297                                    |  |
| Fuorellestadite      | $Ca_5(SiO_4)_{1.5}(SO_4)_{1.5}F$                          | Rd | 1987-002  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 743     |  |
| Fluorite             | $CaF_2$   | G  | ?         | unknown    | original paper?   | <i>Physics and Chemistry of Minerals</i> <b>29</b> (2002), 465 |
| Fluorkyuygenite      | $Ca_{12}Al_{14}O_{32}[(H_2O)_4F_2]$                       | A  | 2013-043  | Israel     | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 123                           |  |
| Fluorlamprophyllite  | $(SrNa)Ti_2Na_3Ti(Si_2O_7)_2O_2F_2$                       | Rd | 2013-102  | Brazil     | <i>Mineralogical Magazine</i> <b>82</b> (2018), 121                                   |  |
| Fluor-liddicoatite   | $Ca(Li_2Al)Al_6(Si_6O_{18})(BO_3)_3(OH)_3F$               | Rd | 1976-041  | Madagascar | <i>American Mineralogist</i> <b>62</b> (1977), 1121                                   | <i>American Mineralogist</i> <b>96</b> (2011), 895             |
| Fluormayenite        | $Ca_{12}Al_{14}O_{32}[\Box_4F_2]$                         | A  | 2013-019  | Israel     | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 123                           |  |
| Fuornatrocoussellite | $(Na_{1.5}Ca_{0.5})(Mg_{1.5}Al_{0.5})F_6F$                | Rn | 2009-070  | Australia  | <i>Australian Journal of Mineralogy</i> <b>15</b> (2009), 21                          | <i>Canadian Mineralogist</i> <b>55</b> (2017), 115             |
| Fuornatromicrolite   | $(Na_{1.5}Bi_{0.5})Ta_2O_6F$                              | A  | 1998-018  | Brazil     | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1105                                   |  |
| Fuornatropyrochlore  | $(Na,Pb,Ca,REE,U)_2Nb_2O_6F$                              | A  | 2013-056  | China      | <i>Canadian Mineralogist</i> <b>53</b> (2015), 455                                    |  |
| Fluoro-cannilloite   | $CaCa_2(Mg_4Al)(Si_5Al_3)O_{22}F_2$                       | Rd | 2012 s.p. | Finland    | <i>American Mineralogist</i> <b>81</b> (1996), 995                                    |  |
| Fluorocronite        | $PbF_2$   | A  | 2010-023  | Russia     | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 695                           |  |
| Fluoro-edenite       | $NaCa_2Mg_5(Si_7Al)O_{22}F_2$                             | Rd | 2012 s.p. | Italy      | <i>American Mineralogist</i> <b>86</b> (2001), 1489                                   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 293            |
| Fluorokinoshitalite  | $BaMg_3Al_2Si_2O_{10}F_2$                                 | A  | 2010-001  | China      | <i>Clay Science</i> <b>15</b> (2011), 13  |  |
| Fluoro-leakeite      | $NaNa_2(Mg_2Al_2Li)Si_8O_{22}F_2$                         | Rd | 2012 s.p. | Sweden     | <i>Mineralogical Magazine</i> <b>73</b> (2009), 817                                   |  |
| Fluoro-nybøite       | $NaNa_2(Mg_3Al_2)(Si_7Al)O_{22}F_2$                       | Rd | 2012 s.p. | China      | <i>Mineralogical Magazine</i> <b>67</b> (2003), 769                                   |  |
| Fluoro-pargasite     | $NaCa_2(Mg_4Al)(Si_6Al_2)O_{22}F_2$                       | Rd | 2012 s.p. | USA        | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1423                                   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 293            |
| Fluoro-pedrizite     | $NaLi_2(Mg_2Al_2Li)Si_8O_{22}F_2$                         | Rd | 2012 s.p. | Russia     | <i>American Mineralogist</i> <b>90</b> (2005), 732                                    |  |
| Fluorophlogopite     | $KMg_3(Si_3Al)O_{10}F_2$                                  | A  | 2006-011  | Italy      | <i>American Mineralogist</i> <b>92</b> (2007), 1601                                   | <i>American Mineralogist</i> <b>98</b> (2013), 1017            |
| Fluoro-richterite    | $Na(NaCa)Mg_5Si_8O_{22}F_2$                               | Rd | 2012 s.p. | Russia     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(3)</b> (1993), 98 | <i>Canadian Mineralogist</i> <b>53</b> (2015), 285             |
| Fluoro-riebeckite    | $\Box Na_2(Fe^{2+}_3Fe^{3+}_2)Si_8O_{22}F_2$              | Rd | 2012 s.p. | USA        | <i>Canadian Mineralogist</i> <b>16</b> (1978), 187                                    |  |
| Fluoro-taramite      | $Na(NaCa)(Mg_3Al_2)(Si_6Al_2)O_{22}F_2$                   | Rd | 2012 s.p. | China      | <i>American Mineralogist</i> <b>92</b> (2007), 1428                                   |  |

|                            |  |    |           |                                  |  |  |
|----------------------------|--|----|-----------|----------------------------------|--|--|
| Fluorotetraferriphlogopite | $\text{KMg}_3\text{Fe}^{3+}\text{Si}_3\text{O}_{10}\text{F}_2$   | A  | 2010-002  | China                            | <i>Clay Science</i> <b>15</b> (2011), 13   |  |
| Fluoro-tremolite           | $\square\text{Ca}_2\text{Mg}_5\text{Si}_6\text{O}_{22}\text{F}_2$  | A  | 2016-018  | USA                              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 145  |  |
| Fluorowardite              | $\text{NaAl}_3(\text{PO}_4)_2(\text{OH})_2\text{F}_2 \cdot 2\text{H}_2\text{O}$                                      | A  | 2012-016  | USA                              | <i>American Mineralogist</i> <b>99</b> (2014), 804   |  |
| Fluorphosphohedyphane      | $\text{Ca}_2\text{Pb}_3(\text{PO}_4)_3\text{F}$  | Rn | 2008-068  | USA                              | <i>American Mineralogist</i> <b>96</b> (2011), 423   |  |
| Fluor-schorl               | $\text{NaFe}^{2+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{F}$                        | A  | 2010-067  | Germany / Italy                  | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 163                                      |  |
| Fluorstrophite             | $\text{SrCaSr}_3(\text{PO}_4)_3\text{F}$   | Rn | 2010 s.p. | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>142</b> (1962), 439   | <i>Soviet Physics - Crystallography</i> <b>32</b> (1987), 524                |
| Fluor-tsilaisite           | $\text{NaMn}^{2+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{F}$                        | A  | 2012-044  | Italy                            | <i>Mineralogical Magazine</i> <b>79</b> (2015), 89   |  |
| Fluor-uvite                | $\text{CaMg}_3(\text{Al}_5\text{Mg})(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{F}$                  | Rd | 2011 s.p. | Sri Lanka                        | <i>Chemie der Erde</i> <b>4</b> (1930), 208  | <i>Mineralogical Record</i> <b>8</b> (1977), 100                             |
| Fluorvesuvianite           | $\text{Ca}_{19}(\text{Al},\text{Mg})_{13}(\text{SiO}_4)_{10}(\text{Si}_2\text{O}_7)_4\text{O}(\text{F},\text{OH})_9$ | A  | 2000-037  | Russia                           | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1371  |  |
| Fluorwavellite             | $\text{Al}_3(\text{PO}_4)_2(\text{OH})_2\text{F} \cdot 5\text{H}_2\text{O}$  | A  | 2015-077  | USA                              | <i>American Mineralogist</i> <b>102</b> (2017), 909  |  |
| Flurlite                   | $\text{ZnZn}_3\text{Fe}^{3+}(\text{PO}_4)_3(\text{OH})_2(\text{H}_2\text{O})_7 \cdot 2\text{H}_2\text{O}$            | Rd | 2014-064  | Germany                          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1175   |  |
| Foggite                    | $\text{CaAl}(\text{PO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$   | A  | 1973-067  | USA                              | <i>American Mineralogist</i> <b>60</b> (1975), 957   | <i>American Mineralogist</i> <b>60</b> (1975), 965                           |
| Fogoite-(Y)                | $\text{Ca}_2\text{Y}_2\text{Na}_3\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{OF})\text{F}_2$                            | Rd | 2014-098  | Portugal                         | CNMNC Newsletter 24 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 247                        |  |
| Foitite                    | $\square(\text{Fe}^{2+}_2\text{Al})\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$     | A  | 1992-034  | USA                              | <i>American Mineralogist</i> <b>78</b> (1993), 1299  | <i>American Mineralogist</i> <b>96</b> (2011), 895                           |
| Folvikite                  | $\text{Sb}^{5+}\text{Mn}^{3+}(\text{Mg},\text{Mn}^{2+})_{10}\text{O}_8(\text{BO}_3)_4$                               | A  | 2016-026  | Sweden                           | <i>Mineralogical Magazine</i> <b>82</b> (2018), 821  |  |
| Fontanite                  | $\text{Ca}(\text{UO}_2)_3(\text{CO}_3)_2\text{O}_2 \cdot 6\text{H}_2\text{O}$  | A  | 1991-034  | France                           | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 1271                                      | <i>American Mineralogist</i> <b>88</b> (2003), 962                           |
| Fontarnauite               | $(\text{Na},\text{K})_2(\text{Sr},\text{Ca})(\text{SO}_4)[\text{B}_5\text{O}_8(\text{OH})](\text{H}_2\text{O})_2$    | A  | 2009-096a | Turkey                           | <i>Canadian Mineralogist</i> <b>53</b> (2015), 803   |  |
| Foordite                   | $\text{Sn}^{2+}\text{Nb}_2\text{O}_6$  | A  | 1984-070  | Rwanda                           | <i>Canadian Mineralogist</i> <b>26</b> (1988), 889   | <i>Canadian Mineralogist</i> <b>26</b> (1988), 899                           |
| Footemineite               | $\text{Ca}_2\text{Mn}^{2+}_5\text{Be}_4(\text{PO}_4)_6(\text{OH})_4 \cdot 6\text{H}_2\text{O}$                       | A  | 2006-029  | USA                              | <i>American Mineralogist</i> <b>93</b> (2008), 1   | <i>Doklady Akademii Nauk, Earth Science Section</i> <b>416</b> (2007), 1053  |
| Forêtite                   | $\text{Cu}_2\text{Al}_2(\text{AsO}_4)(\text{OH},\text{O},\text{H}_2\text{O})_6$                                      | A  | 2011-100  | France                           | <i>Mineralogical Magazine</i> <b>76</b> (2012), 769  |  |
| Formanite-(Y)              | $\text{YTao}_4$  | A  | 1987 s.p. | Australia                        | Dana's System of Mineralogy, 7th ed., Vol. 1. Wiley, New York (1944), 757                        | <i>Acta Crystallographica</i> <b>23</b> (1967), 939                          |
| Formicaite                 | $\text{Ca}(\text{CHOO})_2$   | A  | 1998-030  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(2)</b> (1998), 43            |  |
| Fornacite                  | $\text{CuPb}_2(\text{CrO}_4)(\text{AsO}_4)(\text{OH})$   | G  | 1915      | Republic of the Congo            | <i>Bulletin de la Société Française de Minéralogie</i> <b>38</b> (1915), 198                     | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 385               |
| Forsterite                 | $\text{Mg}_2(\text{SiO}_4)$  | G  | 1824      | Italy                            | <i>Annals of Philosophy</i> <b>7</b> (1824), 61  | <i>Zeitschrift für Kristallographie</i> <b>171</b> (1985), 291               |
| Foshagite                  | $\text{Ca}_4(\text{SiO}_3)_3(\text{OH})_2$   | G  | 1925      | USA                              | <i>American Mineralogist</i> <b>10</b> (1925), 97  | <i>Acta Crystallographica</i> <b>13</b> (1960), 785                          |
| Fougèrite                  | $\text{Fe}^{2+}_4\text{Fe}^{3+}_2(\text{OH})_{12}(\text{CO}_3) \cdot 3\text{H}_2\text{O}$                            | Rd | 2003-057  | France                           | <i>Clays and Clay Minerals</i> <b>55</b> (2007), 323   | <i>Clays and Clay Minerals</i> <b>59</b> (2011), 3                           |
| Fourmarierite              | $\text{Pb}_{1-x}\text{O}_{3-2x}(\text{UO}_2)_4(\text{OH})_{4+2x} \cdot 4\text{H}_2\text{O}$                          | G  | 1924      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>47</b> (1924), C41                        | <i>Canadian Mineralogist</i> <b>38</b> (2000), 737                           |
| Fowlerite                  | $(\text{Mn},\text{Zn})\text{SiO}_3$  | Q  | 1832      | USA                              | <i>American Journal of Science</i> <b>21</b> (1832), 321   | <i>American Mineralogist</i> <b>90</b> (2005), 969                           |
| Fraipontite                | $(\text{Zn},\text{Al})_3(\text{Si},\text{Al})_2\text{O}_5(\text{OH})_4$  | G  | 1927      | Belgium                          | <i>Annales de la Société Géologique de Belgique</i> <b>50</b> (1927), 106                        | <i>Bulletin de la Société Française de Minéralogie</i> <b>98</b> (1975), 235 |
| Francevillite              | $\text{Ba}(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 5\text{H}_2\text{O}$  | Rn | 2007 s.p. | Gabon                            | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>245</b> (1957), 89 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 552                |

|                    |  |   |           |                                  |   |   |
|--------------------|--|---|-----------|----------------------------------|---|---|
| Franciscanite      | $Mn^{2+}_6(V^{5+}\square)_2(SiO_4)_2O_3(OH)_3$                     | A | 1985-038  | USA                              | <i>American Mineralogist</i> <b>71</b> (1986), 1522   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 493                                       |
| Francisite         | $Cu_3Bi(Se^{4+}O_3)_2O_2Cl$  | A | 1989-028  | Australia                        | <i>American Mineralogist</i> <b>75</b> (1990), 1421   |   |
| Franckeite         | $Pb_{21.7}Sn_{9.3}Fe_{4.0}Sb_{8.1}S_{56.9}$                        | G | 1893      | Bolivia                          | <i>Neues Jahrbuch für Mineralogie</i> <b>2</b> (1893), 114  | <i>American Mineralogist</i> <b>96</b> (2011), 1686   |
| Francoanellite     | $K_3Al_5(PO_3OH)_6(PO_4)_2 \cdot 12H_2O$                           | A | 1974-051  | Italy                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1976), 49                                      | <i>Zeitschrift für Naturforschung</i> <b>B53</b> (1998), 711  |
| Françoisite-(Ce)   | $Ce(UO_2)_3O(OH)(PO_4)_2 \cdot 6H_2O$                              | A | 2004-029  | Switzerland / Australia          | <i>American Mineralogist</i> <b>95</b> (2010), 1527   |   |
| Françoisite-(Nd)   | $Nd(UO_2)_3O(OH)(PO_4)_2 \cdot 6H_2O$                              | A | 1987-041  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>111</b> (1988), 443   | <i>Mineralogical Magazine</i> <b>60</b> (1996), 665   |
| Franconite         | $NaNb_2O_5(OH) \cdot 3H_2O$  | A | 1981-006a | Canada                           | <i>Canadian Mineralogist</i> <b>22</b> (1984), 239  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 591   |
| Frankamenite       | $K_3Na_3Ca_5Si_{12}O_{30}(F,OH)_4 \cdot H_2O$                      | A | 1994-050  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(2)</b> (1996), 106            | <i>Mineralogical Magazine</i> <b>60</b> (1996), 897   |
| Frankdicksonite    | $BaF_2$  | A | 1974-015  | USA                              | <i>American Mineralogist</i> <b>59</b> (1974), 885  |   |
| Frankhawthorneite  | $Cu_2Te^{6+}O_4(OH)_2$   | A | 1993-047  | USA                              | <i>Canadian Mineralogist</i> <b>33</b> (1995), 641  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 649  |
| Franklinfurnaceite | $Ca_2Mn^{2+}_3Mn^{3+}Fe^{3+}Zn_2Si_2O_{10}(OH)_8$                  | A | 1986-034  | USA                              | <i>American Mineralogist</i> <b>72</b> (1987), 812  | <i>American Mineralogist</i> <b>73</b> (1988), 876  |
| Franklinite        | $ZnFe^{3+}_2O_4$   | G | 1819      | USA                              | <i>Annales des Mines</i> <b>4</b> (1819), 483   | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 511   |
| Franklinphilite    | $(K,Na)_4(Mn^{2+},Mg,Zn)_{48}(Si,Al)_{72}(O,OH)_{216} \cdot 6H_2O$ | A | 1990-050  | USA                              | <i>Mineralogical Record</i> <b>23</b> (1992), 465   |   |
| Fransoletite       | $Ca_3Be_2(PO_4)_2(PO_3OH)_2 \cdot 4H_2O$                           | A | 1982-096  | USA                              | <i>Bulletin de Minéralogie</i> <b>106</b> (1983), 499   | <i>American Mineralogist</i> <b>77</b> (1992), 848  |
| Franzinite         | $(Na,K)_{30}Ca_{10}(Si_{30}Al_{30})O_{120}(SO_4)_{10} \cdot 2H_2O$ | A | 1976-020  | Italy                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 163                                     | <i>Canadian Mineralogist</i> <b>38</b> (2000), 657  |
| Freboldite         | $CoSe$   | G | 1957      | Germany                          | <i>Mineralogische Tabellen</i> , 3rd ed. (1957), 98   |   |
| Fredrikssonite     | $Mg_2Mn^{3+}O_2(BO_3)$   | A | 1983-040  | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>105</b> (1983), 335                    | <i>Canadian Mineralogist</i> <b>32</b> (1994), 397  |
| Freedite           | $Cu^{1+}Pb_8(As^{3+}O_3)_2O_3Cl_5$                                 | A | 1984-012  | Sweden                           | <i>American Mineralogist</i> <b>70</b> (1985), 845  | <i>Mineralogy and Petrology</i> <b>36</b> (1987), 85  |
| Freibergite        | $Ag_8[Cu_4Fe_2]Sb_4S_{12}$   | G | 1853      | Germany                          | <i>Das Mohs'sche Mineralsystem</i> . Gerold, Wien (1853), 117                                     | <i>Mineralogicheskij Zhurnal</i> <b>15</b> (1993), 9  |
| Freieslebenite     | $AgPbSbS_3$  | G | 1845      | Germany                          | <i>Handbuch der Bestimmenden Mineralogie</i> . Braumüller and Seidel, Wien (1845), 563            | <i>Zeitschrift für Kristallographie</i> <b>139</b> (1974), 85                                       |
| Fresnoite          | $Ba_2TiO(Si_2O_7)$   | A | 1964-012  | USA                              | <i>American Mineralogist</i> <b>50</b> (1965), 314  | <i>Zeitschrift für Kristallographie</i> <b>130</b> (1969), 438                                      |
| Freudenbergite     | $Na(Ti^{4+}_3Fe^{3+})O_8$  | A | 1967 s.p. | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1961), 12                                      | <i>Acta Crystallographica</i> <b>B34</b> (1978), 255  |
| Friedelite         | $Mn^{2+}_8Si_6O_{15}(OH)_{10}$                                     | G | 1876      | France                           | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>82</b> (1876), 1167 | <i>Yamaguchi University, College of Arts Bulletin</i> <b>26</b> (1992), 51                          |
| Friedrichbeckeite  | $K(\square Na)Mg_2(Be_2Mg)Si_{12}O_{30}$                           | A | 2008-019  | Germany                          | <i>Mineralogy and Petrology</i> <b>96</b> (2009), 221   |   |
| Friedrichite       | $Cu_5Pb_5Bi_7S_{18}$   | A | 1977-031  | Austria                          | <i>Canadian Mineralogist</i> <b>16</b> (1978), 127  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 849  |
| Fritzscheite       | $Mn^{2+}(UO_2)_2(VO_4,PO_4)_2 \cdot 4H_2O$                         | G | 1865      | Czech Republic / Germany         | <i>Berg- und Hüttenmännische Zeitung</i> <b>2</b> (1865), 301                                     | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 320 |



|                 |  |    |           |             |  |   |
|-----------------|--|----|-----------|-------------|--|---|
| Frohbergite     | FeTe <sub>2</sub>  | G  | 1947      | Canada      | University of Toronto Studies,<br>Geological Series <b>51</b> (1947), 35   | Anzeiger der Osterreichischen<br>Akademie der Wissenschaften,<br>Mathematisch-Naturwissenschaftliche<br>Klasse <b>123</b> (1986), 123 |
| Frolovite       | Ca[B(OH) <sub>4</sub> ] <sub>2</sub>   | G  | 1957      | Russia      | Zapiski Vsesoyuznogo<br>Mineralogicheskogo Obshchestva <b>86</b><br>(1957), 622  | Doklady Akademii Nauk SSSR <b>202</b><br>(1972), 78   |
| Frondelite      | Mn <sup>2+</sup> Fe <sup>3+</sup> <sub>4</sub> (PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>5</sub>                                     | G  | 1949      | Brazil      | American Mineralogist <b>34</b> (1949), 541  | European Journal of Mineralogy <b>30</b><br>(2018), 773   |
| Froodite        | PdBi <sub>2</sub>  | G  | 1958      | Canada      | Canadian Mineralogist <b>6</b> (1958), 200   |   |
| Fuenzalidaite   | K <sub>3</sub> Na <sub>5</sub> Mg <sub>5</sub> (IO <sub>3</sub> ) <sub>6</sub> (SO <sub>4</sub> ) <sub>6</sub> ·6H <sub>2</sub> O    | A  | 1993-021  | Chile       | American Mineralogist <b>79</b> (1994), 1003   |   |
| Fuettererite    | Pb <sub>3</sub> Cu <sup>2+</sup> <sub>6</sub> Te <sup>6+</sup> O <sub>6</sub> (OH) <sub>7</sub> Cl <sub>5</sub>                      | A  | 2011-111  | USA         | American Mineralogist <b>98</b> (2013), 506  |   |
| Fukalite        | Ca <sub>4</sub> Si <sub>2</sub> O <sub>6</sub> (CO <sub>3</sub> )(OH) <sub>2</sub>   | A  | 1976-003  | Japan       | Mineralogical Journal <b>8</b> (1977), 374   | American Mineralogist <b>94</b> (2009), 323   |
| Fukuchilite     | Cu <sub>3</sub> FeS <sub>8</sub>   | A  | 1967-009  | Japan       | Mineralogical Journal <b>5</b> (1969), 399   | American Mineralogist <b>74</b> (1989), 1168  |
| Fülöppite       | Pb <sub>3</sub> Sb <sub>8</sub> S <sub>15</sub>  | G  | 1929      | Romania     | Mineralogical Magazine <b>22</b> (1929), 179   | Acta Crystallographica <b>B31</b> (1975), 151   |
| Fupingquite     | (Na,Mn <sup>2+</sup> ,□) <sub>2</sub> Mn <sup>2+</sup> <sub>2</sub> Fe <sup>3+</sup> (PO <sub>4</sub> ) <sub>3</sub>                 | A  | 2016-087  | Argentina   | CNMNC Newsletter 35 - Mineralogical<br>Magazine <b>81</b> (2017), 209; European<br>Journal of Mineralogy <b>29</b> (2017), 149 |   |
| Furongite       | Al <sub>4</sub> (UO <sub>2</sub> ) <sub>4</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>19.5</sub> | A  | 1982 s.p. | China       | Acta Geologica Sinica <b>50</b> (1976), 203  | European Journal of Mineralogy <b>29</b><br>(2017), 517   |
| Furutoseite     | (Cu,Ag) <sub>6</sub> PbS <sub>4</sub>  | A  | 1978-040  | Japan       | Bulletin de Minéralogie <b>104</b> (1981), 737   |   |
| Gabrielite      | Tl <sub>2</sub> AgCu <sub>2</sub> As <sub>3</sub> S <sub>7</sub>   | A  | 2002-053  | Switzerland | Canadian Mineralogist <b>44</b> (2006), 135  | Canadian Mineralogist <b>44</b> (2006), 141   |
| Gabrielsonite   | PbFe <sup>3+</sup> (AsO <sub>3</sub> )O  | Rd | 2017 s.p. | Sweden      | Arkiv för Mineralogi och Geologi <b>4</b><br>(1967), 401   | <a href="https://doi.org/10.1127/ejm/2018/0030-2794">https://doi.org/10.1127/ejm/2018/0030-2794</a>                                   |
| Gadolinite-(Ce) | Ce <sub>2</sub> Fe <sup>2+</sup> Be <sub>2</sub> O <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub>                                     | A  | 1987 s.p. | Norway      | American Mineralogist <b>63</b> (1978), 188  |   |
| Gadolinite-(Nd) | Nd <sub>2</sub> Fe <sup>2+</sup> Be <sub>2</sub> O <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub>                                     | A  | 2016-013  | Sweden      | Mineralogical Magazine <b>82</b> (2018), S133  |   |
| Gadolinite-(Y)  | Y <sub>2</sub> Fe <sup>2+</sup> Be <sub>2</sub> O <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub>                                      | Rn | 1987 s.p. | Sweden      | Beiträge zur Chemischen Kenntniss der<br>Mineralkörper, Vol. 3. Rottmann, Berlin<br>(1802), 52                                 | American Mineralogist <b>69</b> (1984), 948   |
| Gagarinite-(Ce) | NaCaCeF <sub>6</sub>   | Rd | 1993-038  | Canada      | Canadian Mineralogist <b>34</b> (1996), 1299   | Canadian Mineralogist <b>49</b> (2011), 1111  |
| Gagarinite-(Y)  | NaCaYF <sub>6</sub>  | A  | 1967 s.p. | Kazakhstan  | Doklady Akademii Nauk SSSR <b>141</b><br>(1961), 954   | Canadian Mineralogist <b>32</b> (1994), 563   |
| Gageite         | Mn <sup>2+</sup> <sub>21</sub> Si <sub>8</sub> O <sub>27</sub> (OH) <sub>20</sub>  | G  | 1910      | USA         | American Journal of Science <b>30</b> (1910),<br>283   | American Mineralogist <b>72</b> (1987), 382   |
| Gahnite         | ZnAl <sub>2</sub> O <sub>4</sub>   | G  | 1807      | Sweden      | Efemeriden der Berg- und Huttenkunde<br><b>3</b> (1807), 75  | Zeitschrift für Kristallographie <b>120</b><br>(1964), 476  |
| Gaidonnayite    | Na <sub>2</sub> ZrSi <sub>3</sub> O <sub>9</sub> ·2H <sub>2</sub> O  | A  | 1973-008  | Canada      | Canadian Mineralogist <b>12</b> (1974), 316  | Canadian Mineralogist <b>24</b> (1986), 417   |
| Gainesite       | Na <sub>2</sub> (Be,Li)Zr <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> ·1.5H <sub>2</sub> O  | A  | 1978-020  | USA         | American Mineralogist <b>68</b> (1983), 1022   | Canadian Mineralogist <b>32</b> (1994), 839   |
| Gaitite         | Ca <sub>2</sub> Zn(AsO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O  | A  | 1978-047  | Namibia     | Canadian Mineralogist <b>18</b> (1980), 197  | European Journal of Mineralogy <b>16</b><br>(2004), 353   |
| Gajardoite      | KCa <sub>0.5</sub> As <sup>3+</sup> <sub>4</sub> O <sub>6</sub> Cl <sub>2</sub> ·5H <sub>2</sub> O                                   | A  | 2015-040  | Chile       | Mineralogical Magazine <b>80</b> (2016), 1265  |   |
| Galaxite        | Mn <sup>2+</sup> Al <sub>2</sub> O <sub>4</sub>  | G  | 1932      | USA         | American Mineralogist <b>17</b> (1932), 1  | American Mineralogist <b>92</b> (2007), 1225  |
| Galeite         | Na <sub>15</sub> (SO <sub>4</sub> ) <sub>5</sub> ClF <sub>4</sub>  | A  | 1967 s.p. | USA         | Geological Society of America Bulletin<br><b>66</b> (1955), 1658   | Mineralogical Magazine <b>40</b> (1975), 357  |
| Galena          | PbS  | G  | ?         | unknown     | original paper?  | Acta Crystallographica <b>C43</b> (1987), 1443  |
| Galenobismutite | PbBi <sub>2</sub> S <sub>4</sub>   | G  | 1878      | Sweden      | Geologiska Föreningens i Stockholm<br>Förhandlingar <b>4</b> (1878), 109   | Physics and Chemistry of Minerals <b>34</b><br>(2007), 467  |

|                    |  |    |           |  |  |  |
|--------------------|--|----|-----------|--|--|--|
| Galgenbergite-(Ce) | $\text{CaCe}_2(\text{CO}_3)_4 \cdot \text{H}_2\text{O}$  | A  | 1997-036  | Austria                                    | <i>Mitteilungen der Österreichischen Mineralogischen Gesellschaft</i> <b>143</b> (1998), 200   | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 189         |
| Galileiite         | $\text{NaFe}^{2+}_4(\text{PO}_4)_3$  | A  | 1996-028  | USA (meteorite)                            | <i>Meteoritics &amp; Planetary Science</i> <b>32</b> (1997), A155  |  |
| Galkhaite          | $(\text{Hg}_5\text{Cu})\text{CsAs}_4\text{S}_{12}$   | A  | 1971-029  | Kyrgyzstan / Russia                        | <i>Doklady Akademii Nauk SSSR</i> <b>205</b> (1972), 1194  | <i>Canadian Mineralogist</i> <b>52</b> (2014), 873             |
| Galliskiite        | $\text{Ca}_4\text{Al}_2(\text{PO}_4)_2\text{F}_8 \cdot 5\text{H}_2\text{O}$  | A  | 2009-038  | Argentina                                  | <i>American Mineralogist</i> <b>95</b> (2010), 392   |  |
| Gallite            | $\text{CuGaS}_2$   | G  | 1958      | Democratic Republic of the Congo / Namibia | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1958), 241  |  |
| Gallobaudantite    | $\text{PbGa}_3(\text{AsO}_4)(\text{SO}_4)(\text{OH})_6$  | A  | 1994-021  | Namibia                                    | <i>Canadian Mineralogist</i> <b>34</b> (1996), 1305  |  |
| Galloplobogummit   | $\text{Pb}(\text{Ga,Al,Ge})_3(\text{PO}_4)_2(\text{OH})_6$   | A  | 2010-088  | Namibia                                    | <i>Journal of Mineralogy and Geochemistry</i> <b>191</b> (2014), 301   |  |
| Galuskinite        | $\text{Ca}_7(\text{SiO}_4)_3(\text{CO}_3)$   | A  | 2010-075  | Russia                                     | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2631   |  |
| Gamagarite         | $\text{Ba}_2\text{Fe}^{3+}(\text{VO}_4)_2(\text{OH})$  | G  | 1943      | South Africa                               | <i>American Mineralogist</i> <b>28</b> (1943), 329   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 295  |
| Gananite           | $\text{BiF}_3$   | A  | 1983-006  | China                                      | <i>Acta Petrologica Mineralogica et Analytica</i> <b>3</b> (1984), 119   |  |
| Ganomalite         | $\text{Pb}_9\text{Ca}_6(\text{Si}_2\text{O}_7)_4(\text{SiO}_4)\text{O}$  | G  | 1876      | Sweden                                     | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1876), 119   | <i>Zeitschrift für Kristallographie</i> <b>212</b> (1997), 208 |
| Ganophyllite       | $(\text{K,Na})_x\text{Mn}^{2+}_6(\text{Si,Al})_{10}\text{O}_{24}(\text{OH})_4 \cdot n\text{H}_2\text{O}$<br>( $x = 1-2$ ; $n = 7-11$ ) | G  | 1890      | Sweden                                     | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>12</b> (1890), 586  | <i>American Mineralogist</i> <b>88</b> (2003), 1324            |
| Ganterite          | $\text{Ba}_{0.5}(\text{Na,K})_{0.5}\text{Al}_2(\text{Si}_{2.5}\text{Al}_{1.5})\text{O}_{10}(\text{OH})_2$                              | A  | 2000-033  | Switzerland                                | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1271  |  |
| Gaotaiite          | $\text{Ir}_3\text{Te}_8$   | A  | 1993-017  | China                                      | <i>Acta Mineralogica Sinica</i> <b>15</b> (1995), 1  |  |
| Garavellite        | $\text{FeSbBiS}_4$   | A  | 1978-018  | Italy                                      | <i>Mineralogical Magazine</i> <b>43</b> (1979), 99   | <i>Mineralogy and Petrology</i> <b>85</b> (2005), 131          |
| Garmite            | $\text{CsLiMg}_2(\text{Si}_4\text{O}_{10})\text{F}_2$  | A  | 2017-008  | Tajikistan                                 | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529 |  |
| Garrelsite         | $\text{NaBa}_3\text{B}_7\text{Si}_2\text{O}_{16}(\text{OH})_4$   | G  | 1955      | USA  | <i>Geological Society of America Bulletin</i> <b>66</b> (1955), 1597   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 824           |
| Garronite-Ca       | $\text{Ca}_3(\text{Al}_6\text{Si}_{10}\text{O}_{32}) \cdot 14\text{H}_2\text{O}$   | Rn | 1997 s.p. | United Kingdom                             | <i>Mineralogical Magazine</i> <b>33</b> (1962), 173  | <i>American Mineralogist</i> <b>77</b> (1992), 189             |
| Garronite-Na       | $\text{Na}_6(\text{Al}_6\text{Si}_{10}\text{O}_{32}) \cdot 8.5\text{H}_2\text{O}$  | A  | 2015-015  | Canada                                     | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1549  |  |
| Gartrellite        | $\text{PbCuFe}^{3+}(\text{AsO}_4)_2(\text{OH}) \cdot \text{H}_2\text{O}$   | Rd | 1988-039  | Australia                                  | <i>Australian Mineralogist</i> <b>4</b> (1989), 83   | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179    |
| Garutiite          | (Ni,Fe,Ir)   | A  | 2008-055  | Dominican Republic                         | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 293  |  |
| Garyansellite      | $\text{Mg}_2\text{Fe}^{3+}(\text{PO}_4)_2(\text{OH}) \cdot 2\text{H}_2\text{O}$  | A  | 1981-019  | Canada                                     | <i>American Mineralogist</i> <b>69</b> (1984), 207   | <i>Doklady Earth Sciences</i> <b>467</b> (2016), 299           |
| Gasparite-(Ce)     | $\text{Ce}(\text{AsO}_4)$  | A  | 1986-031  | Italy                                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>67</b> (1987), 103  | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 111    |
| Gaspéite           | $\text{Ni}(\text{CO}_3)$   | Rn | 1965-029  | Canada                                     | <i>American Mineralogist</i> <b>51</b> (1966), 677   | <i>Acta Crystallographica</i> <b>C42</b> (1986), 4             |
| Gatedalite         | $\text{ZrMn}^{2+}_2\text{Mn}^{3+}_4\text{O}_8(\text{SiO}_4)$   | A  | 2013-091  | Sweden                                     | <i>Mineralogical Magazine</i> <b>79</b> (2015), 625  |  |
| Gatehouseite       | $\text{Mn}^{2+}_5(\text{PO}_4)_2(\text{OH})_4$   | A  | 1992-016  | Australia                                  | <i>Mineralogical Magazine</i> <b>57</b> (1993), 309  |  |
| Gatelite-(Ce)      | $(\text{Ca,Ce})_4(\text{Al,Mg,Fe})_4(\text{Si}_2\text{O}_7)(\text{SiO}_4)_3(\text{O,F,OH})_3$  | A  | 2001-050  | France                                     | <i>American Mineralogist</i> <b>88</b> (2003), 223   |  |
| Gatewayite         | $\text{Ca}_6(\text{As}^{3+}\text{V}^{4+}_3\text{V}^{5+}_9\text{As}^{5+}_6\text{O}_{51}) \cdot 31\text{H}_2\text{O}$                    | A  | 2014-096  | USA  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 145   |  |

|                    |   |    |           |                                  |   |  |
|--------------------|---|----|-----------|----------------------------------|---|--|
| Gatumbaite         | $\text{CaAl}_2(\text{PO}_4)_2(\text{OH})_2 \cdot \text{H}_2\text{O}$  | A  | 1976-019  | Rwanda                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 561                                       |  |
| Gaufroyite         | $\text{Ca}_4\text{Mn}^{3+}_3(\text{BO}_3)_3(\text{CO}_3)\text{O}_3$   | A  | 1964-006  | Morocco                          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>87</b> (1964), 216 | <i>Canadian Mineralogist</i> <b>46</b> (2008), 183                     |
| Gaultite           | $\text{Na}_4\text{Zn}_2\text{Si}_7\text{O}_{18} \cdot 5\text{H}_2\text{O}$  | A  | 1992-040  | Canada                           | <i>Canadian Mineralogist</i> <b>32</b> (1994), 855  |  |
| Gauthierite        | $\text{KPb}[(\text{UO}_2)_7\text{O}_5(\text{OH})_7] \cdot 8\text{H}_2\text{O}$  | A  | 2016-004  | Democratic Republic of the Congo | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 129   |  |
| Gayite             | $\text{NaMnFe}_5(\text{PO}_4)_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$   | A  | 2008-056  | Argentina                        | <i>American Mineralogist</i> <b>95</b> (2010), 386  |  |
| Gaylussite         | $\text{Na}_2\text{Ca}(\text{CO}_3)_2 \cdot 5\text{H}_2\text{O}$   | G  | 1826      | Venezuela                        | <i>Annales de Chimie et de Physique</i> <b>31</b> (1826), 270                                       | <i>Atti della Accademia Nazionale dei Lincei</i> <b>44</b> (1968), 680 |
| Gazeevite          | $\text{BaCa}_6(\text{SiO}_4)_2(\text{SO}_4)_2\text{O}$  | A  | 2015-037  | Georgia / Israel                 | <i>Mineralogical Magazine</i> <b>81</b> (2017), 499   |  |
| Gearsutite         | $\text{CaAlF}_4(\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1962 s.p. | Denmark (Greenland)              | A System of Mineralogy, 5th ed. Wiley, New York (1868), 130   | <i>American Mineralogist</i> <b>85</b> (2000), 231                     |
| Gebhardite         | $\text{Pb}_8\text{As}^{3+}_4\text{O}_{11}\text{Cl}_6$   | A  | 1979-071  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 445                                       | <i>Zeitschrift für Kristallographie</i> <b>159</b> (1982), 75          |
| Gedrite            | $\square\text{Mg}_2(\text{Mg}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | France                           | <i>Annales des Mines</i> <b>10</b> (1836), 582  |  |
| Geerite            | $\text{Cu}_8\text{S}_5$   | A  | 1978-024  | USA                              | <i>Canadian Mineralogist</i> <b>18</b> (1980), 519  | <i>Canadian Mineralogist</i> <b>23</b> (1985), 61                      |
| Geffroyite         | $(\text{Cu,Fe,Ag})_9\text{Se}_8$  | A  | 1980-090  | France                           | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>29</b> (1982), 151             |  |
| Gehlenite          | $\text{Ca}_2\text{Al}(\text{SiAl})\text{O}_7$   | G  | 1815      | Italy                            | <i>Journal of Chemical Physics</i> <b>15</b> (1815), 377  | <i>American Mineralogist</i> <b>92</b> (2007), 1685                    |
| Geigerite          | $\text{Mn}^{2+}_5(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 10\text{H}_2\text{O}$  | A  | 1985-028  | Switzerland                      | <i>American Mineralogist</i> <b>74</b> (1989), 676  |  |
| Geikielite         | $\text{MgTiO}_3$  | G  | 1893      | Sri Lanka                        | <i>Mineralogical Magazine</i> <b>10</b> (1893), 145   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1099                    |
| Gelosaite          | $\text{BiMo}^{6+}_{(2-5x)}\text{Mo}^{5+}_{6x}\text{O}_7(\text{OH}) \cdot \text{H}_2\text{O}$ ( $0 < x < 0.4$ )                              | A  | 2009-022  | Italy                            | <i>American Mineralogist</i> <b>96</b> (2011), 268  |  |
| Geminite           | $\text{Cu}^{2+}(\text{AsO}_3\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1988-045  | France                           | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>70</b> (1990), 309         | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1111                    |
| Gengenbachite      | $\text{KFe}_3(\text{H}_2\text{PO}_4)_2(\text{HPO}_4)_4 \cdot 6\text{H}_2\text{O}$   | A  | 2001-003b | Germany                          | <i>Aufschluss</i> <b>58</b> (2007), 125   | <i>Canadian Mineralogist</i> <b>51</b> (2013), 223                     |
| Genkinite          | $\text{Pt}_4\text{Sb}_3$  | A  | 1976-051  | South Africa                     | <i>Canadian Mineralogist</i> <b>15</b> (1977), 389  | <i>Canadian Mineralogist</i> <b>26</b> (1988), 979                     |
| Genplesite         | $\text{Ca}_3\text{Sn}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 2014-034  | Russia                           | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 375   |  |
| Genthelvite        | $\text{Be}_3\text{Zn}_4(\text{SiO}_4)_3\text{S}$  | G  | 1944      | USA                              | <i>American Mineralogist</i> <b>29</b> (1944), 163  | <i>American Mineralogist</i> <b>70</b> (1985), 186                     |
| Geocronite         | $\text{Pb}_{14}(\text{Sb,As})_6\text{S}_{23}$   | G  | 1841      | Sweden                           | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> (1841), 184                                | <i>American Mineralogist</i> <b>61</b> (1976), 963                     |
| Georgbarsanovite   | $\text{Na}_{12}(\text{Mn,Sr,REE})_3\text{Ca}_6\text{Fe}^{2+}_3\text{Zr}_3\text{NbSi}_{25}\text{O}_{76}\text{Cl}_2 \cdot \text{H}_2\text{O}$ | A  | 2003-013  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(6)</b> (2005), 47                  |  |
| Georgbokiite       | $\text{Cu}_5\text{O}_2(\text{Se}^{4+}\text{O}_3)_2\text{Cl}_2$  | A  | 1996-015  | Russia                           | <i>Doklady Akademii Nauk</i> <b>364</b> (1999), 527   | <i>Zeitschrift für Kristallographie</i> <b>214</b> (1999), 135         |
| Georgechaoite      | $\text{KNaZrSi}_3\text{O}_9 \cdot 2\text{H}_2\text{O}$  | A  | 1984-024  | USA                              | <i>Canadian Mineralogist</i> <b>23</b> (1985), 1  | <i>Canadian Mineralogist</i> <b>23</b> (1985), 5                       |
| George-ericksenite | $\text{Na}_6\text{CaMg}(\text{IO}_3)_6(\text{CrO}_4)_2 \cdot 12\text{H}_2\text{O}$  | Rn | 1996-049  | Chile                            | <i>American Mineralogist</i> <b>83</b> (1998), 390  |  |
| Georgeite          | $\text{Cu}_2(\text{CO}_3)(\text{OH})_2$   | Rd | 1977-004  | Australia                        | <i>Mineralogical Magazine</i> <b>43</b> (1979), 97  | <i>Mineralogical Magazine</i> <b>55</b> (1991), 163                    |
| Georgerobinsonite  | $\text{Pb}_4(\text{CrO}_4)_2(\text{OH})_2\text{FCl}$  | A  | 2009-068  | USA                              | <i>Canadian Mineralogist</i> <b>49</b> (2011), 865  |  |

|   |  |    |           |                |  |  |
|---|--|----|-----------|----------------|--|--|
| Georgiadesite                           | $Pb_4(As^{3+}O_3)Cl_4(OH)$                   | G  | 1907      | Greece         | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>145</b> (1907), 783   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 879            |
| Gerasimovskite                          | $Mn^{2+}(Ti,Nb)_5O_{12} \cdot 9H_2O$ (?)     | G  | 1957      | Russia         | <i>Akademiya Nauk SSSR, Trudy Institut Mineralogii, Geokhimii i Kristalloghimii Redkikh Elementov</i> <b>1</b> (1957), 41              |  |
| Gerdtrammelite                          | $ZnAl_2(AsO_4)(OH)_5$                        | A  | 1983-049a | Namibia        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 1  |  |
| Gerenite-(Y)                            | $(Ca,Na,\square)_2Y_3Si_6O_{18} \cdot 2H_2O$ | A  | 1993-034  | Canada         | <i>Canadian Mineralogist</i> <b>36</b> (1998), 793   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 801             |
| Gerhardtite                             | $Cu_2(NO_3)(OH)_3$                           | G  | 1885      | USA            | <i>American Journal of Science</i> <b>130</b> (1885), 50   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1447            |
| Germanite                               | $Cu_{13}Fe_2Ge_2S_{16}$                      | G  | 1922      | Namibia        | <i>Metall und Erz</i> <b>19</b> (1922), 324  | <i>American Mineralogist</i> <b>69</b> (1984), 943             |
| Germanocolusite                         | $Cu_{13}VGe_3S_{16}$                         | A  | 1991-044  | Russia         | <i>Vestnik Moskovskogo Universiteta, Ser. 4 Geologiya</i> <b>1992(6)</b> , 50  | <i>New Data on Minerals</i> <b>38</b> (2003), 41               |
| Gersdorffite- <i>P</i> 2 <sub>1</sub> 3 | NiAsS  | Rd | 1986 s.p. | Austria        | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Mineralogical Magazine</i> <b>36</b> (1967), 38             |
| Gersdorffite- <i>Pa</i> 3               | NiAsS  | Rd | 1986 s.p. | Austria        | <i>Canadian Mineralogist</i> <b>24</b> (1986), 27  | <i>American Mineralogist</i> <b>53</b> (1968), 290             |
| Gersdorffite- <i>Pca</i> 2 <sub>1</sub> | NiAsS  | Rd | 1986 s.p. | Austria        | <i>Canadian Mineralogist</i> <b>24</b> (1986), 27  | <i>American Mineralogist</i> <b>67</b> (1982), 1058            |
| Gerstleyite                             | $Na_2(Sb,As)_8S_{13} \cdot 2H_2O$            | G  | 1956      | USA            | <i>American Mineralogist</i> <b>41</b> (1956), 839   | <i>Chemistry Letters</i> <b>10</b> (1981), 1327                |
| Gerstmannite                            | $Mn^{2+}MgZn(SiO_4)(OH)_2$                   | A  | 1975-030  | USA            | <i>American Mineralogist</i> <b>62</b> (1977), 51  |  |
| Geschieberite                           | $K_2(UO_2)(SO_4)_2 \cdot 2H_2O$              | A  | 2014-006  | Czech Republic | <i>Mineralogical Magazine</i> <b>79</b> (2015), 205  |  |
| Getchellite                             | $SbAsS_3$                                    | A  | 1965-010  | USA            | <i>American Mineralogist</i> <b>50</b> (1965), 1817  | <i>American Mineralogist</i> <b>89</b> (2004), 696             |
| Geversite                               | $PtSb_2$                                     | A  | 1967 s.p. | South Africa   | <i>Mineralogical Magazine</i> <b>32</b> (1961), 833  |  |
| Ghiaraitite                             | $CaCl_2 \cdot 4H_2O$                         | A  | 2012-072  | Italy          | <i>American Mineralogist</i> <b>99</b> (2014), 519   |  |
| Gianellaite                             | $(Hg_2N)_2(SO_4)(H_2O)_x$                    | A  | 1972-020  | USA            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 119  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 869            |
| Gibbsite                                | $Al(OH)_3$                                   | A  | 1962 s.p. | USA            | <i>New-York Medical and Physical Journal</i> <b>1</b> (1822), 68   | <i>Zeitschrift für Kristallographie</i> <b>139</b> (1974), 129 |
| Giessenite                              | $(Cu,Fe)_2Pb_{26.4}(Bi,Sb)_{19.6}S_{57}$     | A  | 1963-004  | Switzerland    | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>43</b> (1963), 471  | <i>Canadian Mineralogist</i> <b>24</b> (1986), 21              |
| Giftgrubeite                            | $CaMn_2Ca_2(AsO_4)_2(AsO_3OH)_2 \cdot 4H_2O$ | A  | 2016-102  | France         | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |  |
| Gilalite                                | $Cu_5Si_6O_{17} \cdot 7H_2O$                 | A  | 1979-021  | USA            | <i>Mineralogical Magazine</i> <b>43</b> (1980), 639  |  |
| Gillardite                              | $Cu_3NiCl_2(OH)_6$                           | A  | 2006-041  | Australia      | <i>Australian Journal of Mineralogy</i> <b>13</b> (2007), 15   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 317             |
| Gillespite                              | $BaFe^{2+}Si_4O_{10}$                        | A  | 1922      | USA            | <i>Journal of the Washington Academy of Sciences</i> <b>12</b> (1922), 7   | <i>American Mineralogist</i> <b>59</b> (1974), 1166            |
| Gillulyite                              | $Tl_2As_{7.5}Sb_{0.3}S_{13}$                 | A  | 1989-029  | USA            | <i>American Mineralogist</i> <b>76</b> (1991), 653   | <i>American Mineralogist</i> <b>84</b> (1999), 400             |
| Gilmarite                               | $Cu^{2+}_3(AsO_4)(OH)_3$                     | A  | 1996-017  | France         | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 549  |  |
| Giniite                                 | $Fe^{2+}Fe^{3+}_4(PO_4)_4(OH)_2 \cdot 2H_2O$ | A  | 1977-017  | Namibia        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 49   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 561  |
| Ginorite                                | $Ca_2B_{14}O_{20}(OH)_6 \cdot 5H_2O$         | G  | 1934      | Italy          | <i>Periodico di Mineralogia</i> <b>5</b> (1934), 22  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 277    |
| Giorgiosite                             | $Mg_5(CO_3)_4(OH)_2 \cdot 5H_2O$             | Q  | 1905      | Greece         | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>140</b> (1905), 1308  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1975), 196  |

|                  |   |    |           |                        |   |   |
|------------------|---|----|-----------|------------------------|---|---|
| Giraudite        | $\text{Cu}_6[\text{Cu}_4(\text{Fe}, \text{Zn})_2]\text{As}_4\text{Se}_{13}$   | A  | 1980-089  | France                 | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>29</b> (1982), 151 | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1161               |
| Girvasite        | $\text{NaCa}_2\text{Mg}_3(\text{PO}_4)_2[\text{PO}_2(\text{OH})_2](\text{CO}_3)(\text{OH})_2 \cdot 4\text{H}_2\text{O}$                   | A  | 1988-046  | Russia                 | <i>Mineralogicheskii Zhurnal</i> <b>12(3)</b> (1990), 79                                | <i>Doklady Akademii Nauk SSSR</i> <b>311</b> (1990), 1372         |
| Gismondine       | $\text{Ca}_2(\text{Si}_4\text{Al}_4)\text{O}_{16} \cdot 8\text{H}_2\text{O}$  | A  | 1997 s.p. | Italy                  | <i>Taschenbuch für die gesammte Mineralogie</i> <b>11</b> (1817), 164                   | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 805             |
| Gittinsite       | $\text{CaZrSi}_2\text{O}_7$   | A  | 1979-034  | Canada                 | <i>Canadian Mineralogist</i> <b>18</b> (1980), 201                                      | <i>Canadian Mineralogist</i> <b>27</b> (1989), 703                |
| Giuseppettite    | $\text{Na}_{42}\text{K}_{16}\text{Ca}_6\text{Si}_{48}\text{Al}_{48}\text{O}_{192}(\text{SO}_4)_{10}\text{Cl}_2 \cdot 5\text{H}_2\text{O}$ | A  | 1979-064  | Italy                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 103                           | <i>Microporous and Mesoporous Materials</i> <b>73</b> (2004), 129 |
| Gjerdingenite-Ca | $\text{K}_2\text{Ca}(\text{Nb}, \text{Ti})_4(\text{Si}_4\text{O}_{12})_2(\text{O}, \text{OH})_4 \cdot 6\text{H}_2\text{O}$                | A  | 2005-029  | Russia                 | <i>Canadian Mineralogist</i> <b>45</b> (2007), 529                                      | <i>Doklady Chemistry</i> <b>414</b> (2007), 109                   |
| Gjerdingenite-Fe | $\text{K}_2\text{Fe}(\text{Nb}, \text{Ti})_4(\text{Si}_4\text{O}_{12})_2(\text{O}, \text{OH})_4 \cdot 6\text{H}_2\text{O}$                | A  | 2001-009  | Norway                 | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1629                                     |   |
| Gjerdingenite-Mn | $\text{K}_2\text{Mn}(\text{Nb}, \text{Ti})_4(\text{Si}_4\text{O}_{12})_2(\text{O}, \text{OH})_4 \cdot 6\text{H}_2\text{O}$                | A  | 2003-015  | Norway                 | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 979                             |   |
| Gjerdingenite-Na | $\text{K}_2\text{Na}(\text{Nb}, \text{Ti})_4(\text{Si}_4\text{O}_{12})_2(\text{OH}, \text{O})_4 \cdot 5\text{H}_2\text{O}$                | A  | 2005-030  | Canada                 | <i>Canadian Mineralogist</i> <b>45</b> (2007), 529                                      | <i>Doklady Chemistry</i> <b>414</b> (2007), 109                   |
| Gladite          | $\text{CuPbBi}_5\text{S}_9$   | G  | 1924      | Sweden                 | <i>Arkiv för Kemi, Mineralogi och Geologi</i> <b>9</b> (1924), 17                       | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1147               |
| Gladusite        | $\text{Fe}^{3+}_2\text{Fe}^{2+}_4(\text{PO}_4)(\text{OH})_{11} \cdot \text{H}_2\text{O}$  | A  | 1998-011  | Russia                 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 1477                                     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1121               |
| Glagolevite      | $\text{Na}(\text{Mg}, \text{Al})_6(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH}, \text{O})_8$   | A  | 2001-064  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(1)</b> (2003), 67   | <i>American Mineralogist</i> <b>89</b> (2004), 1138               |
| Glauberite       | $\text{Na}_2\text{Ca}(\text{SO}_4)_2$   | G  | 1808      | Spain                  | <i>Journal des Mines</i> <b>23</b> (1808), 5  | <i>Zeitschrift für Kristallographie</i> <b>122</b> (1965), 175    |
| Glaucocerinite   | $(\text{Zn}_{1-x}\text{Al}_x)(\text{SO}_4)_{x/2}(\text{OH})_{2-x} \cdot n\text{H}_2\text{O}$ ( $x < 0.5$ , $n > 3x/2$ )                   | G  | 1932      | Greece                 | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> <b>1</b> (1932), 13     | <i>Mineralogical Magazine</i> <b>49</b> (1985), 583               |
| Glaucochroite    | $\text{CaMn}^{2+}(\text{SiO}_4)$  | G  | 1899      | USA                    | <i>American Journal of Science</i> <b>8</b> (1899), 339                                 | <i>American Mineralogist</i> <b>63</b> (1978), 365                |
| Glaucodot        | $(\text{Co}_{0.5}\text{Fe}_{0.5})\text{AsS}$  | G  | 1849      | Chile                  | <i>Annalen der Physik und Chemie</i> <b>153</b> (1849), 127                             | <i>American Mineralogist</i> <b>93</b> (2008), 1183               |
| Glaucophane      | $\square\text{Na}_2(\text{Mg}_3\text{Al}_2)\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Greece                 | <i>Journal für Praktische Chemie</i> <b>34</b> (1845), 238                              | <i>American Mineralogist</i> <b>53</b> (1968), 1156               |
| Glaukosphaerite  | $\text{CuNi}(\text{CO}_3)(\text{OH})_2$   | A  | 1972-028  | Australia              | <i>Mineralogical Magazine</i> <b>39</b> (1974), 737                                     | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 787       |
| Glucine          | $\text{CaBe}_4(\text{PO}_4)_2(\text{OH})_4 \cdot 0.5\text{H}_2\text{O}$   | A  | 1967 s.p. | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 691        |   |
| Glushinskite     | $\text{Mg}(\text{C}_2\text{O}_4) \cdot 2\text{H}_2\text{O}$   | Rd | 1987 s.p. | Russia                 | <i>Izvestiya Akademii Nauk SSSR</i> (1960), 93  | <i>Mineralogical Magazine</i> <b>43</b> (1980), 837               |
| Gmelinite-Ca     | $\text{Ca}_2(\text{Si}_8\text{Al}_4)\text{O}_{24} \cdot 11\text{H}_2\text{O}$   | A  | 1997 s.p. | Italy                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1978), 310                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 145     |
| Gmelinite-K      | $\text{K}_4(\text{Si}_8\text{Al}_4)\text{O}_{24} \cdot 11\text{H}_2\text{O}$  | A  | 1999-039  | Russia / Italy         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 65   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 504     |
| Gmelinite-Na     | $\text{Na}_4(\text{Si}_8\text{Al}_4)\text{O}_{24} \cdot 11\text{H}_2\text{O}$   | Rn | 1997 s.p. | United Kingdom / Italy | <i>Edinburgh Journal of Sciences</i> <b>2</b> (1825), 262                               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 145     |
| Gobbinsite       | $\text{Na}_5(\text{Si}_{11}\text{Al}_5)\text{O}_{32} \cdot 11\text{H}_2\text{O}$  | A  | 1980-070  | United Kingdom         | <i>Mineralogical Magazine</i> <b>46</b> (1982), 365                                     | <i>American Mineralogist</i> <b>95</b> (2010), 481                |
| Godlevskite      | $(\text{Ni}, \text{Fe})_9\text{S}_8$  | A  | 1968-032  | Russia                 | <i>Geologiya Rudnykh Mestorozhdeniy</i> <b>11</b> (1969), 115                           | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 863       |

|                |  |    |           |              |   |  |
|----------------|--|----|-----------|--------------|---|--|
| Godovikovite   | $(\text{NH}_4)\text{Al}(\text{SO}_4)_2$  | A  | 1987-019  | Russia       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>117</b> (1988), 208   | <i>Annales De Chimie - Science Des Materiaux</i> <b>33</b> (2008), 379 |
| Goedkenite     | $\text{Sr}_2\text{Al}(\text{PO}_4)_2(\text{OH})$   | A  | 1974-004  | USA          | <i>American Mineralogist</i> <b>60</b> (1975), 957  |  |
| Goethite       | $\text{FeO}(\text{OH})$  | A  | 1980 s.p. | Germany      | Tabellen über das gesammte Mineralreich. Göpferdt, Jena (1806), 46  | <i>American Mineralogist</i> <b>84</b> (1999), 895                     |
| Gold           | Au   | G  | ?         | unknown      | original paper?   | <i>Journal of Materials Science</i> <b>23</b> (1988), 757              |
| Goldfieldite   | $\text{Cu}_{10}\text{Te}_4\text{S}_{13}$   | Rd | 1998 s.p. | USA          | <i>U.S. Geological Survey Professional Paper</i> <b>66</b> (1909), 165  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1115                    |
| Goldichite     | $\text{KFe}^{3+}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$   | G  | 1955      | USA          | <i>American Mineralogist</i> <b>40</b> (1955), 469  | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 135                 |
| Goldmanite     | $\text{Ca}_3\text{V}^{3+}_2(\text{SiO}_4)_3$   | A  | 1963-003  | USA          | <i>American Mineralogist</i> <b>49</b> (1964), 644  | <i>American Mineralogist</i> <b>56</b> (1971), 791                     |
| Goldquarryite  | $\text{CuCd}_2\text{Al}_3(\text{PO}_4)_4\text{F}_3 \cdot 10\text{H}_2\text{O}$   | A  | 2001-058  | USA          | <i>Mineralogical Record</i> <b>34</b> (2003), 237   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 753                     |
| Goldschmidtite | $\text{KNbO}_3$  | A  | 2018-034  | South Africa | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Golyshevite    | $\text{Na}_{10}\text{Ca}_9\text{Zr}_3\text{Fe}_2\text{SiNb}(\text{Si}_3\text{O}_9)_2(\text{Si}_9\text{O}_{27})_2(\text{OH})_3(\text{CO}_3) \cdot \text{H}_2\text{O}$ | A  | 2004-039  | Russia       | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(6)</b> (2005), 36  | <i>Crystallography Reports</i> <b>50</b> (2005), 539                   |
| Gonnardite     | $(\text{Na,Ca})_2(\text{Si,Al})_5\text{O}_{10} \cdot 3\text{H}_2\text{O}$  | Rd | 1997 s.p. | France       | <i>Bulletin de la Société Minéralogique de France</i> <b>19</b> (1896), 426   | <i>Materials Science Forum</i> <b>79-82</b> (1991), 845                |
| Gonyerite      | $\text{Mn}^{2+}_5\text{Fe}^{3+}(\text{Si}_3\text{Fe}^{3+}\text{O}_{10})(\text{OH})_8$  | G  | 1955      | Sweden       | <i>American Mineralogist</i> <b>40</b> (1955), 1090   |  |
| Goosecreekite  | $\text{Ca}(\text{Si}_6\text{Al}_2)\text{O}_{16} \cdot 5\text{H}_2\text{O}$   | A  | 1980-004  | USA          | <i>Canadian Mineralogist</i> <b>18</b> (1980), 323  | <i>American Mineralogist</i> <b>71</b> (1986), 1494                    |
| Gorbunovite    | $\text{CsLi}_2(\text{Ti,Fe})\text{Si}_4\text{O}_{10}(\text{F,OH,O})_2$   | A  | 2017-040  | Tajikistan   | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |  |
| Gorceixite     | $\text{BaAl}_3(\text{PO}_4)(\text{PO}_3\text{OH})(\text{OH})_6$  | G  | 1906      | Brazil       | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1906), 335   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 155                     |
| Gordaite       | $\text{NaZn}_4(\text{SO}_4)(\text{OH})_6\text{Cl} \cdot 6\text{H}_2\text{O}$   | A  | 1996-006  | Chile        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 155   | <i>Zeitschrift für Kristallographie</i> <b>212</b> (1997), 704         |
| Gordonite      | $\text{MgAl}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$  | G  | 1930      | USA          | <i>American Mineralogist</i> <b>15</b> (1930), 307  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 265          |
| Görgeyite      | $\text{K}_2\text{Ca}_5(\text{SO}_4)_6 \cdot \text{H}_2\text{O}$  | G  | 1953      | Austria      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1953), 35  | <i>American Mineralogist</i> <b>89</b> (2004), 266                     |
| Gormanite      | $\text{Fe}^{2+}_3\text{Al}_4(\text{PO}_4)_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | A  | 1977-030  | Canada       | <i>Canadian Mineralogist</i> <b>19</b> (1981), 381  | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 719            |
| Gortdrumite    | $\text{Cu}_{24}\text{Fe}_2\text{Hg}_9\text{S}_{23}$  | A  | 1979-039  | Ireland      | <i>Mineralogical Magazine</i> <b>47</b> (1983), 35  | <i>Mineralogical Magazine</i> <b>82</b> (2018), 853                    |
| Goryainovite   | $\text{Ca}_2(\text{PO}_4)\text{Cl}$  | A  | 2015-090  | Sweden       | CNMNC Newsletter 29 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 199   |  |
| Goslarite      | $\text{Zn}(\text{SO}_4) \cdot 7\text{H}_2\text{O}$   | G  | 1845      | Germany      | Handbuch der bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 490  |  |
| Gottardiite    | $\text{Na}_3\text{Mg}_3\text{Ca}_5\text{Al}_{19}\text{Si}_{117}\text{O}_{272} \cdot 93\text{H}_2\text{O}$  | A  | 1994-054  | Antarctica   | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 687  | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 69              |
| Gottlobite     | $\text{CaMg}(\text{VO}_4)(\text{OH})$  | A  | 1998-066  | Germany      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 444   |  |

|                    |   |    |           |                                  |   |   |
|--------------------|---|----|-----------|----------------------------------|---|---|
| Götzenite          | $\text{Ca}_4\text{NaCa}_2\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{OF})\text{F}_2$                       | Rd | 2016 s.p. | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>31</b> (1957), 503   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 957   |
| Goudeyite          | $\text{Cu}_6\text{Al}(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$                           | A  | 1978-015  | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 704  | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>61</b> (1981), 173           |
| Gowerite           | $\text{Ca}[\text{B}_5\text{O}_8(\text{OH})][\text{B}(\text{OH})_3] \cdot 3\text{H}_2\text{O}$           | A  | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>44</b> (1959), 911  | <i>American Mineralogist</i> <b>57</b> (1972), 381  |
| Goyazite           | $\text{SrAl}_3(\text{PO}_4)(\text{PO}_3\text{OH})(\text{OH})_6$   | Rd | 1999 s.p. | Brazil                           | <i>Bulletin de la Société Minéralogique de France</i> <b>7</b> (1884), 204  | <i>Mineralogical Journal</i> <b>13</b> (1987), 390  |
| Graemite           | $\text{Cu}^{2+}(\text{Te}^{4+}\text{O}_3) \cdot \text{H}_2\text{O}$                                     | A  | 1974-022  | USA                              | <i>Mineralogical Record</i> <b>6</b> (1975), 32   |   |
| Graeserite         | $\text{Fe}^{3+}_4\text{Ti}_3\text{As}^{3+}\text{O}_{13}(\text{OH})$                                     | A  | 1996-010  | Switzerland                      | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1083   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>78</b> (1998), 1             |
| Graftonite         | $\text{Fe}^{2+}\text{Fe}^{2+}_2(\text{PO}_4)_2$   | Rd | 1900      | USA                              | <i>American Journal of Science</i> <b>159</b> (1900), 20  | <i>American Mineralogist</i> <b>53</b> (1968), 742  |
| Graftonite-(Ca)    | $\text{CaFe}^{2+}_2(\text{PO}_4)_2$   | A  | 2017-048  | Poland                           | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/minmag.2017.081.109">https://doi.org/10.1180/minmag.2017.081.109</a> |
| Graftonite-(Mn)    | $\text{MnFe}^{2+}_2(\text{PO}_4)_2$   | A  | 2017-050  | Poland                           | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/minmag.2017.081.109">https://doi.org/10.1180/minmag.2017.081.109</a> |
| Gramaccioliite-(Y) | $(\text{Pb},\text{Sr})(\text{Y},\text{Mn})\text{Fe}^{3+}_2(\text{Ti},\text{Fe}^{3+})_{18}\text{O}_{38}$ | A  | 2001-034  | Italy                            | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 171   |   |
| Grandaite          | $\text{Sr}_2\text{Al}(\text{AsO}_4)_2(\text{OH})$   | A  | 2013-059  | Italy                            | <i>Mineralogical Magazine</i> <b>78</b> (2014), 757   |   |
| Grandierite        | $\text{MgAl}_3\text{O}_2(\text{BO}_3)(\text{SiO}_4)$  | G  | 1902      | Madagascar                       | <i>Bulletin de la Société Française de Minéralogie</i> <b>25</b> (1902), 85   | <i>American Mineralogist</i> <b>92</b> (2007), 863  |
| Grandreefite       | $\text{Pb}_2(\text{SO}_4)\text{F}_2$  | A  | 1988-016  | USA                              | <i>American Mineralogist</i> <b>74</b> (1989), 927  | <i>American Mineralogist</i> <b>76</b> (1991), 278  |
| Grandviewite       | $\text{Cu}_3\text{Al}_9(\text{SO}_4)_2(\text{OH})_{29}$   | A  | 2007-004  | USA                              | <i>Australian Journal of Mineralogy</i> <b>14</b> (2008), 51  |   |
| Grantsite          | $(\text{Na},\text{Ca})_{2+x}(\text{V}^{5+},\text{V}^{4+})_6\text{O}_{16} \cdot 4\text{H}_2\text{O}$     | A  | 1967 s.p. | USA                              | <i>American Mineralogist</i> <b>49</b> (1964), 1511   |   |
| Graphite           | C   | G  | 1789      | unknown                          | <i>Bergmannisches Journal</i> <b>1</b> (1789), 369  | <i>Australian Journal of Chemistry</i> <b>42</b> (1989), 479  |
| Grațianite         | $\text{MnBi}_2\text{S}_4$   | A  | 2013-076  | Romania                          | <i>American Mineralogist</i> <b>99</b> (2014), 1163   |   |
| Gratonite          | $\text{Pb}_9\text{As}_4\text{S}_{15}$   | G  | 1939      | Peru                             | <i>American Mineralogist</i> <b>24</b> (1939), 136  | <i>Zeitschrift für Kristallographie</i> <b>128</b> (1969), 321  |
| Grattarolaite      | $\text{Fe}^{3+}_3\text{O}_3(\text{PO}_4)$   | A  | 1995-037  | Italy                            | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 1101   | <i>Journal of Solid State Chemistry</i> <b>47</b> (1983), 245   |
| Graulichite-(Ce)   | $\text{CeFe}^{3+}_3(\text{AsO}_4)_2(\text{OH})_6$   | A  | 2002-001  | Belgium                          | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 733   |   |
| Gravegliaite       | $\text{Mn}^{2+}(\text{S}^{4+}\text{O}_3) \cdot 3\text{H}_2\text{O}$                                     | A  | 1990-020  | Italy                            | <i>Zeitschrift für Kristallographie</i> <b>197</b> (1991), 97   |   |
| Grayite            | $(\text{Th},\text{Pb},\text{Ca})(\text{PO}_4) \cdot \text{H}_2\text{O}$                                 | G  | 1957      | Zimbabwe                         | <i>Geological Survey of Great Britain</i> (1957), 67  |   |
| Grechishchevite    | $\text{Hg}_3\text{S}_2\text{BrCl}_{0.5}\text{I}_{0.5}$  | A  | 1988-027  | Russia                           | <i>Geologiya i Geofizika</i> <b>30</b> (1989), 61   |   |
| Greenalite         | $(\text{Fe}^{2+},\text{Fe}^{3+})_{2-3}\text{Si}_2\text{O}_5(\text{OH})_4$                               | G  | 1903      | USA                              | <i>U.S. Geological Survey Monograph</i> <b>43</b> (1903)  | <i>Canadian Mineralogist</i> <b>20</b> (1982), 1  |
| Greenlizardite     | $(\text{NH}_4)\text{Na}(\text{UO}_2)_2(\text{SO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$           | A  | 2017-001  | USA                              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 401   |   |
| Greenockite        | CdS   | G  | 1840      | United Kingdom                   | <i>The Edinburgh New Philosophical Journal</i> <b>28</b> (1840), 390  | <i>Physical Review B</i> <b>48</b> (1993), 4335   |



|                 |   |    |           |                              |  |   |
|-----------------|---|----|-----------|------------------------------|--|---|
| Greenwoodite    | $Ba_{2-x}(V^{3+}OH)_xV^{3+}_9(Fe^{3+},Fe^{2+})_2Si_2O_{22}$ | A  | 2010-007  | Canada                       | <i>Canadian Mineralogist</i> <b>50</b> (2012), 1233  |   |
| Gregoryite      | $Na_2(CO_3)$  | A  | 1981-045  | Tanzania                     | <i>Lithos</i> <b>13</b> (1980), 213  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>137(4)</b> (2008), 101 |
| Greifensteinite | $Ca_2Be_4Fe^{2+}_5(PO_4)_6(OH)_4 \cdot 6H_2O$               | A  | 2001-044  | Germany                      | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(4)</b> (2002), 47      | <i>Doklady Chemistry</i> <b>383</b> (2002), 78                                      |
| Greigite        | $Fe^{2+}Fe^{3+}_2S_4$                                       | A  | 1963-007  | USA                          | <i>American Mineralogist</i> <b>49</b> (1964), 543   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 857                                 |
| Grenmarite      | $Na_2Zr_2Na_2MnZr(Si_2O_7)_2O_2F_2$                         | Rd | 2003-024  | Norway                       | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 971                                |   |
| Griceite        | LiF   | A  | 1986-043  | Canada                       | <i>Canadian Mineralogist</i> <b>27</b> (1989), 125   |   |
| Grigorievite    | $Cu_3Fe^{3+}_2Al_2(VO_4)_6$                                 | A  | 2012-047  | Russia                       | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 667                                |   |
| Grimaldiite     | CrO(OH)   | A  | 1967-036  | Guyana                       | <i>U.S. Geological Survey Professional Paper</i> <b>887</b> (1976), 1                      | <i>Mineralogical Magazine</i> <b>48</b> (1984), 560                                 |
| Grimselite      | $K_3Na(UO_2)(CO_3)_3 \cdot H_2O$                            | A  | 1971-040  | Switzerland                  | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>52</b> (1972), 93 | <i>Mineralogical Magazine</i> <b>76</b> (2012), 443                                 |
| Griphite        | $Ca(Mn^{2+},Na,Li)_6Fe^{2+}Al_2(PO_4)_6(F,OH)_2$            | G  | 1891      | USA                          | <i>American Journal of Science</i> <b>141</b> (1891), 415                                  | <i>Bulletin de Minéralogie</i> <b>101</b> (1978), 543                               |
| Grischunite     | $NaCa_2Mn^{2+}_5Fe^{3+}(AsO_4)_6 \cdot 2H_2O$               | A  | 1981-028  | Switzerland                  | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>64</b> (1984), 1  | <i>American Mineralogist</i> <b>72</b> (1987), 1225                                 |
| Groatite        | $NaCaMn_2(PO_4)[PO_3(OH)]_2$                                | A  | 2008-054  | Canada                       | <i>Canadian Mineralogist</i> <b>47</b> (2009), 1225  |   |
| Grootfonteinite | $Pb_3O(CO_3)_2$   | A  | 2015-051  | Namibia                      | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 383                                |   |
| Grossite        | $CaAl_4O_7$   | A  | 1993-052  | Algeria (meteorite) / Israel | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 591                                 |   |
| Grossmanite     | $Ca(Ti^{3+},Mg,Ti^{4+})AlSiO_6$                             | A  | 2008-042a | Mexico (meteorite)           | <i>American Mineralogist</i> <b>94</b> (2009), 1491  |   |
| Grossular       | $Ca_3Al_2(SiO_4)_3$   | A  | 1962 s.p. | Russia                       | Handbuch der Mineralogie, Vol. 1. Craz & Gerlach (1811), 479                               | <i>American Mineralogist</i> <b>56</b> (1971), 791                                  |
| Groutite        | $Mn^{3+}O(OH)$  | G  | 1945      | USA                          | <i>American Mineralogist</i> <b>32</b> (1947), 654   | <i>Journal of Solid State Chemistry</i> <b>133</b> (1997), 486                      |
| Grumantite      | $NaSi_2O_4(OH) \cdot H_2O$                                  | A  | 1985-029  | Russia                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 244          | <i>Zeitschrift für Kristallographie</i> <b>185</b> (1988), 612                      |
| Grumiplucite    | $HgBi_2S_4$   | A  | 1997-021  | Italy                        | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1321  | <i>Acta Crystallographica</i> <b>B36</b> (1980), 1300                               |
| Grundmannite    | $CuBiSe_2$  | A  | 2015-038  | Bolivia                      | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 467                                |   |
| Grunerite       | $\square Fe^{2+}_2Fe^{2+}_5Si_8O_{22}(OH)_2$                | Rd | 2012 s.p. | France                       | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 62                                       | <i>Mineralogical Society of America Special Paper</i> <b>2</b> (1969), 95           |
| Gruzdevite      | $Cu_6Hg_3Sb_4S_{12}$  | A  | 1980-053  | Kyrgyzstan                   | <i>Doklady Akademii Nauk SSSR</i> <b>261</b> (1981), 971                                   |   |
| Guanacoite      | $Cu_2Mg_3(OH)_4(AsO_4)_2 \cdot 4H_2O$                       | A  | 2003-021  | Chile                        | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 813                                |   |
| Guanajuatite    | $Bi_2Se_3$  | G  | 1873      | Mexico                       | <i>La República</i> <b>6(40)</b> (1873), 3   | <i>Kristallografiya</i> <b>18</b> (1973), 173                                       |

|                |  |    |           |                                  |  |   |
|----------------|--|----|-----------|----------------------------------|--|---|
| Guanine        | $C_5H_3(NH_2)N_4O$   | A  | 1973-056  | Peru                             | <i>Mineralogical Magazine</i> <b>39</b> (1974), 889  | <i>Acta Crystallographica</i> <b>B27</b> (1971), 2358                     |
| Guarinoite     | $Zn_6(SO_4)(OH)_{10} \cdot 5H_2O$                                  | A  | 1991-005  | France                           | <i>Archives de Sciences de Genève</i> <b>46</b> (1993), 37   | <i>Journal of Solid State Chemistry</i> <b>182</b> (2009), 2350           |
| Gudmundite     | $FeSbS$  | G  | 1928      | Sweden                           | <i>Zeitschrift für Kristallographie</i> <b>68</b> (1928), 87   | <i>American Mineralogist</i> <b>24</b> (1939), 183                        |
| Guérinite      | $Ca_5(AsO_3OH)_2(AsO_4)_2 \cdot 9H_2O$                             | Rn | 2007 s.p. | Germany                          | <i>Materialy Vsesoyuznogo Nauchno-Issledovatel'skogo Geologicheskogo Instituta</i> <b>45</b> (1961), 113                                 | <i>Acta Crystallographica</i> <b>B30</b> (1974), 1789                     |
| Guettardite    | $Pb_8(Sb_{0.56}As_{0.44})_{16}S_{32}$                              | A  | 1966-018  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191  | <i>Canadian Mineralogist</i> <b>50</b> (2012), 253                        |
| Gugiaite       | $Ca_2BeSi_2O_7$  | A  | 1983-072  | China                            | <i>Scientia Sinica</i> <b>11</b> (1962), 977   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>143</b> (1982), 210 |
| Guidottiite    | $Mn_2Fe^{3+}(SiFe^{3+})O_5(OH)_4$                                  | A  | 2009-061  | South Africa                     | <i>Clays and Clay Minerals</i> <b>58</b> (2010), 364   |   |
| Guilidite      | $CuFe^{3+}(SO_4)_2(OH) \cdot 4H_2O$                                | G  | 1928      | USA                              | <i>American Mineralogist</i> <b>13</b> (1928), 203   | <i>American Mineralogist</i> <b>63</b> (1978), 478                        |
| Guilleminite   | $Ba(UO_2)_3(Se^{4+}O_3)_2O_2 \cdot 3H_2O$                          | A  | 1964-031  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>88</b> (1965), 132                                      | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1103                       |
| Guimarãesite   | $Ca_2Be_4Zn_5(PO_4)_6(OH)_4 \cdot 6H_2O$                           | A  | 2006-028  | Brazil                           | <i>New Data on Minerals</i> <b>42</b> (2007), 11   |   |
| Guite          | $Co^{2+}Co^{3+}_2O_4$  | A  | 2017-080  | Democratic Republic of the Congo | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |   |
| Gunningite     | $Zn(SO_4) \cdot H_2O$  | A  | 1962 s.p. | Canada                           | <i>Canadian Mineralogist</i> <b>7</b> (1962), 209  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 296             |
| Günterblässite | $(K,Ca,Ba,Na,\square)_3Fe[(Si,Al)_{13}O_{25}(OH,O)_4] \cdot 7H_2O$ | A  | 2011-032  | Germany                          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(1)</b> (2012), 71   | <i>Doklady Chemistry</i> <b>442</b> (2012), 57                            |
| Gunterite      | $Na_4(H_2O)_{16}(H_2V_{10}O_{28}) \cdot 6H_2O$                     | A  | 2011-001  | USA                              | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1243  |   |
| Gupeiite       | $Fe_3Si$   | A  | 1983-087  | China                            | <i>Acta Petrologica Mineralogica et Analytica</i> <b>3</b> (1984), 231   |   |
| Gurimite       | $Ba_3(VO_4)_2$   | A  | 2013-032  | Israel                           | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1009   |   |
| Gustavite      | $AgPbBi_3S_6$  | A  | 1967-048  | Denmark (Greenland)              | <i>Canadian Mineralogist</i> <b>10</b> (1970), 173   | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 537               |
| Gutkovaite-Mn  | $CaK_2Mn(Ti,Nb)_4(Si_4O_{12})_2(O,OH)_4 \cdot 5H_2O$               | A  | 2001-038  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(2)</b> (2002), 51  | <i>Crystallography Reports</i> <b>46</b> (2001), 415                      |
| Guyanaite      | $CrO(OH)$  | A  | 1967-034  | Guyana                           | <i>U.S. Geological Survey Professional Paper</i> <b>887</b> (1976), 1  | <i>Journal of Solid State Chemistry</i> <b>19</b> (1976), 299             |
| Gwihabaite     | $(NH_4)(NO_3)$   | A  | 1994-011  | Botswana                         | <i>Bulletin of the South African Speleological Association</i> <b>36</b> (1996), 19  |   |
| Gypsum         | $Ca(SO_4) \cdot 2H_2O$   | G  | ?         | unknown                          | original paper?  | <i>American Mineralogist</i> <b>93</b> (2008), 1530                       |
| Gyrolite       | $NaCa_{16}(Si_{23}Al)O_{60}(OH)_8 \cdot 14H_2O$                    | G  | 1851      | United Kingdom                   | <i>Philosophical Magazine and Journal of Science</i> <b>1</b> (1851), 111  | <i>Mineralogical Magazine</i> <b>52</b> (1988), 377                       |
| Gysinite-(Nd)  | $PbNd(CO_3)_2(OH) \cdot H_2O$                                      | A  | 1981-046  | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>70</b> (1985), 1314  | <i>Zeitschrift für Kristallographie</i> <b>171</b> (1985), 155            |
| Haapalaite     | $2[(Fe,Ni)S] \cdot 1.61[(Mg,Fe)(OH)_2]$                            | A  | 1972-021  | Finland                          | <i>Bulletin of the Geological Society of Finland</i> <b>45</b> (1973), 103   |   |
| Hafnon         | $Hf(SiO_4)$  | A  | 1974-018  | Mozambique                       | <i>Contributions to Mineralogy and Petrology</i> <b>48</b> (1974), 73  | <i>American Mineralogist</i> <b>67</b> (1982), 804                        |

|                  |  |    |           |                  |  |   |
|------------------|--|----|-----------|------------------|--|---|
| Hagendorfite     | $\text{NaCaMn}^{2+}\text{Fe}^{2+}_2(\text{PO}_4)_3$  | G  | 1954      | Germany          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1954), 252  | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 915                       |
| Haggertyite      | $\text{BaFe}^{2+}_4\text{Fe}^{3+}_2\text{Ti}_5\text{MgO}_{19}$   | A  | 1996-054  | USA              | <i>American Mineralogist</i> <b>83</b> (1998), 1323  |   |
| Häggite          | $\text{V}^{3+}\text{V}^{4+}\text{O}_2(\text{OH})_3$  | G  | 1958      | USA              | <i>American Mineralogist</i> <b>45</b> (1960), 1144  | <i>Journal of Mineralogy and Geochemistry</i> <b>192</b> (2015), 33               |
| Haidingerite     | $\text{Ca}(\text{AsO}_3\text{OH})\cdot\text{H}_2\text{O}$  | G  | 1827      | Czech Republic   | <i>Edinburgh Journal of Science</i> <b>6</b> (1827), 317   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 209                              |
| Haigerachite     | $\text{KFe}^{3+}_3(\text{H}_2\text{PO}_4)_6(\text{HPO}_4)_2\cdot 4\text{H}_2\text{O}$                          | A  | 1997-049  | Germany          | <i>Aufschluss</i> <b>50</b> (1999), 1  | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>623</b> (1997), 1708 |
| Haineaultite     | $(\text{Na,Ca})_5\text{Ca}(\text{Ti,Nb})_5\text{Si}_{12}\text{O}_{34}(\text{OH,F})_8\cdot 5\text{H}_2\text{O}$ | A  | 1997-015  | Canada           | <i>Canadian Mineralogist</i> <b>42</b> (2004), 769   |   |
| Hainite-(Y)      | $(\text{Ca}_3\text{Y})\text{Na}(\text{NaCa})\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{OF})\text{F}_2$           | Rd | 2016 s.p. | Czech Republic   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>13</b> (1893), 465  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1273                               |
| Haiweeite        | $\text{Ca}(\text{UO}_2)_2(\text{Si}_5\text{O}_{12})(\text{OH})_2\cdot 6\text{H}_2\text{O}$                     | A  | 1962 s.p. | USA              | <i>American Mineralogist</i> <b>44</b> (1959), 839   | <i>American Mineralogist</i> <b>98</b> (2013), 718                                |
| Hakite           | $\text{Cu}_6[\text{Cu}_4\text{Hg}_2]\text{Sb}_4\text{Se}_{13}$   | A  | 1970-019  | Czech Republic   | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 45                                       | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1115                              |
| Halamishite      | $\text{Ni}_5\text{P}_4$  | A  | 2013-105  | Israel           | CNMNC Newsletter 19 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 165  |   |
| Håleniusite-(La) | $\text{LaOF}$  | A  | 2003-028  | Sweden           | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1097  |   |
| Halite           | $\text{NaCl}$  | G  | 1847      | unknown          | Generum et Specierum Mineralium, Secundum Ordines Naturales Digestorum Synopsis. Anton, Halle (1847), 288                                | <i>Canadian Mineralogist</i> <b>28</b> (1990), 299                                |
| Hallimondite     | $\text{Pb}_2(\text{UO}_2)(\text{AsO}_4)_2\cdot n\text{H}_2\text{O}$  | A  | 1965-008  | Germany          | <i>American Mineralogist</i> <b>50</b> (1965), 1143  | <i>American Mineralogist</i> <b>90</b> (2005), 240                                |
| Halloysite-10Å   | $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4\cdot 2\text{H}_2\text{O}$                                       | G  | 1934      | Algeria / Poland | <i>Angewandte Chemie</i> <b>47</b> (1934), 539   | <i>American Mineralogist</i> <b>66</b> (1981), 997                                |
| Halloysite-7Å    | $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$  | G  | 1826      | Belgium          | <i>Annales de Chimie et de Physique</i> <b>32</b> (1826), 332  | <i>American Mineralogist</i> <b>40</b> (1955), 1110                               |
| Halotrichite     | $\text{Fe}^{2+}\text{Al}_2(\text{SO}_4)_4\cdot 22\text{H}_2\text{O}$   | G  | 1839      | unknown          | Grundriss der Mineralogie, mit Einschluss der Geognosie und Petrefactenkunde. Schrag, Nurnberg (1839), 691                               | <i>Acta Geologica Hungarica</i> <b>29</b> (1986), 389                             |
| Halurgite        | $\text{Mg}_2[\text{B}_4\text{O}_5(\text{OH})_4]_2\cdot \text{H}_2\text{O}$                                     | A  | 1967 s.p. | Kazakhstan       | <i>Doklady Akademii Nauk SSSR</i> <b>143</b> (1962), 693   | <i>Kristallografiya</i> <b>9</b> (1964), 735                                      |
| Hamburgite       | $\text{Be}_2(\text{BO}_3)(\text{OH})$  | G  | 1890      | Norway           | <i>Zeitschrift für Kristallographie</i> <b>16</b> (1890), 65   | <i>American Mineralogist</i> <b>97</b> (2012), 1891                               |
| Hammarite        | $\text{Cu}_2\text{Pb}_2\text{Bi}_4\text{S}_9$  | G  | 1924      | Sweden           | <i>Arkiv för Kemi, Mineralogi och Geologi</i> <b>9</b> (1924), 1   | <i>Canadian Mineralogist</i> <b>14</b> (1976), 536                                |
| Hanauerite       | $\text{AgHgSI}$  | A  | 2018-045  | Germany          | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Hanawaltite      | $\text{Hg}^{1+}_6\text{Hg}^{2+}\text{O}_3\text{Cl}_2$  | A  | 1994-036  | USA              | <i>Powder Diffraction</i> <b>11</b> (1996), 45   |   |
| Hancockite       | $\text{CaPb}(\text{Al}_2\text{Fe}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$               | Rn | 2006 s.p. | USA              | <i>American Journal of Science</i> <b>8</b> (1899), 339  | <i>American Mineralogist</i> <b>56</b> (1971), 447                                |
| Hanjiangite      | $\text{Ba}_2\text{Ca}(\text{V}^{3+}\text{Al})(\text{AlSi}_3\text{O}_{10})(\text{OH})_2\text{F}(\text{CO}_3)_2$ | A  | 2009-082  | China            | <i>American Mineralogist</i> <b>97</b> (2012), 281   |   |
| Hanksite         | $\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$   | G  | 1885      | USA              | <i>American Journal of Science</i> <b>130</b> (1885), 133  | <i>American Mineralogist</i> <b>58</b> (1973), 799                                |

|               |   |    |           |                                      |   |  |
|---------------|---|----|-----------|--------------------------------------|---|--|
| Hannayite     | $(\text{NH}_4)_2\text{Mg}_3(\text{PO}_3\text{OH})_4 \cdot 8\text{H}_2\text{O}$                              | G  | 1879      | Australia                            | <i>Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westfalens</i> <b>36</b> (1879), 4     | <i>Acta Crystallographica</i> <b>B32</b> (1976), 2842                          |
| Hannebachite  | $\text{Ca}(\text{SO}_3) \cdot 0.5\text{H}_2\text{O}$  | A  | 1983-056  | Germany                              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 241   | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>401</b> (1973), 1 |
| Hansblockite  | $(\text{Cu}, \text{Hg})(\text{Bi}, \text{Pb})\text{Se}_2$   | A  | 2015-103  | Bolivia                              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 629   |  |
| Hansesmarkite | $\text{Ca}_2\text{Mn}_2\text{Nb}_6\text{O}_{19} \cdot 20\text{H}_2\text{O}$                                 | A  | 2015-067  | Norway                               | <i>Mineralogical Magazine</i> <b>81</b> (2017), 543   |  |
| Hapkeite      | $\text{Fe}_2\text{Si}$  | A  | 2003-014  | Oman                                 | <i>Lunar and Planetary Science</i> <b>34</b> (2003), #1818  |  |
| Haradaite     | $\text{SrV}^{4+}\text{Si}_2\text{O}_7$  | A  | 1963-011  | Japan                                | <i>Mineralogical Journal</i> <b>5</b> (1967), 98  | <i>Proceedings of the Japan Academy, Ser. B</i> <b>58(2)</b> (1974), 21        |
| Hardystonite  | $\text{Ca}_2\text{ZnSi}_2\text{O}_7$  | G  | 1899      | USA                                  | <i>Proceedings of the American Academy of Arts and Sciences</i> <b>34</b> (1899), 479                                 | <i>Zeitschrift für Kristallographie</i> <b>130</b> (1969), 427                 |
| Harkerite     | $\text{Ca}_{12}\text{Mg}_4\text{Al}(\text{CO}_3)_5(\text{BO}_3)_3(\text{SiO}_4)_4 \cdot \text{H}_2\text{O}$ | G  | 1951      | United Kingdom                       | <i>Geological Magazine</i> <b>85</b> (1948), 213  | <i>American Mineralogist</i> <b>62</b> (1977), 263                             |
| Harmotome     | $\text{Ba}_2(\text{Si}_{12}\text{Al}_4)\text{O}_{32} \cdot 12\text{H}_2\text{O}$                            | A  | 1997 s.p. | Germany                              | Traité de Minéralogie, Vol. 3. Louis, Paris (1801), 191   | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 861                     |
| Harmunite     | $\text{CaFe}_2\text{O}_4$   | A  | 2012-045  | Israel                               | <i>American Mineralogist</i> <b>99</b> (2014), 965  |  |
| Harrisonite   | $\text{CaFe}^{2+}_6(\text{SiO}_4)_2(\text{PO}_4)_2$   | A  | 1991-010  | Canada                               | <i>Canadian Mineralogist</i> <b>31</b> (1993), 775  | <i>Canadian Mineralogist</i> <b>31</b> (1993), 781                             |
| Harstigite    | $\text{Ca}_6\text{Be}_4\text{Mn}^{2+}(\text{SiO}_4)_2(\text{Si}_2\text{O}_7)_2(\text{OH})_2$                | G  | 1886      | Sweden                               | <i>Bihang till Kongl. Svenska Vetenskaps-Akademiens Handlingar</i> <b>12</b> (1886), 59                               | <i>Zeitschrift für Kristallographie</i> <b>177</b> (1986), 143                 |
| Hartite       | $\text{C}_{20}\text{H}_{34}$  | G  | 1841      | Austria                              | <i>Annalen der Physik und Chemie</i> <b>54</b> (1841), 261  | <i>American Mineralogist</i> <b>83</b> (1998), 1340                            |
| Hashemite     | $\text{Ba}(\text{CrO}_4)$   | A  | 1978-006  | Jordan                               | <i>American Mineralogist</i> <b>68</b> (1983), 1223   | <i>Acta Crystallographica</i> <b>C43</b> (1987), 1467                          |
| Hastingsite   | $\text{NaCa}_2(\text{Fe}^{2+}_4\text{Fe}^{3+})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$           | Rd | 2012 s.p. | Canada                               | <i>American Journal of Science</i> <b>151</b> (1896), 210   | <i>American Mineralogist</i> <b>74</b> (1989), 1097                            |
| Hatchite      | $\text{AgTlPbAs}_2\text{S}_5$   | G  | 1912      | Switzerland                          | <i>Mineralogical Magazine</i> <b>16</b> (1912), 287   | <i>Zeitschrift für Kristallographie</i> <b>125</b> (1967), 249                 |
| Hatertite     | $\text{Na}_2(\text{Ca}, \text{Na})(\text{Fe}^{3+}, \text{Cu})_2(\text{AsO}_4)_3$                            | A  | 2012-048  | Russia                               | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 683   |  |
| Hatrurite     | $\text{Ca}_3\text{SiO}_5$   | G  | 1977      | Israel                               | <i>Geological Survey of Israel Bulletin</i> <b>70</b> (1977), 35  | <i>Powder Diffraction</i> <b>8</b> (1993), 138                                 |
| Hauchecornite | $\text{Ni}_9\text{BiSbS}_8$   | Rd | 1975-006a | Germany                              | <i>Jahrbuch der Königlich Preussischen Geologischen Landesanstalt und Bergakademie zu Berlin</i> <b>12</b> (1893), 91 | <i>Mineralogical Magazine</i> <b>43</b> (1980), 873                            |
| Hauckite      | $\text{Fe}^{3+}_3\text{Mg}_{24}\text{Zn}_{18}(\text{SO}_4)_4(\text{CO}_3)_2(\text{OH})_{81}$                | A  | 1979-012  | USA                                  | <i>American Mineralogist</i> <b>65</b> (1980), 192  |  |
| Hauerite      | $\text{MnS}_2$  | G  | 1846      | Slovakia                             | <i>Berichte über die Mittheilungen von Freunden der Naturwissenschaften in Wien</i> <b>7</b> (1846), 2                | <i>Zeitschrift für Kristallographie</i> <b>199</b> (1992), 13                  |
| Hausmannite   | $\text{Mn}^{2+}\text{Mn}^{3+}_2\text{O}_4$  | G  | 1828      | Germany                              | <i>Philosophical Magazine</i> <b>4</b> (1828), 96   | <i>Mineralogy and Petrology</i> <b>37</b> (1987), 15                           |
| Haüyne        | $\text{Na}_3\text{Ca}(\text{Si}_3\text{Al}_3)\text{O}_{12}(\text{SO}_4)$                                    | G  | 1807      | Italy                                | <i>Journal des Mines</i> <b>21</b> (1807), 365  | <i>Mineralogical Magazine</i> <b>68</b> (2004), 499                            |
| Hawleyite     | $\text{CdS}$  | G  | 1955      | Canada                               | <i>American Mineralogist</i> <b>40</b> (1955), 555  |  |
| Hawthorneite  | $\text{BaMgTi}_3\text{Cr}_4\text{Fe}^{2+}_2\text{Fe}^{3+}_2\text{O}_{19}$                                   | A  | 1988-019  | South Africa                         | <i>American Mineralogist</i> <b>74</b> (1989), 668  | <i>American Mineralogist</i> <b>72</b> (1987), 633                             |
| Haxonite      | $(\text{Fe}, \text{Ni})_{23}\text{C}_6$   | A  | 1971-001  | Mexico (meteorite) / USA (meteorite) | <i>Nature</i> <b>229</b> (1971), 61   |  |
| Haycockite    | $\text{Cu}_4\text{Fe}_5\text{S}_8$  | A  | 1971-028  | South Africa                         | <i>American Mineralogist</i> <b>57</b> (1972), 689  | <i>Acta Crystallographica</i> <b>B31</b> (1975), 2105                          |

|                  |  |    |           |                   |  |   |
|------------------|--|----|-----------|-------------------|--|---|
| Haydeeite        | $\text{Cu}_3\text{Mg}(\text{OH})_6\text{Cl}_2$   | A  | 2006-046  | Chile             | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>184</b> (2007), 39               | <i>Acta Crystallographica</i> <b>B63</b> (2007), 157          |
| Haynesite        | $(\text{UO}_2)_3(\text{Se}^{4+}\text{O}_3)_2(\text{OH})_2 \cdot 5\text{H}_2\text{O}$                             | A  | 1990-023  | USA               | <i>Canadian Mineralogist</i> <b>29</b> (1991), 561                                     |   |
| Hazenite         | $\text{KNaMg}_2(\text{PO}_4)_2 \cdot 14\text{H}_2\text{O}$   | A  | 2007-061  | USA               | <i>American Mineralogist</i> <b>96</b> (2011), 675                                     |   |
| Heazlewoodite    | $\text{Ni}_3\text{S}_2$  | G  | 1897      | Australia         | Report of the Secretary for Mines. William Grahame, Hobart (1897), 47                  | <i>American Mineralogist</i> <b>62</b> (1977), 341            |
| Hechtsbergite    | $\text{Bi}_2\text{O}(\text{VO}_4)(\text{OH})$  | A  | 1995-050  | Germany           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 271                          |   |
| Hectorfloresite  | $\text{Na}_9(\text{IO}_3)(\text{SO}_4)_4$  | A  | 1987-050a | Chile             | <i>American Mineralogist</i> <b>74</b> (1989), 1207                                    |   |
| Hectorite        | $\text{Na}_{0.3}(\text{Mg},\text{Li})_3\text{Si}_4\text{O}_{10}(\text{F},\text{OH})_2 \cdot n\text{H}_2\text{O}$ | Q  | 1941      | USA               | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>247</b> (1941), 65        | <i>Clays and Clay Minerals</i> <b>18</b> (1970), 139          |
| Hedegaardite     | $(\text{Ca},\text{Na})_9(\text{Ca},\text{Na})\text{Mg}(\text{PO}_4)_6(\text{PO}_3\text{OH})$                     | A  | 2014-069  | Chile             | CNMNC Newsletter 23 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 51               |   |
| Hedenbergite     | $\text{CaFe}^{2+}\text{Si}_2\text{O}_6$  | A  | 1988 s.p. | Sweden            | Nouveau Système de Minéralogie. Méquignon-Marvis, Paris (1819), 269                    | <i>American Mineralogist</i> <b>92</b> (2007), 1492           |
| Hedleyite        | $\text{Bi}_7\text{Te}_3$   | G  | 1945      | Canada            | <i>University of Toronto Studies, Geological Series</i> <b>49</b> (1945), 55           | <i>Canadian Mineralogist</i> <b>45</b> (2007), 665            |
| Hedyphane        | $\text{Ca}_2\text{Pb}_3(\text{AsO}_4)_3\text{Cl}$  | A  | 1980 s.p. | Sweden            | <i>Journal für Chemie und Physik</i> <b>60</b> (1830), 310                             | <i>American Mineralogist</i> <b>69</b> (1984), 920            |
| Heftetjernite    | $\text{ScTaO}_4$   | A  | 2006-056  | Norway            | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 309                            |   |
| Heideite         | $(\text{Fe},\text{Cr})_{1.15}(\text{Ti},\text{Fe})_2\text{S}_4$  | A  | 1973-062  | India (meteorite) | <i>American Mineralogist</i> <b>59</b> (1974), 465                                     |   |
| Heidornite       | $\text{Na}_2\text{Ca}_3\text{B}_5\text{O}_8(\text{SO}_4)_2(\text{OH})_2\text{Cl}$                                | G  | 1956      | Germany           | <i>Beiträge zur Mineralogie und Petrographie</i> <b>5</b> (1956), 177                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1967), 157 |
| Heinrichite      | $\text{Ba}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 10\text{H}_2\text{O}$  | G  | 1958      | USA / Germany     | <i>American Mineralogist</i> <b>43</b> (1958), 1134                                    | <i>Canadian Mineralogist</i> <b>43</b> (2005), 721            |
| Heisenbergite    | $(\text{UO}_2)(\text{OH})_2 \cdot \text{H}_2\text{O}$  | A  | 2010-076  | Germany           | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>189</b> (2012), 117              |   |
| Hejtmanite       | $\text{Ba}_2\text{Mn}^{2+}_4\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2\text{F}_2$               | Rd | 1989-038  | Zambia            | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 35                              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 841           |
| Heklaite         | $\text{KNaSiF}_6$  | A  | 2008-052  | Iceland           | <i>Mineralogical Magazine</i> <b>74</b> (2010), 147                                    |   |
| Heliophyllite    | $\text{Pb}_6\text{As}_2\text{O}_7\text{Cl}_4$  | Q  | 1888      | Sweden            | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>45</b> (1888), 574 | <i>Acta Mineralogica Sinica</i> <b>5</b> (1985), 216          |
| Hellandite-(Ce)  | $(\text{Ca},\text{REE})_4\text{Ce}_2\text{Al}\square_2(\text{B}_4\text{Si}_4\text{O}_{22})(\text{OH})_2$         | A  | 2001-019  | Italy             | <i>American Mineralogist</i> <b>87</b> (2002), 745                                     | <i>American Mineralogist</i> <b>84</b> (1999), 913            |
| Hellandite-(Y)   | $(\text{Ca},\text{REE})_4\text{Y}_2\text{Al}\square_2(\text{B}_4\text{Si}_4\text{O}_{22})(\text{OH})_2$          | A  | 2000 s.p. | Norway            | <i>Nyt Magazin for Naturvidenska-Berne Kristiania</i> <b>41</b> (1903), 213            | <i>American Mineralogist</i> <b>87</b> (2002), 745            |
| Hellyerite       | $\text{Ni}(\text{CO}_3) \cdot 6\text{H}_2\text{O}$   | A  | 1962 s.p. | Australia         | <i>American Mineralogist</i> <b>44</b> (1959), 533                                     |   |
| Helmutwinklerite | $\text{PbZn}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1979-010  | Namibia           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 118                          | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179   |
| Helvine          | $\text{Be}_3\text{Mn}^{2+}_4(\text{SiO}_4)_3\text{S}$  | G  | 1817      | Germany           | Letztes Mineral-System. Craz und Gerlach und Carl Gerold, Freiberg und Wien (1817), 29 | <i>American Mineralogist</i> <b>70</b> (1985), 186            |
| Hematite         | $\text{Fe}_2\text{O}_3$  | A  | 1971 s.p. | unknown           | original paper?  | <i>Acta Crystallographica</i> <b>B50</b> (1994), 435          |
| Hematolite       | $(\text{Mn},\text{Mg},\text{Al})_{15}(\text{AsO}_4)_2(\text{AsO}_3)(\text{OH})_{23}$                             | G  | 1884      | Sweden            | <i>Svenska Vetenskaps-Akademiens Stockholm, Öfv.</i> <b>41</b> (1884), 85              | <i>American Mineralogist</i> <b>63</b> (1978), 150            |
| Hematophanite    | $\text{Pb}_4\text{Fe}^{3+}_3\text{O}_8(\text{Cl},\text{OH})$   | G  | 1928      | Sweden            | <i>Zeitschrift für Kristallographie</i> <b>68</b> (1928), 87                           | <i>Mineralogical Magazine</i> <b>39</b> (1973), 49            |
| Hemihedrite      | $\text{ZnPb}_{10}(\text{CrO}_4)_6(\text{SiO}_4)_2(\text{OH})_2$  | A  | 1967-011  | USA               | <i>American Mineralogist</i> <b>55</b> (1970), 1088                                    | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1021          |

|                  |  |    |           |                |   |   |
|------------------|--|----|-----------|----------------|---|---|
| Hemimorphite     | $Zn_4(Si_2O_7)(OH)_2 \cdot H_2O$                                   | A  | 1962 s.p. | Romania        | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 67  | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 803                            |
| Hemleyite        | $FeSiO_3$  | A  | 2016-085  | China          | <i>Scientific Reports</i> <b>7</b> (2017), 42674  |   |
| Hemloite         | $(Ti, V^{3+}, Fe^{3+}, Al)_{12}As^{3+}_2O_{23}(OH)$                | A  | 1987-015  | Canada         | <i>Canadian Mineralogist</i> <b>27</b> (1989), 427  |   |
| Hemusite         | $Cu^{1+}_4Cu^{2+}_2SnMoS_8$  | A  | 1968-038  | Bulgaria       | <i>American Mineralogist</i> <b>56</b> (1971), 1847   | <i>Mineralogy and Petrology</i> <b>45</b> (1991), 11-17                               |
| Hendekasartorite | $Tl_2Pb_{48}As_{82}S_{172}$  | A  | 2015-075  | Switzerland    | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 701   |   |
| Hendersonite     | $Ca_{1.3}(V^{5+}, V^{4+})_6O_{16} \cdot 6H_2O$                     | A  | 1967 s.p. | USA            | <i>American Mineralogist</i> <b>47</b> (1962), 1252   |   |
| Hendricksite     | $KZn_3(Si_3Al)O_{10}(OH)_2$  | A  | 1965-027  | USA            | <i>American Mineralogist</i> <b>51</b> (1966), 1107   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>34</b> (1985), 1 |
| Heneuite         | $CaMg_5(PO_4)_3(CO_3)(OH)$   | A  | 1983-057  | Norway         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 343   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 351                         |
| Henmilite        | $Ca_2Cu[B(OH)_4]_2(OH)_4$  | A  | 1981-050  | Japan          | <i>American Mineralogist</i> <b>71</b> (1986), 1234   |   |
| Hennomartinite   | $SrMn^{3+}_2(Si_2O_7)(OH)_2 \cdot H_2O$                            | A  | 1992-033  | South Africa   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>73</b> (1993), 349             | <i>American Mineralogist</i> <b>81</b> (1996), 9                                      |
| Henritermierite  | $Ca_3Mn^{3+}_2(SiO_4)_2(OH)_4$                                     | Rn | 1968-029  | Morocco        | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>92</b> (1969), 185     | <i>American Mineralogist</i> <b>86</b> (2001), 147                                    |
| Henryite         | $Cu_4Ag_3Te_4$   | A  | 1982-094  | USA            | <i>Bulletin de Minéralogie</i> <b>106</b> (1983), 511   |   |
| Henrymeyerite    | $Ba(Ti_7Fe^{2+})O_{16}$  | A  | 1999-016  | Russia         | <i>Canadian Mineralogist</i> <b>38</b> (2000), 617  |   |
| Hentschelite     | $CuFe^{3+}_2(PO_4)_2(OH)_2$  | A  | 1985-057  | Germany        | <i>American Mineralogist</i> <b>72</b> (1987), 404  | <i>Acta Crystallographica</i> <b>C43</b> (1987), 1855                                 |
| Hephaistosite    | $TlPb_2Cl_5$   | A  | 2006-043  | Italy          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 701  | <i>Mineralogy and Petrology</i> <b>96</b> (2009), 121                                 |
| Heptasartorite   | $Tl_7Pb_{22}As_{55}S_{108}$  | A  | 2015-073  | Switzerland    | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 701   | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 149                           |
| Herbertsmithite  | $Cu_3Zn(OH)_6Cl_2$   | A  | 2003-041  | Chile          | <i>Mineralogical Magazine</i> <b>68</b> (2004), 527   | <i>Journal of the American Chemical Society</i> <b>132</b> (2010), 16185              |
| Hercynite        | $Fe^{2+}Al_2O_4$   | G  | 1839      | Czech Republic | Verhandlungen der Gesellschaft des Vaterländischen Museums in Böhmen. Gottlieb Haase, Prague (1839), 19 | <i>American Mineralogist</i> <b>94</b> (2009), 657                                    |
| Herderite        | $CaBe(PO_4)F$  | G  | 1828      | Germany        | <i>Philosophical Magazine</i> <b>4</b> (1828), 1  | <i>American Mineralogist</i> <b>93</b> (2008), 1545                                   |
| Hereroite        | $[Pb_{32}(O, \square)_{21}](AsO_4)_2[(Si, As, V, Mo)O_4]_2Cl_{10}$ | A  | 2011-027  | Namibia        | <i>Mineralogical Magazine</i> <b>76</b> (2012), 883   | <i>American Mineralogist</i> <b>98</b> (2013), 248                                    |
| Hermannjahnite   | $CuZn(SO_4)_2$   | A  | 2015-050  | Russia         | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 123  |   |
| Hermannroseite   | $CaCu(PO_4)(OH)$   | A  | 2010-006  | Namibia        | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>188</b> (2011), 135                               |   |
| Herzenbergite    | $SnS$  | G  | 1934      | Bolivia        | <i>Neues Jahrbuch für Mineralogie</i> <b>68A</b> (1934), 292  | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1903                                 |
| Hessite          | $Ag_2Te$   | G  | 1843      | Kazakhstan     | Grundzüge eines Systemes der Krystallogie. Literarisches Comptoir, Zurich Und Winterthur (1843)         | <i>Zeitschrift für Kristallographie</i> <b>112</b> (1959), 44                         |
| Hetaerolite      | $ZnMn^{3+}_2O_4$   | G  | 1877      | USA            | <i>American Journal of Science and Arts</i> <b>114</b> (1877), 423                                      | <i>Physical Review B</i> <b>60</b> (1999), 12651                                      |
| Heterogenite     | $Co^{3+}O(OH)$   | A  | 1967 s.p. | Germany        | <i>Journal für Praktische Chemie</i> <b>5</b> (1872), 401   | <i>Mineralogical Magazine</i> <b>39</b> (1973), 152                                   |

|                 |   |    |           |                    |  |  |
|-----------------|---|----|-----------|--------------------|--|--|
| Heteromorphite  | $\text{Pb}_7\text{Sb}_8\text{S}_{19}$   | G  | 1849      | Germany            | <i>Annalen der Physik und Chemie</i> <b>77</b> (1849), 240   | <i>Zeitschrift für Kristallographie</i> <b>151</b> (1980), 193 |
| Heterosite      | $\text{Fe}^{3+}(\text{PO}_4)$   | G  | 1826      | France             | <i>Annales des Sciences Naturelles</i> <b>8</b> (1826), 334  | <i>American Mineralogist</i> <b>57</b> (1972), 45              |
| Heulandite-Ba   | $(\text{Ba}, \text{Ca}, \text{K})_5(\text{Si}_{27}\text{Al}_9)\text{O}_{72} \cdot 22\text{H}_2\text{O}$                         | A  | 2003-001  | Norway             | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 143  |  |
| Heulandite-Ca   | $(\text{Ca}, \text{Na}, \text{K})_5(\text{Si}_{27}\text{Al}_9)\text{O}_{72} \cdot 26\text{H}_2\text{O}$                         | Rn | 1997 s.p. | United Kingdom     | <i>Edinburgh Philosophy Journal</i> <b>6</b> (1822), 112   | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 497    |
| Heulandite-K    | $(\text{K}, \text{Ca}, \text{Na})_5(\text{Si}_{27}\text{Al}_9)\text{O}_{72} \cdot 26\text{H}_2\text{O}$                         | A  | 1997 s.p. | Italy              | <i>Periodico di Mineralogia</i> <b>38</b> (1969), 237  | <i>American Mineralogist</i> <b>82</b> (1997), 517             |
| Heulandite-Na   | $(\text{Na}, \text{Ca}, \text{K})_6(\text{Si}, \text{Al})_{36}\text{O}_{72} \cdot 22\text{H}_2\text{O}$                         | A  | 1997 s.p. | USA                | <i>Proceedings of the U.S. National Museum</i> <b>64</b> (1924), 1                                 | <i>American Mineralogist</i> <b>57</b> (1972), 1463            |
| Heulandite-Sr   | $(\text{Sr}, \text{Ca}, \text{Na})_5(\text{Si}_{27}\text{Al}_9)\text{O}_{72} \cdot 24\text{H}_2\text{O}$                        | A  | 1997 s.p. | Italy              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 541                                      | <i>American Mineralogist</i> <b>88</b> (2003), 527             |
| Hewettite       | $\text{CaV}^{5+}_6\text{O}_{16} \cdot 9\text{H}_2\text{O}$  | G  | 1914      | Peru               | <i>Proceedings of the American Philosophical Society</i> <b>53</b> (1914), 31                      |  |
| Hexacelsian     | $\text{Ba}(\text{Al}_2\text{Si}_2\text{O}_8)$   | A  | 2015-045  | Israel             | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1009   |  |
| Hexaferrum      | $(\text{Fe}, \text{Os}, \text{Ru}, \text{Ir})$  | A  | 1995-032  | Russia             | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(5)</b> (1998), 41              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 531            |
| Hexahydrite     | $\text{Mg}(\text{SO}_4) \cdot 6\text{H}_2\text{O}$  | G  | 1911      | Canada             | <i>Geological Survey of Canada, Summary Report 1910</i> (1911), 256                                | <i>Acta Crystallographica</i> <b>17</b> (1964), 235            |
| Hexahydroborite | $\text{Ca}[\text{B}(\text{OH})_4]_2 \cdot 2\text{H}_2\text{O}$  | A  | 1977-015  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 691                  | <i>Doklady Akademii Nauk SSSR</i> <b>228</b> (1976), 1337      |
| Hexamolybdenum  | $(\text{Mo}, \text{Ru}, \text{Fe}, \text{Ir}, \text{Os})$   | A  | 2007-029  | Mexico (meteorite) | <i>American Mineralogist</i> <b>99</b> (2014), 654   |  |
| Heyerdahlite    | $\text{Na}_3\text{Mn}_7\text{Ti}_2(\text{Si}_4\text{O}_{12})_2\text{O}_2(\text{OH})_4\text{F}(\text{H}_2\text{O})_2$            | A  | 2016-108  | Norway             | <i>Mineralogical Magazine</i> <b>82</b> (2018), 243  |  |
| Heyite          | $\text{Pb}_5\text{Fe}^{2+}_2\text{O}_4(\text{VO}_4)_2$  | A  | 1971-042  | USA                | <i>Mineralogical Magazine</i> <b>39</b> (1973), 65   |  |
| Heyrovskýite    | $\text{Pb}_6\text{Bi}_2\text{S}_9$  | A  | 1970-022  | Czech Republic     | <i>Mineralium Deposita</i> <b>6</b> (1971), 133  | <i>American Mineralogist</i> <b>96</b> (2011), 1120            |
| Hezuolinite     | $(\text{Sr}, \text{REE})_4\text{Zr}(\text{Ti}, \text{Fe}^{3+}, \text{Fe}^{2+})_2\text{Ti}_2\text{O}_8(\text{Si}_2\text{O}_7)_2$ | A  | 2010-045  | China              | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 189  |  |
| Hiärneite       | $(\text{Ca}, \text{Mn}^{2+}, \text{Na})_2(\text{Zr}, \text{Mn}^{3+})_5(\text{Sb}, \text{Ti}, \text{Fe})_2\text{O}_{16}$         | A  | 1996-040  | Sweden             | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 843   |  |
| Hibbingite      | $\text{Fe}^{2+}_2(\text{OH})_3\text{Cl}$  | A  | 1991-036  | USA                | <i>American Mineralogist</i> <b>79</b> (1994), 555   |  |
| Hibonite        | $(\text{Ca}, \text{Ce})(\text{Al}, \text{Ti}, \text{Mg})_{12}\text{O}_{19}$   | G  | 1956      | Madagascar         | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>242</b> (1956), 2845 | <i>Mineralogical Magazine</i> <b>74</b> (2010), 871            |
| Hibonite-(Fe)   | $(\text{Fe}, \text{Mg})\text{Al}_{12}\text{O}_{19}$   | A  | 2009-027  | Mexico (meteorite) | <i>American Mineralogist</i> <b>95</b> (2010), 188   |  |
| Hidalgoite      | $\text{PbAl}_3(\text{SO}_4)(\text{AsO}_4)(\text{OH})_6$   | Rd | 1987 s.p. | Mexico             | <i>American Mineralogist</i> <b>38</b> (1953), 1218  |  |
| Hielscherite    | $\text{Ca}_6\text{Si}_2[(\text{SO}_4)_2(\text{SO}_3)_2(\text{OH})_{12}] \cdot 22\text{H}_2\text{O}$                             | A  | 2011-037  | Germany            | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1133   |  |
| Hieratite       | $\text{K}_2\text{SiF}_6$  | G  | 1882      | Italy              | <i>Transunti dell'Accademia dei Lincei, Serie III</i> <b>6</b> (1882), 141                         | <i>American Mineralogist</i> <b>57</b> (1972), 287             |
| Hilairite       | $\text{Na}_2\text{ZrSi}_3\text{O}_9 \cdot 3\text{H}_2\text{O}$  | A  | 1972-019  | Canada             | <i>Canadian Mineralogist</i> <b>12</b> (1974), 237   | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 495    |
| Hilarionite     | $\text{Fe}^{3+}_2(\text{SO}_4)(\text{AsO}_4)(\text{OH}) \cdot 6\text{H}_2\text{O}$  | A  | 2011-089  | Greece             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>142(5)</b> (2013), 30                 |  |
| Hilgardite      | $\text{Ca}_2\text{B}_5\text{O}_9\text{Cl} \cdot \text{H}_2\text{O}$   | G  | 1937      | United Kingdom     | <i>American Mineralogist</i> <b>22</b> (1937), 1052  | <i>Acta Crystallographica</i> <b>C50</b> (1994), 653           |



|                 |   |    |           |                  |  |  |
|-----------------|---|----|-----------|------------------|--|--|
| Hillebrandite   | $\text{Ca}_2\text{SiO}_3(\text{OH})_2$  | G  | 1908      | Mexico           | <i>American Journal of Science</i> <b>176</b> (1908), 545  | <i>American Mineralogist</i> <b>80</b> (1995), 841             |
| Hillesheimite   | $(\text{K}, \text{Ca}, \text{Ba}, \square)_2(\text{Mg}, \text{Fe}, \text{Ca}, \square)_2[(\text{Si}, \text{Al})_{13}\text{O}_{23}(\text{OH})_6](\text{OH}) \cdot 8\text{H}_2\text{O}$ | A  | 2011-080  | Germany          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(3)</b> (2012), 29   |  |
| Hillite         | $\text{Ca}_2\text{Zn}(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$   | A  | 2003-005  | Australia        | <i>Canadian Mineralogist</i> <b>41</b> (2003), 981   |  |
| Hingganite-(Ce) | $\text{BeCe}(\text{SiO}_4)(\text{OH})$  | A  | 2004-004  | Japan            | <i>Journal of Mineralogical and Petrological Sciences</i> <b>102</b> (2007), 1   |  |
| Hingganite-(Y)  | $\text{BeY}(\text{SiO}_4)(\text{OH})$   | Rn | 1981-052  | China            | <i>Yanshi Kuangwu Ji Ceshi</i> <b>3</b> (1984), 46   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1105            |
| Hingganite-(Yb) | $\text{BeYb}(\text{SiO}_4)(\text{OH})$  | A  | 1982-041  | Russia           | <i>Doklady Akademii Nauk SSSR</i> <b>270</b> (1983), 1188  | <i>Kristallografiya</i> <b>28</b> (1983), 457                  |
| Hinsdalite      | $\text{PbAl}_3(\text{SO}_4)(\text{PO}_4)(\text{OH})_6$  | Rd | 1987 s.p. | USA              | <i>Journal of the Washington Academy of Sciences</i> <b>1</b> (1911), 25   | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 513    |
| Hiortdahlite    | $(\text{Na}, \text{Ca})_2\text{Ca}_4\text{Zr}(\text{Mn}, \text{Ti}, \text{Fe})(\text{Si}_2\text{O}_7)_2(\text{F}, \text{O})_4$  | A  | 1987 s.p. | Norway           | <i>Nyt Magazin for Naturvidenskaberne</i> <b>31</b> (1888), 232  | <i>Mineralogy and Petrology</i> <b>37</b> (1987), 25           |
| Hisingerite     | $\text{Fe}_2\text{Si}_2\text{O}_5(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | G  | 1819      | Sweden           | Nouveau Système de Minéralogie. Méquignon-Marvis, Paris (1819), 210  | <i>Clays and Clay Minerals</i> <b>46</b> (1998), 400           |
| Hitachiite      | $\text{Pb}_5\text{Bi}_2\text{Te}_2\text{S}_6$   | A  | 2018-027  | Japan            | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879  |  |
| Hizenite-(Y)    | $\text{Ca}_2\text{Y}_6(\text{CO}_3)_{11} \cdot 14\text{H}_2\text{O}$  | A  | 2011-030  | Japan            | <i>Journal of Mineralogical and Petrological Sciences</i> <b>108</b> (2013), 161   |  |
| Hjalmarite      | $\text{Na}(\text{NaMn})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$  | A  | 2017-070  | Sweden           | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |  |
| Hloušekite      | $(\text{Ni}, \text{Co})\text{Cu}_4(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 9\text{H}_2\text{O}$  | A  | 2013-048  | Czech Republic   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1341   |  |
| Hocartite       | $\text{Ag}_2\text{FeSnS}_4$   | A  | 1967-046  | Bolivia / France | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>91</b> (1968), 383                                      |  |
| Hochelagaite    | $\text{CaNb}_4\text{O}_{11} \cdot 8\text{H}_2\text{O}$  | A  | 1983-088  | Canada           | <i>Canadian Mineralogist</i> <b>24</b> (1986), 449   |  |
| Hodgesmithite   | $(\text{Cu}, \text{Zn})_6\text{Zn}(\text{SO}_4)_2(\text{OH})_{10} \cdot 3\text{H}_2\text{O}$  | A  | 2015-112  | Australia        | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  |  |
| Hodgkinsonite   | $\text{Zn}_2\text{Mn}^{2+}(\text{SiO}_4)(\text{OH})_2$  | G  | 1913      | USA              | <i>Journal of the Washington Academy of Sciences</i> <b>3</b> (1913), 474  | <i>Zeitschrift für Kristallographie</i> <b>119</b> (1963), 117 |
| Hodrušite       | $\text{Cu}_8\text{Bi}_{12}\text{S}_{22}$  | Rn | 1969-025  | Slovakia         | <i>Mineralogical Magazine</i> <b>37</b> (1971), 641  | <i>Canadian Mineralogist</i> <b>41</b> (2004), 1481            |
| Hoelite         | $\text{C}_{14}\text{H}_8\text{O}_2$   | G  | 1922      | Norway           | <i>Resultater av de Norske Statsunderstøttede Spitsbergenekspeditioner</i> <b>1</b> (1922), 9  | <i>Acta Crystallographica</i> <b>22</b> (1967), 439            |
| Hoganite        | $\text{Cu}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$   | A  | 2001-029  | Australia        | <i>Mineralogical Magazine</i> <b>66</b> (2002), 459  | <i>Spectrochimica Acta A</i> <b>67</b> (2007), 48              |
| Hogarthite      | $(\text{Na}, \text{K})_2\text{CaTi}_2\text{Si}_{10}\text{O}_{26} \cdot 8\text{H}_2\text{O}$   | A  | 2009-043  | Canada           | <i>Canadian Mineralogist</i> <b>53</b> (2015), 13  |  |
| Høgtuvaite      | $\text{Ca}_4[\text{Fe}^{2+}_6\text{Fe}^{3+}_6]\text{O}_4[\text{Si}_8\text{Be}_2\text{Al}_2\text{O}_{36}]$   | A  | 1990-051  | Norway           | <i>Canadian Mineralogist</i> <b>32</b> (1994), 439   |  |
| Hohmannite      | $\text{Fe}^{3+}_2\text{O}(\text{SO}_4)_2 \cdot 8\text{H}_2\text{O}$   | G  | 1888      | Chile            | <i>Mineralogische und petrographische Mitteilungen</i> <b>9</b> (1888), 397  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 11             |
| Holdawayite     | $\text{Mn}^{2+}_6(\text{CO}_3)_2(\text{OH})_7(\text{Cl}, \text{OH})$  | A  | 1986-001  | Namibia          | <i>American Mineralogist</i> <b>73</b> (1988), 632   |  |
| Holdenite       | $\text{Mn}^{2+}_6\text{Zn}_3(\text{AsO}_4)_2(\text{SiO}_4)(\text{OH})_8$  | G  | 1927      | USA              | <i>American Mineralogist</i> <b>12</b> (1927), 144   | <i>American Mineralogist</i> <b>62</b> (1977), 513             |
| Holfertite      | $(\text{UO}_2)_{1.75}\text{Ca}_{0.25}\text{TiO}_4 \cdot 3\text{H}_2\text{O}$  | A  | 2003-009  | USA              | <i>Mineralogical Record</i> <b>37</b> (2006), 311  | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1545            |
| Hollandite      | $\text{Ba}(\text{Mn}^{4+}_6\text{Mn}^{3+}_2)\text{O}_{16}$  | Rd | 2012 s.p. | India            | <i>Mineralogical Journal</i> <b>13</b> (1986), 119   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1056          |

|                 |  |    |            |                    |   |   |
|-----------------|--|----|------------|--------------------|---|---|
| Hollingworthite | RhAsS  | A  | 1964-029   | South Africa       | <i>American Mineralogist</i> <b>50</b> (1965), 1068   | <i>Mineralium Deposita</i> <b>22</b> (1987), 178                                  |
| Hollisterite    | Al <sub>3</sub> Fe   | A  | 2016-034   | Russia (meteorite) | <i>American Mineralogist</i> <b>102</b> (2017), 690   |   |
| Holmquistite    | □Li <sub>2</sub> (Mg <sub>3</sub> Al <sub>2</sub> )Si <sub>8</sub> O <sub>22</sub> (OH) <sub>2</sub>   | Rd | 2012 s.p.  | Sweden             | <i>Sitzungsberichte der Heidelberger Akademie der Wissenschaften</i> (1913), 3  | <i>American Mineralogist</i> <b>90</b> (2005), 1167                               |
| Holtedahlite    | Mg <sub>12</sub> (PO <sub>3</sub> OH,CO <sub>3</sub> )(PO <sub>4</sub> ) <sub>5</sub> (OH,O) <sub>6</sub>  | A  | 1976-054   | Norway             | <i>Lithos</i> <b>12</b> (1979), 283   | <i>Mineralogy and Petrology</i> <b>40</b> (1989), 91                              |
| Holtite         | (Ta <sub>0.6</sub> □ <sub>0.4</sub> )Al <sub>6</sub> BSi <sub>3</sub> O <sub>18</sub>  | Rd | 1969-029   | Australia          | <i>Mineralogical Magazine</i> <b>38</b> (1971), 21  | <i>Mineralogical Magazine</i> <b>53</b> (1989), 457                               |
| Holtstamite     | Ca <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub>   | A  | 2003-047   | South Africa       | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 375   |   |
| Homilite        | Ca <sub>2</sub> Fe <sup>2+</sup> B <sub>2</sub> Si <sub>2</sub> O <sub>10</sub>  | G  | 1876       | Norway             | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1876), 229  | <i>Acta Crystallographica</i> <b>C41</b> (1985), 13                               |
| Honeaite        | Au <sub>3</sub> TiTe <sub>2</sub>  | A  | 2015-060   | Australia          | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 979   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 611                               |
| Honessite       | (Ni <sub>1-x</sub> Fe <sup>3+</sup> <sub>x</sub> )(SO <sub>4</sub> ) <sub>x/2</sub> (OH) <sub>2</sub> ·nH <sub>2</sub> O (x < 0.5, n < 3x/2)                                 | A  | 1962 s.p.  | USA                | <i>American Mineralogist</i> <b>44</b> (1959), 995  | <i>Mineralogical Magazine</i> <b>44</b> (1981), 339                               |
| Hongheite       | Ca <sub>19</sub> Fe <sup>2+</sup> Al <sub>4</sub> (Fe <sup>3+</sup> ,Mg,Al) <sub>8</sub> (□,B) <sub>4</sub> BSi <sub>18</sub> O <sub>69</sub> (O,OH) <sub>9</sub>            | A  | 2017-027   | China              | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |   |
| Hongshiite      | PtCu   | A  | 1988-xxx ? | China              | <i>Acta Geologica Sinica</i> <b>2</b> (1974), 202   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 711                                |
| Honzaitite      | Ni <sub>2</sub> [AsO <sub>3</sub> (OH)] <sub>2</sub> (H <sub>2</sub> O) <sub>5</sub>   | A  | 2014-105   | Czech Republic     | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 989   |   |
| Hopeite         | Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O   | G  | 1826       | Belgium            | <i>Transactions of the Royal Society of Edinburgh</i> <b>10</b> (1826), 107   | <i>American Mineralogist</i> <b>61</b> (1976), 987                                |
| Horákite        | (Bi <sub>7</sub> O <sub>7</sub> OH)[(UO <sub>2</sub> ) <sub>4</sub> (PO <sub>4</sub> ) <sub>2</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ]·3.5H <sub>2</sub> O | A  | 2017-033   | Czech Republic     | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |   |
| Hörnesite       | Mg <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> ·8H <sub>2</sub> O  | G  | 1860       | Romania            | <i>Jahrbuch der Kaiserlich-Königlichen Geologischen Reichsanstalt</i> <b>11</b> (1860), 10  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1966), 349                     |
| Horomanite      | Fe <sub>6</sub> Ni <sub>3</sub> S <sub>8</sub>   | A  | 2007-037   | Japan              | <i>Journal of Mineralogical and Petrological Sciences</i> <b>106</b> (2011), 204  |   |
| Horváthite-(Y)  | NaY(CO <sub>3</sub> )F <sub>2</sub>  | A  | 1996-032   | Canada             | <i>Canadian Mineralogist</i> <b>35</b> (1997), 743  |   |
| Hotsonite       | Al <sub>5</sub> (SO <sub>4</sub> )(PO <sub>4</sub> )(OH) <sub>10</sub> ·8H <sub>2</sub> O  | A  | 1983-033   | South Africa       | <i>American Mineralogist</i> <b>69</b> (1984), 979  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>119</b> (1990), 121 |
| Housleyite      | Pb <sub>6</sub> CuTe <sub>4</sub> O <sub>18</sub> (OH) <sub>2</sub>  | A  | 2009-024   | USA                | <i>American Mineralogist</i> <b>95</b> (2010), 1337   |   |
| Howardevansite  | NaCu <sup>2+</sup> Fe <sup>3+</sup> <sub>2</sub> (VO <sub>4</sub> ) <sub>3</sub>   | A  | 1987-011   | El Salvador        | <i>American Mineralogist</i> <b>73</b> (1988), 181  |   |
| Howieite        | Na(Fe <sup>2+</sup> ,Fe <sup>3+</sup> ,Al,Mg) <sub>12</sub> (Si <sub>6</sub> O <sub>17</sub> ) <sub>2</sub> (O,OH) <sub>10</sub>   | A  | 1964-017   | USA                | <i>American Mineralogist</i> <b>50</b> (1965), 278  | <i>American Mineralogist</i> <b>59</b> (1974), 86                                 |
| Howlite         | Ca <sub>2</sub> SiB <sub>5</sub> O <sub>9</sub> (OH) <sub>5</sub>  | G  | 1868       | Canada             | <i>A System of Mineralogy</i> , 5th ed. Wiley, New York (1868), 598   | <i>American Mineralogist</i> <b>73</b> (1988), 1138                               |
| Hsianghualite   | Li <sub>2</sub> Ca <sub>3</sub> Be <sub>3</sub> (SiO <sub>4</sub> ) <sub>3</sub> F <sub>2</sub>  | A  | 1997 s.p.  | China              | <i>Ti-chih-yueh-k'an</i> <b>7</b> (1958), 35  | <i>Doklady Akademii Nauk SSSR</i> <b>316</b> (1991), 624                          |
| Huanghoite-(Ce) | BaCe(CO <sub>3</sub> ) <sub>2</sub> F  | A  | 1967 s.p.  | China              | <i>Scientia Sinica</i> <b>10</b> (1961), 1007   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1993), 163                     |
| Huangite        | Ca <sub>0.5</sub> Al <sub>3</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>  | A  | 1991-009   | Chile              | <i>American Mineralogist</i> <b>77</b> (1992), 1275   | <i>Mineralogical Journal</i> <b>20</b> (1998), 1                                  |
| Huanzalaite     | Mg(WO <sub>4</sub> )   | A  | 2009-018   | Peru               | <i>Canadian Mineralogist</i> <b>48</b> (2010), 105  |   |
| Hubeite         | Ca <sub>2</sub> Mn <sup>2+</sup> Fe <sup>3+</sup> Si <sub>4</sub> O <sub>12</sub> (OH)·2H <sub>2</sub> O   | A  | 2000-022   | China              | <i>Mineralogical Record</i> <b>33</b> (2002), 465   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 825                                |

|                   |  |    |           |                    |  |  |
|-------------------|--|----|-----------|--------------------|--|--|
| Hübnerite         | $Mn^{2+}(WO_4)$  | G  | 1865      | USA                | <i>Berg- und Hüttenmännische Zeitung</i> <b>24</b> (1865), 370                                       | <i>Zeitschrift für Kristallographie</i> <b>207</b> (1993), 193 |
| Huemulite         | $Na_4MgV^{5+}_{10}O_{28} \cdot 24H_2O$   | A  | 1965-012  | Argentina          | <i>American Mineralogist</i> <b>51</b> (1966), 1   | <i>Canadian Mineralogist</i> <b>49</b> (2011), 849             |
| Huenite           | $Cu_4(MoO_4)_3(OH)_2$  | A  | 2015-122  | Chile              | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691                            |  |
| Hügelite          | $Pb_2(UO_2)_3(AsO_4)_2O_2 \cdot 5H_2O$   | G  | 1913      | Germany            | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>51</b> (1913), 278          | <i>Mineralogical Magazine</i> <b>67</b> (2003), 1109           |
| Hughesite         | $Na_3AlV_{10}O_{28} \cdot 22H_2O$  | A  | 2009-035a | USA                | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1253  |  |
| Huizingite-(Al)   | $(NH_4)_9Al_3(SO_4)_8(OH)_2 \cdot 4H_2O$   | A  | 2015-014  | USA                | <i>American Mineralogist</i> <b>101</b> (2016), 2095   |  |
| Hulsite           | $Fe^{2+}_2Fe^{3+}O_2(BO_3)$  | G  | 1908      | USA                | <i>American Journal of Science</i> <b>25</b> (1908), 323   | <i>American Mineralogist</i> <b>61</b> (1976), 116             |
| Humberstonite     | $K_3Na_7Mg_2(SO_4)_6(NO_3)_2 \cdot 6H_2O$  | A  | 1967-015  | Chile              | <i>American Mineralogist</i> <b>55</b> (1970), 1518  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 381             |
| Humboldtine       | $Fe^{2+}(C_2O_4) \cdot 2H_2O$  | G  | 1821      | Czech Republic     | <i>Annales de Chimie et de Physique</i> <b>18</b> (1821), 207  | <i>Physics and Chemistry of Minerals</i> <b>35</b> (2008), 467 |
| Humite            | $Mg_7(SiO_4)_3(F,OH)_2$  | G  | 1813      | Italy              | Catalogue de la collection minéralogique particulière du Comte de Bournon. Juigné, London (1813), 32 | <i>American Mineralogist</i> <b>56</b> (1971), 1155            |
| Hummerite         | $KMgV^{5+}_5O_{14} \cdot 8H_2O$  | G  | 1951      | USA                | <i>American Mineralogist</i> <b>36</b> (1951), 326   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1429            |
| Hunchunite        | $Au_2Pb$   | A  | 1991-033  | China              | <i>Acta Mineralogica Sinica</i> <b>12</b> (1992), 319  |  |
| Hundholmenite-(Y) | $(Y, REE, Ca, Na)_{15}(Al, Fe^{3+})Ca_xAs^{3+}_{1-x}(Si, As^{5+})Si_6B_3(O, F)_{48}$ | A  | 2006-005  | Norway             | <i>Mineralogical Magazine</i> <b>71</b> (2007), 179  |  |
| Hungchaoite       | $MgB_4O_5(OH)_4 \cdot 7H_2O$   | A  | 1967 s.p. | China              | <i>Scientia Sinica</i> <b>13</b> (1964), 525   | <i>American Mineralogist</i> <b>62</b> (1977), 1135            |
| Huntite           | $CaMg_3(CO_3)_4$   | G  | 1953      | USA                | <i>American Mineralogist</i> <b>38</b> (1953), 4   | <i>American Mineralogist</i> <b>71</b> (1986), 163             |
| Hureaulite        | $Mn^{2+}_5(PO_3OH)_2(PO_4)_2 \cdot 4H_2O$  | Rn | 2007 s.p. | France             | <i>Annales de Chimie et de Physique</i> <b>3</b> (1825), 302   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 93     |
| Hurlbutite        | $CaBe_2(PO_4)_2$   | G  | 1952      | USA                | <i>American Mineralogist</i> <b>37</b> (1952), 931   | <i>American Mineralogist</i> <b>59</b> (1974), 1267            |
| Hutcheonite       | $Ca_3Ti_2(SiAl_2)O_{12}$   | A  | 2013-029  | Mexico (meteorite) | <i>American Mineralogist</i> <b>99</b> (2014), 667   |  |
| Hutchinsonite     | $TiPbAs_5S_9$  | G  | 1905      | Switzerland        | <i>Mineralogical Magazine</i> <b>14</b> (1905), 72   | <i>Zeitschrift für Kristallographie</i> <b>209</b> (1994), 475 |
| Huttonite         | $Th(SiO_4)$  | G  | 1951      | New Zealand        | <i>American Mineralogist</i> <b>36</b> (1951), 60  | <i>Acta Crystallographica</i> <b>B34</b> (1978), 1074          |
| Hyalotekite       | $(Ba, Pb, K)_4(Ca, Y)_2(B, Be)_2(Si, B)_2Si_8O_{28}F$                                | G  | 1877      | Sweden             | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1877), 382                         | <i>Mineralogical Magazine</i> <b>62</b> (1998), 77             |
| Hydrobasaluminite | $Al_4(SO_4)(OH)_{10} \cdot 15H_2O$   | G  | 1948      | United Kingdom     | <i>Nature</i> <b>162</b> (1948), 565   | <i>Mineralogical Magazine</i> <b>43</b> (1980), 931            |
| Hydrobiotite      | $K(Mg, Fe^{2+})_6(Si, Al)_8O_{20}(OH)_4 \cdot nH_2O$                                 | Rd | 1983 s.p. | Czech Republic     | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>6</b> (1882), 321                         | <i>American Mineralogist</i> <b>68</b> (1983), 420             |
| Hydroboracite     | $CaMg[B_3O_4(OH)_3]_2 \cdot 3H_2O$   | G  | 1834      | Kazakhstan         | <i>Annalen der Physik und Chemie</i> <b>31</b> (1834), 49  | <i>Canadian Mineralogist</i> <b>16</b> (1978), 75              |
| Hydrocalumite     | $Ca_4Al_2(OH)_{12}(Cl, CO_3, OH)_2 \cdot 4H_2O$                                      | G  | 1934      | United Kingdom     | <i>Mineralogical Magazine</i> <b>23</b> (1934), 607  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 462  |
| Hydrocerussite    | $Pb_3(CO_3)_2(OH)_2$   | G  | 1877      | Sweden             | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1877), 376                         | <i>Acta Crystallographica</i> <b>C58</b> (2002), i82           |
| Hydrochlorborite  | $Ca_2B_3O_3(OH)_4 \cdot BO(OH)_3Cl \cdot 7H_2O$                                      | G  | 1965      | China              | <i>Acta Geologica Sinica</i> <b>45</b> (1965), 209   | <i>American Mineralogist</i> <b>62</b> (1977), 147             |
| Hydrodelhayelite  | $KCa_2(Si_7Al)O_{17}(OH)_2 \cdot 6H_2O$  | A  | 1979-023  | Russia             | <i>New data on minerals of the USSR</i> <b>28</b> (1979), 172  |  |
| Hydrodresserite   | $BaAl_2(CO_3)_2(OH)_4 \cdot 3H_2O$   | A  | 1976-036  | Canada             | <i>Canadian Mineralogist</i> <b>15</b> (1977), 399   | <i>Canadian Mineralogist</i> <b>20</b> (1982), 253             |

|                           |   |    |           |                                  |   |   |
|---------------------------|---|----|-----------|----------------------------------|---|---|
| Hydroglauberite           | $\text{Na}_{10}\text{Ca}_3(\text{SO}_4)_8 \cdot 6\text{H}_2\text{O}$  | A  | 1968-026  | Uzbekistan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>98</b> (1969), 59   |   |
| Hydrohalite               | $\text{NaCl} \cdot 2\text{H}_2\text{O}$   | G  | 1847      | Austria                          | Handbuch der Mineralogie. Vandenhoeck und Ruprecht, Göttingen (1847), 1458  | <i>Acta Crystallographica</i> <b>B30</b> (1974), 2363                     |
| Hydrohonessite            | $(\text{Ni}_{1-x}\text{Fe}^{3+}_x)(\text{SO}_4)_{x/2}(\text{OH})_2 \cdot n\text{H}_2\text{O}$ ( $x < 0.5$ , $n > 3x/2$ )      | A  | 1980-037a | Australia                        | <i>Mineralogical Magazine</i> <b>44</b> (1981), 333   | <i>Mineralogical Magazine</i> <b>44</b> (1981), 339                       |
| Hydrokenoelsmoreite       | $\square_2\text{W}_2\text{O}_6(\text{H}_2\text{O})$   | Rd | 2010 s.p. | Australia                        | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1061   | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1195                      |
| Hydrokenomicrolite        | $(\square, \text{H}_2\text{O})_2\text{Ta}_2(\text{O}, \text{OH})_6(\text{H}_2\text{O})$                                       | A  | 2011-103  | Brazil                           | <i>American Mineralogist</i> <b>98</b> (2013), 292  |   |
| Hydrokenopyrochlore       | $(\square, \#)_2\text{Nb}_2\text{O}_6 \cdot \text{H}_2\text{O}$   | A  | 2017-005  | Madagascar                       | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 869   |   |
| Hydrokenoralstonite       | $\square_2\text{Al}_2\text{F}_6(\text{H}_2\text{O})$  | Rn | 1871      | Denmark (Greenland)              | <i>American Journal of Science and Arts</i> <b>102</b> (1871), 30   | <i>Canadian Mineralogist</i> <b>55</b> (2017), 115                        |
| Hydromagnesite            | $\text{Mg}_5(\text{CO}_3)_4(\text{OH})_2 \cdot 4\text{H}_2\text{O}$   | G  | 1828      | USA                              | Kongl. Vetenskaps-Academiens Handlingar för År 1827. Norstedt, Stockholm (1828), 17                                       | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1273                     |
| Hydrombobomkulite         | $(\text{Ni}, \text{Cu})\text{Al}_4(\text{NO}_3)_2(\text{SO}_4)(\text{OH})_{12} \cdot 14\text{H}_2\text{O}$                    | A  | 1979-079a | South Africa                     | <i>Annals of the Geological Survey of South Africa</i> <b>14</b> (1980), 1  |   |
| Hydroniumjarosite         | $(\text{H}_3\text{O})\text{Fe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | Poland                           | <i>Bulletin de l'Académie Polonaise des Sciences, Série des Sciences Géologiques et Géographiques</i> <b>8</b> (1960), 95 | <i>Mineralogical Magazine</i> <b>78</b> (2014), 535                       |
| Hydroniumpharmacoalumite  | $(\text{H}_3\text{O})\text{Al}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 4.5\text{H}_2\text{O}$                                    | A  | 2012-050  | Spain                            | <i>Journal of Mineralogy and Geochemistry</i> <b>192</b> (2015), 169  |   |
| Hydroniumpharmacosiderite | $(\text{H}_3\text{O})\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 4\text{H}_2\text{O}$                                 | A  | 2010-014  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 863   |   |
| Hydropascoite             | $\text{Ca}_3(\text{V}_{10}\text{O}_{28}) \cdot 24\text{H}_2\text{O}$  | A  | 2016-032  | USA                              | <i>Canadian Mineralogist</i> <b>55</b> (2017), 207  |   |
| Hydropyrochlore           | $(\text{H}_2\text{O}, \square)_2\text{Nb}_2(\text{O}, \text{OH})_6(\text{H}_2\text{O})$                                       | Rd | 2010 s.p. | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>63</b> (1978), 528  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673                        |
| Hydroromarchite           | $\text{Sn}^{2+}_3\text{O}_2(\text{OH})_2$   | A  | 1969-007  | Canada                           | <i>Canadian Mineralogist</i> <b>10</b> (1971), 916  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 649                        |
| Hydroscarbroite           | $\text{Al}_{14}(\text{CO}_3)_3(\text{OH})_{36} \cdot n\text{H}_2\text{O}$   | Q  | 1960      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>32</b> (1960), 353   | <i>Journal of The Russell Society</i> <b>1</b> (1982), 9                  |
| Hydrotalcite              | $\text{Mg}_6\text{Al}_2(\text{CO}_3)(\text{OH})_{16} \cdot 4\text{H}_2\text{O}$   | A  | 2016 s.p. | Norway                           | <i>Journal für Praktische Chemie</i> <b>27</b> (1842), 375  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1023                      |
| Hydroterskite             | $\text{Na}_2\text{ZrSi}_6\text{O}_{12}(\text{OH})_6$  | A  | 2015-042  | Canada                           | <i>Canadian Mineralogist</i> <b>53</b> (2015), 821  |   |
| Hydrotungstite            | $\text{WO}_2(\text{OH})_2 \cdot \text{H}_2\text{O}$   | G  | 1944      | Bolivia                          | <i>American Mineralogist</i> <b>29</b> (1944), 192  | <i>Bulletin of the Geological Society of Finland</i> <b>43</b> (1971), 89 |
| Hydrowoodwardite          | $(\text{Cu}_{1-x}\text{Al}_x)(\text{SO}_4)_{x/2}(\text{OH})_2 \cdot n\text{H}_2\text{O}$ ( $x < 0.5$ , $n > 3x/2$ )           | A  | 1996-038  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1999), 75  |   |
| Hydroxyapophyllite-(K)    | $\text{KCa}_4\text{Si}_8\text{O}_{20}(\text{OH}, \text{F}) \cdot 8\text{H}_2\text{O}$   | Rn | 1978 s.p. | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 196  |   |
| Hydroxycalcimicrolite     | $\text{Ca}_{1.5}\text{Ta}_2\text{O}_6(\text{OH})$   | A  | 2013-073  | Brazil                           | <i>Mineralogical Magazine</i> <b>81</b> (2017), 555   |   |
| Hydroxycalciopyrochlore   | $(\text{Ca}, \text{Na}, \text{U}, \square)_2(\text{Nb}, \text{Ti})_2\text{O}_6(\text{OH})$                                    | A  | 2011-026  | China                            | <i>Acta Geologica Sinica</i> <b>88</b> (2014), 748  |   |
| Hydroxycalcioroméite      | $(\text{Ca}, \text{Sb}^{3+})_2(\text{Sb}^{5+}, \text{Ti})_2\text{O}_6(\text{OH})$   | Rd | 2010 s.p. | Brazil                           | <i>Mineralogical Magazine</i> <b>11</b> (1895), 80  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673                        |
| Hydroxycancrinite         | $(\text{Na}, \text{Ca}, \text{K})_8(\text{Al}_6\text{Si}_6\text{O}_{24})(\text{OH}, \text{CO}_3)_2 \cdot 2\text{H}_2\text{O}$ | A  | 1990-014  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 100                                    |   |

|                          |  |    |           |             |  |   |
|--------------------------|--|----|-----------|-------------|--|---|
| Hydroxyferroroméite      | $(\text{Fe}^{2+}_{1.5}\square_{0.5})\text{Sb}^{5+}_2\text{O}_6(\text{OH})$   | A  | 2016-006  | France      | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 307  |   |
| Hydroxykenoelsmoreite    | $(\square, \text{Pb})_2(\text{W}, \text{Fe}^{3+}, \text{Al})_2(\text{O}, \text{OH})_6(\text{OH})$                                    | A  | 2016-056  | Burundi     | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 491  |   |
| Hydroxykenomicrolite     | $(\square, \text{Na}, \text{Sb}^{3+})_2\text{Ta}_2\text{O}_6(\text{OH})$   | Rd | 2010 s.p. | Russia      | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 345  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673  |
| Hydroxykenopyrochlore    | $(\square, \text{Ce}, \text{Ba})_2(\text{Nb}, \text{Ti})_2\text{O}_6(\text{OH}, \text{F})$   | A  | 2017-030a | Brazil      | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931  |   |
| Hydroxylapatite          | $\text{Ca}_5(\text{PO}_4)_3\text{OH}$  | Rn | 2010 s.p. | Switzerland | <i>Annales des Mines</i> <b>10</b> (1856), 65  | <i>Science</i> <b>180</b> (1973), 1055  |
| Hydroxylbastnäsité-(Ce)  | $\text{Ce}(\text{CO}_3)(\text{OH})$  | Rn | 1987 s.p. | Russia      | <i>Doklady Akademii Nauk SSSR, Earth Science Sections</i> <b>159</b> (1964), 1048  | <i>American Mineralogist</i> <b>93</b> (2008), 698  |
| Hydroxylbastnäsité-(Nd)  | $\text{Nd}(\text{CO}_3)(\text{OH})$  | Rn | 1984-060  | Montenegro  | <i>Mineralogical Magazine</i> <b>49</b> (1985), 717  |   |
| Hydroxylborite           | $\text{Mg}_3(\text{BO}_3)(\text{OH})_3$  | A  | 2005-054  | Russia      | <i>Proceedings of the Russian Mineralogical Society</i> <b>136(1)</b> (2007), 69   |   |
| Hydroxylchondrodite      | $\text{Mg}_5(\text{SiO}_4)_2(\text{OH})_2$   | A  | 2010-019  | Russia      | <i>Doklady Earth Sciences</i> <b>436</b> (2011), 230   |   |
| Hydroxylclinohumite      | $\text{Mg}_9(\text{SiO}_4)_4(\text{OH})_2$   | A  | 1998-065  | Russia      | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(5)</b> (1999), 64  | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 169  |
| Hydroxyledgrewite        | $\text{Ca}_9(\text{SiO}_4)_4(\text{OH})_2$   | A  | 2011-113  | Russia      | <i>American Mineralogist</i> <b>97</b> (2012), 1998  |   |
| Hydroxyllestadite        | $\text{Ca}_5(\text{SiO}_4)_{1.5}(\text{SO}_4)_{1.5}\text{OH}$  | Rn | 2010 s.p. | USA         | <i>American Mineralogist</i> <b>22</b> (1937), 977   | <i>American Mineralogist</i> <b>91</b> (2006), 1927   |
| Hydroxylgugiaite         | $(\text{Ca}_3\square)_{24}(\text{Si}_{3.5}\text{Be}_{2.5})_{26}\text{O}_{11}(\text{OH})_3$   | A  | 2016-009  | Norway      | <i>Canadian Mineralogist</i> <b>55</b> (2017), 207   |   |
| Hydroxylhedyphane        | $\text{Ca}_2\text{Pb}_3(\text{AsO}_4)_3(\text{OH})$  | A  | 2018-052  | Sweden      | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Hydroxylherderite        | $\text{CaBe}(\text{PO}_4)(\text{OH})$  | Rn | 2007 s.p. | USA         | <i>American Journal of Science</i> <b>147</b> (1894), 329  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 723   |
| Hydroxylpyromorphite     | $\text{Pb}_5(\text{PO}_4)_3(\text{OH})$  | A  | 2017-075  | USA         | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |   |
| Hydroxylwagnerite        | $\text{Mg}_2(\text{PO}_4)(\text{OH})$  | A  | 2004-009  | Italy       | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 553  |   |
| Hydroxymanganopyrochlore | $(\text{Mn}, \text{Th}, \text{Na}, \text{Ca}, \text{REE})_2(\text{Nb}, \text{Ti})_2\text{O}_6(\text{OH})$                            | A  | 2012-005  | Germany     | <i>Doklady Earth Sciences</i> <b>449</b> (2013), 342   |   |
| Hydroxynatropyrochlore   | $(\text{Na}, \text{Ca}, \text{Ce})_2\text{Nb}_2\text{O}_6(\text{OH})$  | A  | 2017-074  | Russia      | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 | <a href="https://doi.org/10.1180/minmag.2017.081.102">https://doi.org/10.1180/minmag.2017.081.102</a> |
| Hydrozincite             | $\text{Zn}_5(\text{CO}_3)_2(\text{OH})_6$  | G  | 1853      | Austria     | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 26   | <i>Acta Crystallographica</i> <b>17</b> (1964), 1051  |
| Hylbrownite              | $\text{Na}_3\text{MgP}_3\text{O}_{10} \cdot 12\text{H}_2\text{O}$  | A  | 2010-054  | Australia   | <i>Mineralogical Magazine</i> <b>77</b> (2013), 385  |   |
| Hypercinnabar            | $\text{HgS}$   | A  | 1977 s.p. | USA         | <i>American Mineralogist</i> <b>63</b> (1978), 1143  |   |
| Hyršlite                 | $\text{Pb}_8\text{As}_{10}\text{Sb}_6\text{S}_{32}$  | A  | 2016-097  | Peru        | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339   | <a href="https://doi.org/10.1127/ejrm/2018/0030-2797">https://doi.org/10.1127/ejrm/2018/0030-2797</a> |
| Hyttsjöite               | $\text{Pb}_{18}\text{Ba}_2\text{Ca}_5\text{Mn}^{2+}_2\text{Fe}^{3+}_2\text{Si}_{30}\text{O}_{90}\text{Cl} \cdot 6\text{H}_2\text{O}$ | A  | 1993-056  | Sweden      | <i>American Mineralogist</i> <b>81</b> (1996), 743   |   |
| Ianbruceite              | $\text{Zn}_2(\text{AsO}_4)(\text{OH})(\text{H}_2\text{O}) \cdot 2\text{H}_2\text{O}$   | A  | 2011-049  | Namibia     | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1119   |   |
| Iangreyite               | $\text{Ca}_2\text{Al}_7(\text{PO}_4)_2(\text{PO}_3\text{OH})_2(\text{OH}, \text{F})_{15} \cdot 8\text{H}_2\text{O}$                  | A  | 2009-087  | USA         | <i>Mineralogical Magazine</i> <b>75</b> (2011), 327  |   |

|                  |  |   |           |                                  |   |  |
|------------------|--|---|-----------|----------------------------------|---|--|
| Ianthinite       | $U^{4+}_2(VO_2)_4O_6(OH)_4 \cdot 9H_2O$  | G | 1925      | Democratic Republic of the Congo | <i>Natuurwetenschappelijk Tijdschrift voor Nederlandsch-Indie</i> <b>7</b> (1925), 97   | <i>Journal of Nuclear Materials</i> <b>249</b> (1997), 199     |
| Ice              | $H_2O$   | G | ?         | unknown                          | original paper?   | <i>Acta Crystallographica</i> <b>B41</b> (1985), 169           |
| Ice-VII          | $H_2O$   | A | 2017-029  | Botswana                         | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |  |
| Ichnusaite       | $Th(MoO_4)_2 \cdot 3H_2O$  | A | 2013-087  | Italy                            | <i>American Mineralogist</i> <b>99</b> (2014), 2089   |  |
| Icosahedrite     | $Al_{63}Cu_{24}Fe_{13}$  | A | 2010-042  | Russia (meteorite)               | <i>American Mineralogist</i> <b>96</b> (2011), 928  |  |
| Idaite           | $Cu_3FeS_4$  | G | 1958      | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1958), 142   | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1063   |
| Idrialite        | $C_{22}H_{14}$   | G | 1832      | Slovenia                         | <i>Annales de Chimie et de Physique</i> <b>50</b> (1832), 182   | <i>American Mineralogist</i> <b>94</b> (2009), 1325            |
| Imoriite-(Y)     | $Y_2(SiO_4)(CO_3)$   | A | 1967-033  | Japan                            | <i>Geological Survey of Japan</i> <b>39</b> (1968), 85  | <i>Canadian Mineralogist</i> <b>34</b> (1996), 817             |
| Ikaite           | $Ca(CO_3) \cdot 6H_2O$   | A | 1962-005  | Denmark (Greenland)              | <i>Naturens Verden</i> (1963), 168  | <i>Zeitschrift für Kristallographie</i> <b>163</b> (1983), 227 |
| Ikranite         | $(Na, H_3O)_{15}(Ca, Mn, REE)_6Fe^{3+}_2Zr_3Si_{24}O_{66}(O, OH)_6Cl \cdot nH_2O$  | A | 2000-010  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(5)</b> (2003), 22   | <i>Crystallography Reports</i> <b>48</b> (2003), 717           |
| Ikunolite        | $Bi_4S_3$  | A | 1962 s.p. | Japan                            | <i>Mineralogical Journal</i> <b>2</b> (1959), 397   |  |
| Ilesite          | $Mn^{2+}(SO_4) \cdot 4H_2O$  | G | 1881      | USA                              | <i>American Chemical Journal</i> <b>3</b> (1881), 420   | <i>Acta Crystallographica</i> <b>E58</b> (2002), i121          |
| Ilímaussite-(Ce) | $(Ba, Na)_{10}K_3Na_{4.5}Ce_5(Nb, Ti)_6O_6(Si_{12}O_{36})(Si_9O_{18})(O, OH)_{24}$ | A | 1965-025  | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>181(7)</b> (1968), 3  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 787             |
| Ilinskite        | $NaCu_5O_2(Se^{4+}O_3)_2Cl_3$  | A | 1996-027  | Russia                           | <i>Doklady Akademii Nauk</i> <b>353</b> (1997), 641   | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 235         |
| Iirneyite        | $Mg_{0.5}[ZnMn^{3+}(TeO_3)_3] \cdot 4.5H_2O$                                       | A | 2015-046  | Russia                           | CNMNC Newsletter 27 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1223  |  |
| Ilmajokite       | $(Na, Ce, Ba)_{10}Ti_5Si_{14}O_{22}(OH)_{44} \cdot nH_2O$                          | A | 1971-027  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>101</b> (1972), 75  |  |
| Ilmenite         | $Fe^{2+}Ti^{4+}O_3$  | G | 1827      | Russia                           | <i>Archiv für die Gesamte Naturlehre</i> <b>10</b> (1827), 1  | <i>Physics and Chemistry of Minerals</i> <b>34</b> (2007), 307 |
| Ilsemannite      | $Mo_3O_8 \cdot nH_2O$ (?)  | Q | 1871      | Austria                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1871), 566   | <i>American Mineralogist</i> <b>36</b> (1951), 609             |
| Ittisite         | $HgAgSbCl$   | A | 1994-031  | France                           | <i>Archives de Sciences de Genève</i> <b>50</b> (1997), 1   |  |
| Ilvaite          | $CaFe^{3+}Fe^{2+}_2O(Si_2O_7)(OH)$   | G | 1811      | Italy                            | Vollständiges Handbuch der Oryktognosie, Erster Theil. Halle (1811), 356  | <i>Physics and Chemistry of Minerals</i> <b>32</b> (2005), 388 |
| Ilyukhinite      | $(H_3O, Na)_{14}Ca_6Mn_2Zr_3Si_{26}O_{72}(OH)_2 \cdot 3H_2O$                       | A | 2015-065  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(4)</b> (2016), 44  |  |
| IMA No. 2018-029 | $Hg^{2+}_3[NHg^{2+}_2]_{18}(Cl, I, OH, Br, S)_{24}$                                | A | 2018-029  | USA                              | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Imandrite        | $Na_{12}Ca_3Fe^{3+}_2Si_{12}O_{36}$  | A | 1979-025  | Russia                           | <i>Mineralogiceskij Zhurnal</i> <b>1</b> (1979), 89   | <i>Doklady Akademii Nauk SSSR</i> <b>252</b> (1980), 618       |

|                |   |    |           |              |  |  |
|----------------|---|----|-----------|--------------|--|--|
| Imayoshiite    | $\text{Ca}_3\text{Al}(\text{CO}_3)[\text{B}(\text{OH})_4](\text{OH})_6 \cdot 12\text{H}_2\text{O}$  | A  | 2013-069  | Japan        | <i>Mineralogical Magazine</i> <b>79</b> (2015), 413  |  |
| Imhofite       | $\text{Ti}_{5,8}\text{As}_{15,4}\text{S}_{26}$  | A  | 1971 s.p. | Switzerland  | <i>Chimia</i> <b>19</b> (1965), 499  | <i>Zeitschrift für Kristallographie</i> <b>144</b> (1976), 323                   |
| Imlerite       | $\text{Ag}_2\text{HgS}_2$   | Rn | 1983-038  | Morocco      | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 457  |  |
| Imogolite      | $\text{Al}_2\text{SiO}_3(\text{OH})_4$  | Rd | 1987 s.p. | Japan        | <i>Soil Science and Plant Nutrition</i> <b>8(3)</b> (1962), 114                                      | <i>Mineralogical Magazine</i> <b>51</b> (1987), 327                              |
| Inaglyite      | $\text{PbCu}_3\text{Ir}_8\text{S}_{16}$   | A  | 1983-054  | Russia       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 712                    |  |
| Incomsartorite | $\text{Ti}_6\text{Pb}_{144}\text{As}_{246}\text{S}_{516}$   | A  | 2016-035  | Switzerland  | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135                           |  |
| Inderborite    | $\text{CaMg}[\text{B}_3\text{O}_3(\text{OH})_5]_2 \cdot 6\text{H}_2\text{O}$  | G  | 1941      | Kazakhstan   | <i>Doklady Akademii Nauk SSSR</i> <b>33</b> (1941), 254  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 533                               |
| Inderite       | $\text{MgB}_3\text{O}_3(\text{OH})_5 \cdot 5\text{H}_2\text{O}$   | A  | 1962 s.p. | Kazakhstan   | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>66</b> (1937), 315                      | <i>American Mineralogist</i> <b>97</b> (2012), 1858                              |
| Indialite      | $\text{Mg}_2\text{Al}_3(\text{AlSi}_5)\text{O}_{18}$  | G  | 1954      | India        | <i>Proceedings of the Japan Academy</i> <b>30</b> (1954), 746  | <i>Zeitschrift für Kristallographie</i> <b>190</b> (1990), 271                   |
| Indigirite     | $\text{Mg}_2\text{Al}_2(\text{CO}_3)_4(\text{OH})_2 \cdot 15\text{H}_2\text{O}$   | A  | 1971-012  | Russia       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>100</b> (1971), 178                    |  |
| Indite         | $\text{FeIn}_2\text{S}_4$   | A  | 1967 s.p. | Russia       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 445                     | <i>Journal of Physics and Chemistry of Solids</i> <b>39</b> (1978), 1105         |
| Indium         | In  | A  | 1968 s.p. | Russia       | <i>Geochemistry, mineralogy, and genetic types of deposits of rare elements</i> <b>2</b> (1964), 568 |  |
| Inesite        | $\text{Ca}_2\text{Mn}^{2+}_7\text{Si}_{10}\text{O}_{28}(\text{OH})_2 \cdot 5\text{H}_2\text{O}$   | G  | 1887      | Germany      | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>39</b> (1887), 829                     | <i>American Mineralogist</i> <b>63</b> (1978), 563                               |
| Ingersonite    | $\text{Ca}_3\text{Mn}^{2+}\text{Sb}^{5+}_4\text{O}_{14}$  | A  | 1986-021  | Sweden       | <i>American Mineralogist</i> <b>73</b> (1988), 405   | <i>American Mineralogist</i> <b>92</b> (2007), 947                               |
| Ingodite       | $\text{Bi}_2\text{TeS}$   | A  | 1980-045  | Russia       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 594                    | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 31 |
| Innelite       | $\text{Ba}_4\text{Ti}_2\text{Na}(\text{NaCa})\text{Ti}(\text{Si}_2\text{O}_7)_2[(\text{SO}_4)(\text{PO}_4)]\text{O}_2[\text{O}(\text{OH})]$ | Rd | 2016 s.p. | Russia       | <i>Doklady Akademii Nauk SSSR</i> <b>141</b> (1961), 1198  | <i>Kristallografiya</i> <b>16</b> (1971), 87                                     |
| Innsbruckite   | $\text{Mn}_{33}(\text{Si}_2\text{O}_5)_{14}(\text{OH})_{38}$  | A  | 2013-038  | Austria      | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1613   |  |
| Insizwaite     | $\text{PtBi}_2$   | A  | 1971-031  | South Africa | <i>Mineralogical Magazine</i> <b>38</b> (1972), 794  | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>620</b> (1994), 393 |
| Intersilite    | $\text{Na}_6\text{Mn}(\text{Ti},\text{Nb})\text{Si}_{10}(\text{O},\text{OH})_{28} \cdot 4\text{H}_2\text{O}$                                | A  | 1995-033  | Russia       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(4)</b> (1996), 79                | <i>Crystallography Reports</i> <b>41</b> (1996) 239                              |
| Inyoite        | $\text{CaB}_3\text{O}_3(\text{OH})_5 \cdot 4\text{H}_2\text{O}$   | G  | 1914      | USA          | <i>Journal of the Washington Academy of Sciences</i> <b>4</b> (1914), 354                            | <i>Acta Crystallographica</i> <b>12</b> (1959), 162                              |
| Iodargyrite    | AgI   | A  | 1962 s.p. | Mexico       | <i>Cours de Minéralogie (Histoire naturelle)</i> . Masson, Paris (1859)                              | <i>Canadian Mineralogist</i> <b>35</b> (1997), 23                                |
| Iowaite        | $\text{Mg}_6\text{Fe}^{3+}_2(\text{OH})_{16}\text{Cl}_2 \cdot 4\text{H}_2\text{O}$  | A  | 1967-002  | USA          | <i>American Mineralogist</i> <b>52</b> (1967), 1261  | <i>Mineralogical Magazine</i> <b>58</b> (1994), 79                               |
| Iquiqueite     | $\text{K}_3\text{Na}_4\text{Mg}(\text{CrO}_4)\text{B}_{24}\text{O}_{39}(\text{OH}) \cdot 12\text{H}_2\text{O}$                              | A  | 1984-019  | Chile        | <i>American Mineralogist</i> <b>71</b> (1986), 830   |  |



|                  |   |    |           |                  |   |   |
|------------------|---|----|-----------|------------------|---|---|
| Iranite          | $\text{CuPb}_{10}(\text{CrO}_4)_6(\text{SiO}_4)_2(\text{OH})_2$                             | A  | 1980 s.p. | Iran             | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>86</b> (1963), 133 | <i>Acta Crystallographica</i> <b>C63</b> (2007), i122   |
| Iraqite-(La)     | $\text{KCa}_2(\text{La,Ce,Th})\text{Si}_8\text{O}_{20}$                                     | A  | 1973-041  | Iraq             | <i>Mineralogical Magazine</i> <b>40</b> (1976), 441   |   |
| Irarsite         | $\text{IrAsS}$  | A  | 1966-028  | South Africa     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>95</b> (1966), 700                    | <i>Mineralium Deposita</i> <b>22</b> (1987), 178  |
| Irhtemite        | $\text{Ca}_4\text{Mg}(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 4\text{H}_2\text{O}$   | A  | 1971-034  | Morocco          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 365 |   |
| Iridarsenite     | $\text{IrAs}_2$   | A  | 1973-021  | Papua New Guinea | <i>Canadian Mineralogist</i> <b>12</b> (1974), 280  |   |
| Iridium          | $\text{Ir}$   | Rd | 1991 s.p. | Russia ?         | <i>Philosophical Transactions of the Royal Society of London</i> <b>94</b> (1804), 411              | <i>Canadian Mineralogist</i> <b>29</b> (1991), 231  |
| Irriginite       | $(\text{UO}_2)\text{Mo}^{6+}_2\text{O}_7 \cdot 3\text{H}_2\text{O}$                         | G  | 1957      | Russia           | Mineraly Urana Spravochnik (Uranium Minerals Handbook). Moscow (1957)                               | <i>Canadian Mineralogist</i> <b>38</b> (2000), 847  |
| Irinarassite     | $\text{Ca}_3\text{Sn}_2(\text{SiAl}_2)\text{O}_{12}$  | A  | 2010-073  | Russia           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2857  |   |
| Iron             | $\text{Fe}$   | G  | ?         | unknown          | original paper?   |   |
| Irtysbite        | $\text{Na}_2\text{Ta}_4\text{O}_{11}$   | A  | 1984-025  | Kazakhstan       | <i>Mineralogicheskii Zhurnal</i> <b>7(3)</b> (1985), 87   |   |
| Iseite           | $\text{Mn}_2\text{Mo}_3\text{O}_8$  | A  | 2012-020  | Japan            | <i>Journal of Mineralogical and Petrological Sciences</i> <b>108</b> (2014), 37                     |   |
| Ishiharaite      | $(\text{Cu,Ga,Fe,In,Zn})\text{S}$   | A  | 2013-119  | Argentina        | <i>Canadian Mineralogist</i> <b>52</b> (2014), 969  |   |
| Ishikawaite      | $(\text{U,Fe,Y})\text{NbO}_4$   | G  | 1922      | Japan            | <i>Journal of the Chemical Society of Japan</i> <b>29</b> (1922), 648                               | <i>Mineralogical Magazine</i> <b>63</b> (1999), 27  |
| Isoclasite       | $\text{Ca}_2(\text{PO}_4)(\text{OH}) \cdot 2\text{H}_2\text{O}$                             | Q  | 1870      | Czech Republic   | <i>Journal für Praktische Chemie, Neue Folge</i> <b>2</b> (1870), 125                               |   |
| Isocubanite      | $\text{CuFe}_2\text{S}_3$   | A  | 1983 s.p. | Pacific Ocean    | <i>Mineralogical Magazine</i> <b>52</b> (1988), 509   | <i>Zeitschrift für Kristallographie</i> <b>140</b> (1974), 240  |
| Isoferroplatinum | $\text{Pt}_3\text{Fe}$  | A  | 1974-012a | Canada           | <i>Canadian Mineralogist</i> <b>13</b> (1975), 117  | <i>Doklady Akademii Nauk, Earth Science Sections</i> <b>407</b> (2006), 335                           |
| Isokite          | $\text{CaMg}(\text{PO}_4)\text{F}$  | G  | 1955      | Zambia           | <i>Mineralogical Magazine</i> <b>30</b> (1955), 681   | <i>Acta Crystallographica</i> <b>C63</b> (2007), i89  |
| Isolueshite      | $\text{NaNbO}_3$  | A  | 1995-024  | Russia           | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 483  | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 597   |
| Isomertieite     | $\text{Pd}_{11}\text{Sb}_2\text{As}_2$  | A  | 1973-057  | Brazil           | <i>Mineralogical Magazine</i> <b>39</b> (1974), 528   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 511  |
| Isovite          | $(\text{Cr,Fe})_{23}\text{C}_6$   | A  | 1996-039  | Russia           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(5)</b> (1998), 26               |   |
| Itelmenite       | $\text{Na}_4\text{Mg}_3\text{Cu}_3(\text{SO}_4)_8$  | A  | 2015-047  | Russia           | CNMNC Newsletter 27 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1223                          | <a href="https://doi.org/10.1180/minmag.2017.081.089">https://doi.org/10.1180/minmag.2017.081.089</a> |
| Itoigawaite      | $\text{SrAl}_2\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$                  | A  | 1998-034  | Japan            | <i>Mineralogical Magazine</i> <b>63</b> (1999), 909   |   |
| Itoite           | $\text{Pb}_3\text{GeO}_2(\text{SO}_4)_2(\text{OH})_2$                                       | A  | 1962 s.p. | Namibia          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1960), 132                                       | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>123</b> (1975), 160                             |
| Itsiite          | $\text{Ba}_2\text{Ca}(\text{BSi}_2\text{O}_7)_2$  | A  | 2013-085  | Canada           | <i>Canadian Mineralogist</i> <b>52</b> (2014), 401  |   |
| Ivanyukite-Cu    | $\text{Cu}[\text{Ti}_4\text{O}_2(\text{OH})_2(\text{SiO}_4)_3] \cdot 7\text{H}_2\text{O}$   | A  | 2007-043  | Russia           | <i>American Mineralogist</i> <b>94</b> (2009), 1450   |   |
| Ivanyukite-K     | $\text{K}_2[\text{Ti}_4\text{O}_2(\text{OH})_2(\text{SiO}_4)_3] \cdot 9\text{H}_2\text{O}$  | A  | 2007-042  | Russia           | <i>American Mineralogist</i> <b>94</b> (2009), 1450   |   |
| Ivanyukite-Na    | $\text{Na}_2[\text{Ti}_4\text{O}_2(\text{OH})_2(\text{SiO}_4)_3] \cdot 6\text{H}_2\text{O}$ | A  | 2007-041  | Russia           | <i>American Mineralogist</i> <b>94</b> (2009), 1450   |   |
| Ivsite           | $\text{Na}_3\text{H}(\text{SO}_4)_2$  | A  | 2013-138  | Russia           | <i>Doklady Earth Sciences</i> <b>468</b> (2016), 632  |   |

|                     |  |    |           |                    |   |   |
|---------------------|--|----|-----------|--------------------|---|---|
| Iwashiroite-(Y)     | YTaO <sub>4</sub>  | A  | 2003-053  | Japan              | <i>Journal of Mineralogical and Petrological Sciences</i> <b>101</b> (2006), 170  | <i>Acta Crystallographica</i> <b>23</b> (1967), 939   |
| Iwateite            | Na <sub>2</sub> BaMn(PO <sub>4</sub> ) <sub>2</sub>  | A  | 2013-034  | Japan              | <i>Journal of Mineralogical and Petrological Sciences</i> <b>109</b> (2014), 34   |   |
| Ixiolite            | (Ta,Mn,Nb)O <sub>2</sub>   | Rd | 1962 s.p. | Finland            | <i>Annalen der Physik und Chemie</i> <b>11</b> (1857), 625  | <i>Canadian Mineralogist</i> <b>14</b> (1976), 540  |
| Iyoite              | MnCuCl(OH) <sub>3</sub>  | A  | 2013-130  | Japan              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 485   |   |
| Izoklakeite         | Pb <sub>26.4</sub> (Cu,Fe) <sub>2</sub> (Sb,Bi) <sub>19.6</sub> S <sub>57</sub>  | A  | 1983-065  | Canada             | <i>Canadian Mineralogist</i> <b>24</b> (1986), 1  | <i>American Mineralogist</i> <b>72</b> (1987), 821  |
| Jáchymovite         | (UO <sub>2</sub> ) <sub>8</sub> (SO <sub>4</sub> )(OH) <sub>14</sub> ·13H <sub>2</sub> O   | A  | 1994-025  | Czech Republic     | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>170</b> (1996), 155   |   |
| Jacobsite           | Mn <sup>2+</sup> Fe <sup>3+</sup> <sub>2</sub> O <sub>4</sub>  | A  | 1982 s.p. | Sweden             | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>69</b> (1869), 168  | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 31   |
| Jacquiesdietrichite | Cu <sub>2</sub> BO(OH) <sub>5</sub>  | A  | 2003-012  | Morocco            | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 361   |   |
| Jacutingaite        | Pt <sub>2</sub> HgSe <sub>3</sub>  | A  | 2010-078  | Brazil             | <i>Canadian Mineralogist</i> <b>50</b> (2012), 431  | <i>Canadian Mineralogist</i> <b>50</b> (2012), 441  |
| Jadarite            | LiNaB <sub>3</sub> SiO <sub>7</sub> (OH)   | A  | 2006-036  | Serbia             | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 575   | <i>Acta Crystallographica</i> <b>B63</b> (2007), 396  |
| Jadeite             | NaAlSi <sub>2</sub> O <sub>6</sub>   | A  | 1988 s.p. | Burma              | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>56</b> (1863), 861  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1593   |
| Jaffeite            | Ca <sub>6</sub> Si <sub>2</sub> O <sub>7</sub> (OH) <sub>6</sub>   | A  | 1987-056  | Namibia            | <i>American Mineralogist</i> <b>74</b> (1989), 1203   | <i>Crystallography Reports</i> <b>38</b> (1993), 464  |
| Jagoite             | Pb <sub>18</sub> Fe <sup>3+</sup> <sub>4</sub> [Si <sub>4</sub> (Si,Fe <sup>3+</sup> ) <sub>6</sub> ][Pb <sub>4</sub> Si <sub>16</sub> (Si,Fe) <sub>4</sub> ]O <sub>82</sub> Cl <sub>6</sub> | G  | 1957      | Sweden             | <i>Arkiv för Mineralogi och Geologi</i> <b>2</b> (1957), 315  | <i>American Mineralogist</i> <b>66</b> (1981), 852  |
| Jagowerite          | BaAl <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub>  | A  | 1973-001  | Canada             | <i>Canadian Mineralogist</i> <b>12</b> (1973), 135  | <i>American Mineralogist</i> <b>59</b> (1974), 291  |
| Jagüéite            | Cu <sub>2</sub> Pd <sub>3</sub> Se <sub>4</sub>  | Rn | 2002-060  | Argentina          | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1745   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 497  |
| Jahnsite-(CaFeMg)   | CaFe <sup>2+</sup> Mg <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | A  | 2013-111  | Australia          | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 991   |   |
| Jahnsite-(CaMnFe)   | CaMn <sup>2+</sup> Fe <sup>2+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | Rd | 1978 s.p. | USA                | <i>Mineralogical Magazine</i> <b>42</b> (1978), 309   |   |
| Jahnsite-(CaMnMg)   | CaMn <sup>2+</sup> Mg <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | Rd | 1973-022  | USA                | <i>American Mineralogist</i> <b>59</b> (1974), 48   | <i>American Mineralogist</i> <b>59</b> (1974), 964  |
| Jahnsite-(CaMnMn)   | CaMn <sup>2+</sup> Mn <sup>2+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | A  | 1987-020a | Portugal           | <i>American Mineralogist</i> <b>75</b> (1990), 401  |   |
| Jahnsite-(MnMnMg)   | Mn <sup>2+</sup> Mn <sup>2+</sup> Mg <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O   | A  | 2017-118  | Brazil             | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647  |   |
| Jahnsite-(MnMnMn)   | Mn <sup>2+</sup> Mn <sup>2+</sup> Mn <sup>2+</sup> <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O                           | Rd | 1978 s.p. | USA                | <i>Mineralogical Magazine</i> <b>42</b> (1978), 309   |   |
| Jahnsite-(MnMnZn)   | Mn <sup>2+</sup> Mn <sup>2+</sup> Zn <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O   | A  | 2017-113  | Portugal           | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405  | <a href="https://doi.org/10.1127/ejm/2018/0030-2800">https://doi.org/10.1127/ejm/2018/0030-2800</a> |
| Jahnsite-(NaFeMg)   | NaFe <sup>3+</sup> Mg <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | A  | 2007-016  | USA                | <i>American Mineralogist</i> <b>93</b> (2008), 940  |   |
| Jahnsite-(NaMnMg)   | (Na,Ca)Mn <sup>2+</sup> (Mg,Fe <sup>3+</sup> ) <sub>2</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>8</sub>                  | A  | 2018-017  | Brazil / Australia | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Jaipurite           | CoS  | Q  | 1880      | India              | <i>Doklady Akademii Nauk SSSR</i> <b>303</b> (1988), 1206   |   |
| Jakobssonite        | CaAlF <sub>5</sub>   | A  | 2011-036  | Iceland            | <i>Mineralogical Magazine</i> <b>76</b> (2012), 751   |   |
| Jalpaite            | Ag <sub>3</sub> CuS <sub>2</sub>   | G  | 1858 ?    | Mexico             | <i>Berg- und Hüttenmannische Zeitung</i> <b>17</b> (1858), 85   | <i>Australian Journal of Chemistry</i> <b>45</b> (1992), 1441                                       |

|               |  |    |           |                     |   |   |
|---------------|--|----|-----------|---------------------|---|---|
| Jamborite     | $\text{Ni}^{2+}_{1-x}\text{Co}^{3+}_x(\text{OH})_{2-x}(\text{SO}_4)_x \cdot n\text{H}_2\text{O}$ [ $x \leq \frac{1}{3}$ ; $n \leq (1-x)$ ] | A  | 2014 s.p. | Italy               | <i>American Mineralogist</i> <b>58</b> (1973), 835  | <i>Canadian Mineralogist</i> <b>53</b> (2015), 791  |
| Jamesite      | $\text{Pb}_2\text{ZnFe}^{3+}_2(\text{Fe}^{3+}, \text{Zn})_4(\text{AsO}_4)_4(\text{OH})_8(\text{OH}, \text{O})_2$                           | A  | 1978-079  | Namibia             | <i>Chemie der Erde</i> <b>40</b> (1981), 105  |   |
| Jamesonite    | $\text{Pb}_4\text{FeSb}_6\text{S}_{14}$  | G  | 1825      | United Kingdom      | Treatise on Mineralogy, or the Natural History of the Mineral Kingdom, Vol. 1. Constable, Edinburgh (1825), 451 | <i>Zeitschrift für Kristallographie</i> <b>109</b> (1957), 161                              |
| Janchevite    | $\text{Pb}_7\text{V}^{5+}(\text{O}_{8.5}\square_{0.5})\text{Cl}_2$   | A  | 2017-079  | Namibia             | <i>Canadian Mineralogist</i> <b>56</b> (2018), 159  |   |
| Janggunitite  | $(\text{Mn}^{4+}, \text{Mn}^{2+}, \text{Fe}^{3+})_6\text{O}_8(\text{OH})_6$  | A  | 1975-011  | South Korea         | <i>Mineralogical Magazine</i> <b>41</b> (1977), 519   |   |
| Janhaugite    | $\text{Na}_3\text{Mn}^{2+}_3\text{Ti}_2(\text{Si}_2\text{O}_7)_2(\text{O}, \text{OH}, \text{F})_4$   | A  | 1981-018  | Norway              | <i>American Mineralogist</i> <b>68</b> (1983), 1216   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 7                                 |
| Jankovičite   | $\text{Ti}_5\text{Sb}_9(\text{As}, \text{Sb})_4\text{S}_{22}$  | A  | 1993-050  | Macedonia           | <i>Mineralogy and Petrology</i> <b>53</b> (1995), 125   | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 479                                  |
| Jarandolite   | $\text{CaB}_3\text{O}_4(\text{OH})_3$  | A  | 1995-020c | Serbia              | <i>New Data on Minerals</i> <b>39</b> (2004), 26  | <i>Crystallography Reports</i> <b>39</b> (1994), 991  |
| Jarlite       | $\text{Na}_2(\text{Sr}, \text{Na})_{14}(\text{Mg}, \square)_2\text{Al}_{12}\text{F}_{64}(\text{OH})_4$                                     | G  | 1933      | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>92</b> (1933), 2  | <i>Canadian Mineralogist</i> <b>30</b> (1992), 449  |
| Jarosewichite | $\text{Mn}^{3+}\text{Mn}^{2+}_3(\text{AsO}_4)(\text{OH})_6$  | A  | 1981-060  | USA                 | <i>American Mineralogist</i> <b>67</b> (1982), 1043   |   |
| Jarosite      | $\text{KFe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | Spain               | <i>Berg- und Hüttenmannische Zeitung</i> <b>11</b> (1852), 68   | <i>American Mineralogist</i> <b>95</b> (2010), 1590   |
| Jaskólskiite  | $\text{Cu}_x\text{Pb}_{2+x}(\text{Sb}, \text{Bi})_{2-x}\text{S}_5$ ( $x \approx 0.15$ )  | A  | 1982-057  | Sweden              | <i>Canadian Mineralogist</i> <b>22</b> (1984), 481  | <i>Zeitschrift für Kristallographie</i> <b>171</b> (1985), 179                              |
| Jasmundite    | $\text{Ca}_{11}\text{O}_2(\text{SiO}_4)_4\text{S}$   | A  | 1981-047  | Germany             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 337   | <i>Acta Crystallographica</i> <b>B37</b> (1981), 803  |
| Jasrouxite    | $\text{Ag}_{16}\text{Pb}_4(\text{Sb}_{25}\text{As}_{15})_{\Sigma 40}\text{S}_{72}$   | A  | 2012-058  | France              | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 1031  | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 145                                 |
| Jaszczakite   | $[\text{Bi}_3\text{S}_3][\text{AuS}_2]$  | A  | 2016-077  | Hungary             | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 673   |   |
| Javorieite    | $\text{KFeCl}_3$   | A  | 2016-020  | Slovakia            | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 995   |   |
| Jeanbandyite  | $\text{Fe}^{3+}\text{Sn}(\text{OH})_5\text{O}$   | A  | 1980-043  | Bolivia             | <i>Mineralogical Record</i> <b>13</b> (1982), 235   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 297   |
| Jedwabite     | $\text{Fe}_7\text{Ta}_3$   | A  | 1995-043  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(2)</b> (1997), 100                          |   |
| Jeffbenite    | $\text{Mg}_3\text{Al}_2\text{Si}_3\text{O}_{12}$   | A  | 2014-097  | Brazil              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1219  |   |
| Jeffreyite    | $(\text{Ca}, \text{Na})_2(\text{Be}, \text{Al})\text{Si}_2(\text{O}, \text{OH})_7$   | A  | 1982-095  | Canada              | <i>Canadian Mineralogist</i> <b>22</b> (1984), 443  |   |
| Jennite       | $\text{Ca}_9(\text{Si}_3\text{O}_9)_2(\text{OH})_6 \cdot 8\text{H}_2\text{O}$  | A  | 1965-021  | USA                 | <i>American Mineralogist</i> <b>51</b> (1966), 56   | <i>Cement and Concrete Research</i> <b>34</b> (2004), 1481                                  |
| Jensenite     | $\text{Cu}^{2+}_3\text{Te}^{6+}\text{O}_6 \cdot 2\text{H}_2\text{O}$   | A  | 1994-043  | USA                 | <i>Canadian Mineralogist</i> <b>34</b> (1996), 49   | <i>Canadian Mineralogist</i> <b>34</b> (1996), 55   |
| Jentschite    | $\text{TiPbAs}_2\text{SbS}_6$  | A  | 1993-025  | Switzerland         | <i>Mineralogical Magazine</i> <b>61</b> (1997), 131   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>76</b> (1996), 147 |
| Jeppeite      | $(\text{K}, \text{Ba})_2(\text{Ti}, \text{Fe}^{3+})_6\text{O}_{13}$  | A  | 1980-080  | Australia           | <i>Mineralogical Magazine</i> <b>48</b> (1984), 263   | <i>Australian Journal of Chemistry</i> <b>30</b> (1977), 1195                               |
| Jeremejevite  | $\text{Al}_6(\text{BO}_3)_5\text{F}_3$   | G  | 1883      | Russia              | <i>Bulletin de la Société Minéralogique de France</i> <b>6</b> (1883), 20                                       | <i>Zeitschrift für Kristallographie</i> <b>165</b> (1983), 255                              |
| Jerrygibbsite | $\text{Mn}^{2+}_9(\text{SiO}_4)_4(\text{OH})_2$  | A  | 1981-059  | USA                 | <i>American Mineralogist</i> <b>69</b> (1984), 546  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 410                               |
| Jervisite     | $\text{NaSc}^{3+}\text{Si}_2\text{O}_6$  | A  | 1980-012  | Italy               | <i>American Mineralogist</i> <b>67</b> (1982), 599  | <i>Periodico di Mineralogia</i> <b>75</b> (2006), 189                                       |
| Ježekite      | $\text{Na}_8[(\text{UO}_2)(\text{CO}_3)_3](\text{SO}_4)_2 \cdot 3\text{H}_2\text{O}$   | A  | 2014-079  | Czech Republic      | <i>Journal of Geosciences</i> <b>60</b> (2015), 259   |   |

|                   |  |    |           |                     |   |  |
|-------------------|--|----|-----------|---------------------|---|--|
| Jianshuiite       | $\text{MgMn}^{4+}_3\text{O}_7 \cdot 3\text{H}_2\text{O}$   | A  | 1990-019  | China               | <i>Acta Mineralogica Sinica</i> <b>12(1)</b> (1992), 69   | <i>American Mineralogist</i> <b>101</b> (2016), 414                                    |
| Jimboite          | $\text{Mn}^{2+}_3(\text{BO}_3)_2$  | A  | 1963-002  | Japan               | <i>Proceedings of the Japan Academy, ser. B</i> <b>39</b> (1963), 170                             | <i>Mineralogical Journal</i> <b>4</b> (1965), 380                                      |
| Jimthompsonite    | $\text{Mg}_5\text{Si}_6\text{O}_{16}(\text{OH})_2$   | A  | 1977-011  | USA                 | <i>American Mineralogist</i> <b>63</b> (1978), 1000   | <i>American Mineralogist</i> <b>63</b> (1978), 1053                                    |
| Jinshajiangite    | $\text{BaNaFe}^{2+}_4\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2\text{F}$  | Rd | 1981-061  | China               | <i>Geochemistry (China)</i> <b>1</b> (1982), 458  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1185                                    |
| Jixianite         | $(\text{Pb}, \square)_2(\text{W}, \text{Fe}^{3+})_2(\text{O}, \text{OH})_7$  | Q  | 2013 s.p. | China               | <i>Acta Geologica Sinica</i> <b>53</b> (1979), 46   |  |
| Joanneumite       | $\text{Cu}(\text{C}_3\text{N}_3\text{O}_3\text{H}_2)_2(\text{NH}_3)_2$   | A  | 2012-001  | Chile               | <i>Mineralogical Magazine</i> <b>81</b> (2017), 155   |  |
| Joaquinite-(Ce)   | $\text{NaBa}_2\text{Fe}^{2+}\text{Ti}_2\text{Ce}_2(\text{Si}_4\text{O}_{12})_2\text{O}_2(\text{OH}) \cdot \text{H}_2\text{O}$      | Rd | 2001 s.p. | USA                 | <i>Bulletin of the University of California, Department of Geology</i> <b>5</b> (1909), 331       | <i>American Mineralogist</i> <b>60</b> (1975), 872                                     |
| Joegoldsteinite   | $\text{MnCr}_2\text{S}_4$  | A  | 2015-049  | USA                 | <i>American Mineralogist</i> <b>101</b> (2016), 1217  |  |
| Joëlbruggerite    | $\text{Pb}_3\text{Zn}_3\text{Sb}^{5+}\text{As}_2\text{O}_{13}(\text{OH})$  | A  | 2008-034  | USA                 | <i>American Mineralogist</i> <b>94</b> (2009), 1012   |  |
| Joessmithite      | $\text{Pb}^{2+}\text{Ca}_2(\text{Mg}_3\text{Fe}^{3+}_2)(\text{Si}_6\text{Be}_2)\text{O}_{22}(\text{OH})_2$                         | Rd | 2012 s.p. | Sweden              | <i>Arkiv för Mineralogi och Geologi</i> <b>4</b> (1968), 487                                      | <i>Mineralogy and Petrology</i> <b>48</b> (1993), 97                                   |
| Johachidolite     | $\text{CaAlB}_3\text{O}_7$   | Rd | 1977 s.p. | North Korea         | <i>Scientific Papers of the Institute of Physical and Chemical Research</i> <b>39</b> (1942), 300 | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 965                            |
| Johannite         | $\text{Cu}(\text{UO}_2)_2(\text{SO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$   | G  | 1830      | Czech Republic      | <i>Edinburgh Journal of Science</i> <b>3</b> (1830), 306  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 47 |
| Johannsenite      | $\text{CaMnSi}_2\text{O}_6$  | A  | 1988 s.p. | Italy / USA         | <i>American Mineralogist</i> <b>23</b> (1938), 575  | <i>American Mineralogist</i> <b>52</b> (1967), 709                                     |
| Johillerite       | $\text{NaCuMg}_3(\text{AsO}_4)_3$  | A  | 1980-014  | Namibia             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>29</b> (1982), 169           | <i>Canadian Mineralogist</i> <b>56</b> (2018), 189                                     |
| Johnbaumite       | $\text{Ca}_5(\text{AsO}_4)_3(\text{OH})$   | A  | 1980 s.p. | USA                 | <i>American Mineralogist</i> <b>65</b> (1980), 1143   | <i>American Mineralogist</i> <b>98</b> (2013), 1580                                    |
| Johnnnesite       | $\text{Na}_2\text{Mn}^{2+}_9\text{Mg}_7(\text{AsO}_4)_2(\text{Si}_6\text{O}_{17})_2(\text{OH})_8$                                  | A  | 1985-046  | Namibia             | <i>Mineralogical Magazine</i> <b>50</b> (1986), 667   | <i>American Mineralogist</i> <b>79</b> (1994), 991                                     |
| Johnsenite-(Ce)   | $\text{Na}_{12}\text{Ce}_3\text{Ca}_6\text{Mn}_3\text{Zr}_3\text{WSi}_{25}\text{O}_{73}(\text{CO}_3)(\text{OH})_2$                 | A  | 2004-026  | Canada              | <i>Canadian Mineralogist</i> <b>44</b> (2006), 105  |  |
| Johnsomervilleite | $\text{Na}_{10}\text{Ca}_6\text{Mg}_{18}\text{Fe}^{2+}_{25}(\text{PO}_4)_{36}$   | A  | 1979-032  | United Kingdom      | <i>Mineralogical Magazine</i> <b>43</b> (1980), 833   |  |
| Johntomaite       | $\text{BaFe}^{2+}_2\text{Fe}^{3+}_2(\text{PO}_4)_3(\text{OH})_3$   | A  | 1999-009  | Australia           | <i>Mineralogy and Petrology</i> <b>70</b> (2000), 1   |  |
| Johnwalkite       | $\text{K}(\text{Mn}^{2+}, \text{Fe}^{3+})_2(\text{Nb}, \text{Ta})\text{O}_2(\text{PO}_4)_2 \cdot 2(\text{H}_2\text{O}, \text{OH})$ | A  | 1985-008  | USA                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 115                                     |  |
| Jökokuite         | $\text{Mn}^{2+}(\text{SO}_4) \cdot 5\text{H}_2\text{O}$  | A  | 1976-045  | Japan               | <i>Mineralogical Journal</i> <b>9</b> (1978), 28  | <i>Zeitschrift für Naturforschung</i> <b>A37</b> (1982), 581                           |
| Joliotite         | $(\text{UO}_2)(\text{CO}_3) \cdot 2\text{H}_2\text{O}$   | A  | 1974-014  | Germany             | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>56</b> (1976), 167       |  |
| Jolliffeite       | $\text{NiAsSe}$  | A  | 1989-011  | Canada              | <i>Canadian Mineralogist</i> <b>29</b> (1991), 411  |  |
| Jonassonite       | $\text{Au}(\text{Bi}, \text{Pb})_5\text{S}_4$  | A  | 2004-031  | Hungary             | <i>Canadian Mineralogist</i> <b>44</b> (2006) 1127  |  |
| Jonesite          | $\text{KBa}_2\text{Ti}_2(\text{Si}_5\text{Al})\text{O}_{18} \cdot n\text{H}_2\text{O}$   | A  | 1976-040  | USA                 | <i>Mineralogical Record</i> <b>8</b> (1977), 453  | <i>American Mineralogist</i> <b>89</b> (2004), 314                                     |
| Joosteite         | $\text{Mn}^{2+}\text{Mn}^{3+}\text{O}(\text{PO}_4)$  | A  | 2005-013  | Namibia             | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>183</b> (2007), 197                         | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>184</b> (2007), 225              |
| Jordanite         | $\text{Pb}_{14}(\text{As}, \text{Sb})_6\text{S}_{23}$  | G  | 1864      | Switzerland         | <i>Annalen der Physik und Chemie</i> <b>122</b> (1864), 371                                       | <i>Zeitschrift für Kristallographie</i> <b>139</b> (1974), 161                         |
| Jordisite         | $\text{MoS}_2$   | G  | 1909      | Germany             | <i>Zeitschrift für Chemie und Industrie der Kolloide</i> <b>4</b> (1909), 190                     | <i>American Mineralogist</i> <b>86</b> (2001), 852                                     |
| Jørgensenite      | $\text{Na}_2\text{Sr}_{14}\text{Na}_2\text{Al}_{12}\text{F}_{64}(\text{OH})_4$   | A  | 1995-046  | Denmark (Greenland) | <i>Canadian Mineralogist</i> <b>35</b> (1997), 175  | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1509                                    |

|                                |  |    |           |                                  |   |   |
|--------------------------------|--|----|-----------|----------------------------------|---|---|
| Jörgkellerite                  | $\text{Na}_3\text{Mn}^{3+}_3(\text{PO}_4)_2(\text{CO}_3)\text{O}_2 \cdot 5\text{H}_2\text{O}$                                | A  | 2015-020  | Tanzania                         | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 373  |   |
| Joséite-A                      | $\text{Bi}_4\text{TeS}_2$  | Q  | 1853      | Brazil                           | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 121   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 665            |
| Joséite-B                      | $\text{Bi}_4\text{Te}_2\text{S}$   | Q  | 1949      | Canada                           | <i>American Mineralogist</i> <b>34</b> (1949), 342  | <i>Canadian Mineralogist</i> <b>45</b> (2007), 665            |
| Joteite                        | $\text{Ca}_2\text{CuAl}(\text{AsO}_4)[\text{AsO}_3(\text{OH})]_2(\text{OH})_2 \cdot 5\text{H}_2\text{O}$                     | A  | 2012-091  | Chile                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2811  |   |
| Jouravskite                    | $\text{Ca}_3\text{Mn}^{4+}(\text{SO}_4)(\text{CO}_3)(\text{OH})_6 \cdot 12\text{H}_2\text{O}$                                | A  | 1965-009  | Morocco                          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>88</b> (1965), 254 | <i>Acta Crystallographica</i> <b>B25</b> (1969), 1943         |
| Juabite                        | $\text{CaCu}_{10}(\text{Te}^{4+}\text{O}_3)_4(\text{AsO}_4)_4(\text{OH})_2 \cdot 4\text{H}_2\text{O}$                        | A  | 1996-001  | USA                              | <i>Mineralogical Magazine</i> <b>61</b> (1997), 139   | <i>Canadian Mineralogist</i> <b>38</b> (2000), 809            |
| Juangodoyite                   | $\text{Na}_2\text{Cu}(\text{CO}_3)_2$  | A  | 2004-036  | Chile                            | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>182</b> (2005), 11                            | <i>Acta Crystallographica</i> <b>B42</b> (1986), 430          |
| Juanitaite                     | $(\text{Cu,Ca,Fe})_{10}\text{Bi}(\text{AsO}_4)_4(\text{OH})_{11} \cdot 2\text{H}_2\text{O}$                                  | A  | 1999-022  | USA                              | <i>Mineralogical Record</i> <b>31</b> (2000), 301   |   |
| Juanite                        | $\text{Ca}_{10}(\text{Mg,Fe}^{2+})_4(\text{Si,Al})_{13}(\text{O,OH})_{39} \cdot 4\text{H}_2\text{O}$ (?)                     | Q  | 1932      | USA                              | <i>American Mineralogist</i> <b>17</b> (1932), 343  | <i>Geologiya i Geofizika</i> <b>12</b> (1971), 62             |
| Juansilvaite                   | $\text{Na}_5\text{Al}_3[\text{AsO}_3(\text{OH})]_4[\text{AsO}_2(\text{OH})_2]_2(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$    | A  | 2015-080  | Chile                            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 619   |   |
| Julgoldite-(Fe <sup>2+</sup> ) | $\text{Ca}_2\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{Si}_2\text{O}_7)(\text{SiO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$       | Rn | 1966-033  | Sweden                           | <i>Lithos</i> <b>4</b> (1971), 93   | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 721   |
| Julgoldite-(Fe <sup>3+</sup> ) | $\text{Ca}_2\text{Fe}^{3+}\text{Fe}^{3+}_2(\text{Si}_2\text{O}_7)(\text{SiO}_4)\text{O}(\text{OH}) \cdot \text{H}_2\text{O}$ | Rn | 1973 s.p. | Sweden                           | <i>Canadian Mineralogist</i> <b>12</b> (1973), 219  | <i>American Mineralogist</i> <b>88</b> (2003), 1084           |
| Julgoldite-(Mg)                | $\text{Ca}_2\text{MgFe}^{3+}_2(\text{Si}_2\text{O}_7)(\text{SiO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$                   | Rn | 1973 s.p. | Japan                            | <i>Canadian Mineralogist</i> <b>12</b> (1973), 219  |   |
| Julienite                      | $\text{Na}_2\text{Co}(\text{SCN})_4 \cdot 8\text{H}_2\text{O}$   | Rn | 2007 s.p. | Democratic Republic of the Congo | <i>Natuurwetenschappelijk Tijdschrift</i> <b>10(2)</b> (1928), 58                                   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1084         |
| Jungite                        | $\text{Ca}_2\text{Zn}_4\text{Fe}^{3+}_8(\text{PO}_4)_9(\text{OH})_9 \cdot 16\text{H}_2\text{O}$                              | A  | 1977-034  | Germany                          | <i>Aufschluss</i> <b>31</b> (1980), 55  |   |
| Junitoite                      | $\text{CaZn}_2\text{Si}_2\text{O}_7 \cdot \text{H}_2\text{O}$  | A  | 1975-042  | USA                              | <i>American Mineralogist</i> <b>61</b> (1976), 1255   | <i>Acta Crystallographica</i> <b>E68</b> (2012), i73          |
| Junoite                        | $\text{Cu}_2\text{Pb}_3\text{Bi}_8(\text{S,Se})_{16}$  | A  | 1974-011  | Australia                        | <i>Economic Geology</i> <b>70</b> (1975), 369   | <i>American Mineralogist</i> <b>60</b> (1975), 548            |
| Juonniite                      | $\text{CaMgSc}(\text{PO}_4)_2(\text{OH}) \cdot 4\text{H}_2\text{O}$  | A  | 1996-060  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(4)</b> (1997), 80               |   |
| Jurbanite                      | $\text{Al}(\text{SO}_4)(\text{OH}) \cdot 5\text{H}_2\text{O}$  | A  | 1974-023  | USA                              | <i>American Mineralogist</i> <b>61</b> (1976), 1  | <i>Zeitschrift für Kristallographie</i> <b>173</b> (1985), 33 |
| Jusite                         | $\text{Na}_2\text{Ca}_{15}\text{Al}_4\text{Si}_{16}\text{O}_{54} \cdot 17\text{H}_2\text{O}$                                 | Q  | 1943      | Germany                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>A49</b> (1943), 178            | <i>Mineralogical Abstracts</i> <b>9</b> (1944), 37            |
| Kaatialaite                    | $\text{Fe}^{3+}(\text{H}_2\text{AsO}_4)_3 \cdot 5\text{H}_2\text{O}$   | A  | 1982-021  | Finland                          | <i>American Mineralogist</i> <b>69</b> (1984), 383  | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1402         |
| Kadyrelite                     | $([\text{Hg}^{1+}]_2)_3\text{OBr}_3(\text{OH})$  | A  | 1986-042  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 733                   | <i>American Mineralogist</i> <b>77</b> (1992), 839            |
| Kaersutite                     | $\text{NaCa}_2(\text{Mg}_3\text{AlTi}^{4+})(\text{Si}_6\text{Al}_2)\text{O}_{22}\text{O}_2$                                  | Rd | 2012 s.p. | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>7</b> (1893), 27  | <i>Mineralogical Magazine</i> <b>39</b> (1973), 390           |
| Kahlerite                      | $\text{Fe}^{2+}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 12\text{H}_2\text{O}$   | G  | 1953      | Austria                          | <i>Der Karinthin</i> <b>23</b> (1953), 277  |   |
| Kainite                        | $\text{KMg}(\text{SO}_4)\text{Cl} \cdot 3\text{H}_2\text{O}$   | G  | 1865      | Germany                          | <i>Berg- und Huttenmannische Zeitung</i> <b>24</b> (1865), 79                                       | <i>American Mineralogist</i> <b>57</b> (1972), 1325           |
| Kainosite-(Y)                  | $\text{Ca}_2\text{Y}_2(\text{SiO}_3)_4(\text{CO}_3) \cdot \text{H}_2\text{O}$  | A  | 1987 s.p. | Norway                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>8</b> (1886), 143                        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 153 |
| Kainotropite                   | $\text{Cu}_4\text{Fe}^{3+}\text{O}_2(\text{V}_2\text{O}_7)(\text{VO}_4)$   | A  | 2015-053  | Russia                           | CNMNC Newsletter 27 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1223                          |   |

|               |  |    |           |                                  |   |  |
|---------------|--|----|-----------|----------------------------------|---|--|
| Kaitianite    | $Ti^{3+}_2Ti^{4+}O_5$                          | A  | 2017-078a | Mexico (meteorite)               | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405  |  |
| Kalborsite    | $K_6Al_4BSi_6O_{20}(OH)_4Cl$                   | A  | 1979-033  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>252</b> (1980), 1465   | <i>Doklady Akademii Nauk SSSR</i> <b>252</b> (1980), 611       |
| Kalgoorlieite | $As_2Te_3$                                     | A  | 2015-119  | Australia                        | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407   |  |
| Kaliborite    | $KHMg_2B_{12}O_{16}(OH)_{10} \cdot 4H_2O$      | G  | 1889      | Germany                          | <i>Chemiker-Zeitung</i> <b>73</b> (1889), 1188  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 885             |
| Kalicinite    | $KH(CO_3)$                                     | G  | 1865      | Switzerland                      | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>60</b> (1865), 918   | <i>American Mineralogist</i> <b>88</b> (2003), 1446            |
| Kalifersite   | $K_5Fe^{3+}_7Si_{20}O_{50}(OH)_6 \cdot 12H_2O$ | A  | 1996-007  | Russia                           | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 865   |  |
| Kalininite    | $ZnCr_2S_4$                                    | A  | 1984-028  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 622   | <i>Physics and Chemistry of Minerals</i> <b>24</b> (1997), 597 |
| Kalinite      | $KAl(SO_4)_2 \cdot 11H_2O$                     | Q  | 1868      | unknown                          | A System of Mineralogy, 5th ed. Wiley, New York (1868), 652   |  |
| Kaliochalcite | $KCu_2(SO_4)_2[(OH)(H_2O)]$                    | A  | 2013-037  | Russia                           | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 597   |  |
| Kaliophilite  | $KAlSiO_4$                                     | G  | 1887      | Italy                            | <i>Mineralogische und Petrographische Mitteilungen</i> <b>8</b> (1887), 113   | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 1209    |
| Kalistrontite | $K_2Sr(SO_4)_2$                                | A  | 1967 s.p. | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 712  | <i>American Mineralogist</i> <b>103</b> (2018), 1136           |
| Kalithallite  | $K_3Ti^{3+}Cl_6 \cdot 2H_2O$                   | A  | 2017-044  | Russia                           | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |  |
| Kalsilite     | $KAlSiO_4$                                     | G  | 1942      | Uganda                           | <i>Mineralogical Magazine</i> <b>26</b> (1942), 218   | <i>American Mineralogist</i> <b>95</b> (2010), 1024            |
| Kalungaitite  | $PdAsSe$                                       | A  | 2004-047  | Brazil                           | <i>Mineralogical Magazine</i> <b>70</b> (2006), 123   | <i>Journal of Solid State Chemistry</i> <b>162</b> (2001), 69  |
| Kamaishilite  | $Ca_2(SiAl_2)O_6(OH)_2$                        | A  | 1980-052  | Japan                            | <i>Proceedings of the Japan Academy</i> <b>57B</b> (1981), 239  |  |
| Kamarizaite   | $Fe^{3+}_3(AsO_4)_2(OH)_3 \cdot 3H_2O$         | A  | 2008-017  | Greece                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(3)</b> (2009), 100   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 71     |
| Kambaldaite   | $NaNi_4(CO_3)_3(OH)_3 \cdot 3H_2O$             | A  | 1982-098  | Australia                        | <i>American Mineralogist</i> <b>70</b> (1985), 419  | <i>American Mineralogist</i> <b>70</b> (1985), 423             |
| Kamchatkite   | $KCu_3O(SO_4)_2Cl$                             | A  | 1987-018  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>117</b> (1988), 459   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 499    |
| Kamenevite    | $K_2TiSi_3O_9 \cdot H_2O$                      | A  | 2017-021  | Russia                           | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |  |
| Kamiokite     | $Fe^{2+}_2Mo^{4+}_3O_8$                        | A  | 1975-003  | Japan                            | <i>Mineralogical Journal</i> <b>12</b> (1985), 393  | <i>Acta Crystallographica</i> <b>C42</b> (1986), 9             |
| Kamitugaite   | $PbAl(UO_2)_5(PO_4)_2(OH)_9 \cdot 9.5H_2O$     | Rn | 1983-030  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 15  |  |
| Kamotoite-(Y) | $Y_2O_4(UO_2)_4(CO_3)_3 \cdot 14H_2O$          | Rn | 1985-051  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>109</b> (1986), 643   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 653            |

|                   |   |   |           |                     |  |  |
|-------------------|---|---|-----------|---------------------|--|--|
| Kampelite         | Ba <sub>3</sub> Mg <sub>1.5</sub> Sc <sub>4</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>3</sub> ·4H <sub>2</sub> O  | A | 2016-084  | Russia              | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 111   |  |
| Kampfite          | Ba <sub>12</sub> (Si <sub>11</sub> Al <sub>5</sub> )O <sub>31</sub> (CO <sub>3</sub> ) <sub>8</sub> Cl <sub>5</sub>   | A | 2000-003  | USA                 | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1053  | <i>Canadian Mineralogist</i> <b>45</b> (2007), 935                         |
| Kamphaugite-(Y)   | CaY(CO <sub>3</sub> ) <sub>2</sub> (OH)·H <sub>2</sub> O  | A | 1987-043  | Norway              | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 679   | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 685                 |
| Kanemite          | HNaSi <sub>2</sub> O <sub>5</sub> ·3H <sub>2</sub> O  | A | 1971-050  | Chad                | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 371                      | <i>Mineralogical Magazine</i> <b>79</b> (2015), 103                        |
| Kangite           | (Sc, Ti, Al, Zr, Mg, Ca, □) <sub>2</sub> O <sub>3</sub>   | A | 2011-092  | Mexico (meteorite)  | <i>American Mineralogist</i> <b>98</b> (2013), 870   |  |
| Kaňkite           | Fe <sup>3+</sup> (AsO <sub>4</sub> )·3.5H <sub>2</sub> O  | A | 1975-005  | Czech Republic      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1976), 426  | <i>Mineralogical Journal</i> <b>12</b> (1984), 6                           |
| Kannanite         | Ca <sub>4</sub> Al <sub>4</sub> (MgAl)(VO <sub>4</sub> )(SiO <sub>4</sub> ) <sub>2</sub> (Si <sub>3</sub> O <sub>10</sub> )(OH) <sub>6</sub>                        | A | 2015-100  | Japan               | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  |  |
| Kanoite           | MnMgSi <sub>2</sub> O <sub>6</sub>  | A | 1977-020  | Japan               | <i>Journal of the Geological Society of Japan</i> <b>83</b> (1977), 537  | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 953                 |
| Kanonaite         | Mn <sup>3+</sup> AlOSiO <sub>4</sub>  | A | 1976-047  | Zambia              | <i>Contributions to Mineralogy and Petrology</i> <b>66</b> (1978), 325   | <i>Zeitschrift für Kristallographie</i> <b>155</b> (1981), 81              |
| Kanonerovite      | Na <sub>3</sub> MnP <sub>3</sub> O <sub>10</sub> ·12H <sub>2</sub> O  | A | 1997-016  | Russia              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 117  | <i>Acta Crystallographica</i> <b>C43</b> (1987), 4                         |
| Kaolinite         | Al <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>4</sub>  | A | 1980 s.p. | China               | <i>Clays and Clay Minerals</i> <b>28</b> (1980), 97  | <i>Mineralogical Magazine</i> <b>27</b> (1946), 242                        |
| Kapellasite       | Cu <sub>3</sub> Zn(OH) <sub>6</sub> Cl <sub>2</sub>   | A | 2005-009  | Greece              | <i>Mineralogical Magazine</i> <b>70</b> (2006), 329  |  |
| Kapitsaite-(Y)    | Ba <sub>4</sub> Y <sub>2</sub> Si <sub>8</sub> B <sub>4</sub> O <sub>28</sub> F   | A | 1998-057  | Tajikistan          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(6)</b> (2000), 42                                    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 74               |
| Kapundaite        | CaNaFe <sup>3+</sup> <sub>4</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>3</sub> ·5H <sub>2</sub> O  | A | 2009-047  | Australia           | <i>American Mineralogist</i> <b>95</b> (2010), 754   |  |
| Kapustinite       | Na <sub>6</sub> ZrSi <sub>6</sub> O <sub>16</sub> (OH) <sub>2</sub>   | A | 2003-018  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(6)</b> (2003), 1                                     | <i>Doklady Earth Sciences</i> <b>397</b> (2004), 658                       |
| Karasugite        | SrCaAlF <sub>7</sub>  | A | 1993-013  | Russia              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 209  |  |
| Karchevskiyite    | Mg <sub>18</sub> Al <sub>9</sub> (OH) <sub>54</sub> Sr <sub>2</sub> (CO <sub>3</sub> ) <sub>9</sub> (H <sub>2</sub> O) <sub>6</sub> (H <sub>3</sub> O) <sub>5</sub> | A | 2005-015a | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>136(5)</b> (2007), 52                                       |  |
| Karelianite       | V <sub>2</sub> O <sub>3</sub>   | A | 1967 s.p. | Finland             | <i>American Mineralogist</i> <b>48</b> (1963), 33  | <i>Journal of Applied Physics</i> <b>51</b> (1980), 5362                   |
| Karenwebberite    | Na(Fe <sup>2+</sup> , Mn <sup>2+</sup> )(PO <sub>4</sub> )  | A | 2011-015  | Italy               | <i>American Mineralogist</i> <b>98</b> (2013), 767   |  |
| Karibibite        | Fe <sup>3+</sup> <sub>3</sub> (As <sup>3+</sup> O <sub>2</sub> ) <sub>4</sub> (As <sup>3+</sup> O <sub>5</sub> )(OH)  | A | 1973-007  | Namibia             | <i>Lithos</i> <b>6</b> (1973), 265   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1191                       |
| Karlite           | (Mg, Al) <sub>6.5</sub> (BO <sub>3</sub> ) <sub>3</sub> (OH) <sub>4</sub> (□, Cl) <sub>0.5</sub>  | A | 1980-030  | Austria             | <i>American Mineralogist</i> <b>66</b> (1981), 872   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 253              |
| Karnasurtite-(Ce) | CeTiAlSi <sub>2</sub> O <sub>7</sub> (OH) <sub>4</sub> ·3H <sub>2</sub> O   | Q | 1987 s.p. | Russia              | <i>Trudy Institut Mineralogii, Geokhimii, Kristalloghimii Redkikh Elementov, Akademiia Nauk SSSR</i> <b>2</b> (1959), 95 |  |
| Karpenkoite       | Co <sub>3</sub> (V <sub>2</sub> O <sub>7</sub> )(OH) <sub>2</sub> ·2H <sub>2</sub> O  | A | 2014-092  | USA                 | <i>Journal of Geosciences</i> <b>60</b> (2015), 251  |  |
| Karpinskite       | (Mg, Ni) <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> (OH) <sub>2</sub> (?)  | Q | 1956      | Russia              | <i>Kora Vyvetrivaniya</i> <b>2</b> (1956), 124   | <i>Bulletin of the Geological Society of Denmark</i> <b>20</b> (1970), 492 |
| Karpovite         | Ti <sub>2</sub> VO(SO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O)  | A | 2013-040  | Russia              | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1699   |  |
| Karupmøllerite-Ca | (Na, Ca, K) <sub>2</sub> Ca(Nb, Ti) <sub>4</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>2</sub> (O, OH) <sub>4</sub> ·7H <sub>2</sub> O                            | A | 2001-028  | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 433  | <i>Doklady Akademii Nauk</i> <b>375</b> (2000), 487                        |



|                   |  |    |           |                                  |  |  |
|-------------------|--|----|-----------|----------------------------------|--|--|
| Kasatkinite       | $\text{Ba}_2\text{Ca}_8\text{B}_5\text{Si}_8\text{O}_{32}(\text{OH})_3 \cdot 6\text{H}_2\text{O}$                | A  | 2011-045  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(3)</b> (2012), 39   |  |
| Kashinite         | $\text{Ir}_2\text{S}_3$  | A  | 1982-036  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 617  |  |
| Kaskasite         | $(\text{Mo},\text{Nb})\text{S}_2 \cdot (\text{Mg}_{1-x}\text{Al}_x)(\text{OH})_{2+x}$                            | A  | 2013-025  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 663  |  |
| Kasolite          | $\text{Pb}(\text{UO}_2)(\text{SiO}_4) \cdot \text{H}_2\text{O}$  | A  | 1980 s.p. | Democratic Republic of the Congo | <i>Comptes rendus hebdomadaires des séances de l'Académie des Sciences</i> <b>173</b> (1921), 1476   | <i>Crystal Structure Communications</i> <b>6</b> (1977), 617             |
| Kassite           | $\text{CaTi}_2\text{O}_4(\text{OH})_2$   | A  | 1968 s.p. | Russia                           | The Caledonian complex of the ultrabasic alkaline rocks and carbonatites of the Kola Peninsula and northern Karelia. Izdatelstvo "Nedra", Moscow (1965), 368 | <i>American Mineralogist</i> <b>76</b> (1991), 283                       |
| Kastningite       | $\text{Mn}^{2+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$                                | A  | 1997-033  | Germany                          | <i>Lapis</i> <b>24(6)</b> (1999), 39   | <i>Zeitschrift für Kristallographie</i> <b>214</b> (1999), 465           |
| Katayamalite      | $\text{KLi}_3\text{Ca}_7\text{Ti}_2(\text{SiO}_3)_{12}(\text{OH})_2$   | A  | 1982-004  | Japan                            | <i>Mineralogical Journal</i> <b>11</b> (1983), 261   | <i>Acta Crystallographica</i> <b>E69</b> (2013), i41                     |
| Katerinopoulosite | $(\text{NH}_4)_2\text{Zn}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$  | A  | 2017-004  | Greece                           | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 821  |  |
| Katiarsite        | $\text{KTiO}(\text{AsO}_4)$  | A  | 2014-025  | Russia                           | <i>Mineralogical Magazine</i> <b>80</b> (2016), 639  |  |
| Katoite           | $\text{Ca}_3\text{Al}_2(\text{OH})_{12}$   | A  | 1982-080  | Italy                            | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 605  | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 1                      |
| Katophorite       | $\text{Na}(\text{NaCa})(\text{Mg}_4\text{Al})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$                   | A  | 2013-140  | Myanmar                          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 355  |  |
| Katoptrite        | $\text{Mn}^{2+}_{13}\text{Al}_4\text{Sb}^{5+}_2\text{O}_{20}(\text{SiO}_4)_2$                                    | G  | 1917      | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>39</b> (1917), 426  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>127</b> (1976), 47 |
| Kawazulite        | $\text{Bi}_2\text{Te}_2\text{Se}$  | A  | 1968-014  | Japan                            | <i>Geological Survey of Japan</i> (1970), 87   | <i>Canadian Mineralogist</i> <b>19</b> (1981), 341                       |
| Kayrobertsonite   | $\text{MnAl}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 6\text{H}_2\text{O}$  | A  | 2015-029  | Germany                          | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 649  |  |
| Kazakhstanite     | $\text{Fe}^{3+}_5\text{V}^{4+}_3\text{V}^{5+}_{12}\text{O}_{39}(\text{OH})_9 \cdot 9\text{H}_2\text{O}$          | A  | 1988-044  | Kazakhstan                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(5)</b> (1989), 95  |  |
| Kazakovite        | $\text{Na}_6\text{Mn}^{2+}\text{TiSi}_6\text{O}_{18}$  | A  | 1973-061  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 342  | <i>Doklady Akademii Nauk SSSR</i> <b>245</b> (1979), 106                 |
| Kazanskyite       | $\text{Ba}\square\text{TiNbNa}_3\text{Ti}(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_2$ | Rd | 2011-007  | Russia                           | <i>Mineralogical Magazine</i> <b>76</b> (2012), 473  |  |
| Keckite           | $\text{CaMn}(\text{Fe}^{3+},\text{Mn})_2\text{Fe}^{3+}_2(\text{PO}_4)_4(\text{OH})_3 \cdot 7\text{H}_2\text{O}$  | A  | 1977-028  | Germany                          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>134</b> (1979), 183  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1445                      |
| Kegelite          | $\text{Pb}_4\text{Al}_2\text{Si}_4\text{O}_{10}(\text{SO}_4)(\text{CO}_3)_2(\text{OH})_4$                        | Rd | 1974-042  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1976), 110  | <i>American Mineralogist</i> <b>75</b> (1990), 702                       |
| Kegginite         | $\text{Pb}_3\text{Ca}_3[\text{AsV}_{12}\text{O}_{40}(\text{VO})] \cdot 20\text{H}_2\text{O}$                     | A  | 2015-114  | USA                              | <i>American Mineralogist</i> <b>102</b> (2017), 461  |  |
| Keilite           | $\text{FeS}$   | A  | 2001-053  | Canada (meteorite)               | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1687  | <i>American Mineralogist</i> <b>92</b> (2007), 204                       |
| Keithconite       | $\text{Pd}_{20}\text{Te}_7$  | A  | 1978-032  | USA                              | <i>Canadian Mineralogist</i> <b>17</b> (1979), 589   | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751                       |
| Keiviite-(Y)      | $\text{Y}_2\text{Si}_2\text{O}_7$  | A  | 1984-054  | Russia                           | <i>Mineralogiceskij Zhurnal</i> <b>7</b> (1985), 79  | <i>Journal of Applied Crystallography</i> <b>44</b> (2011), 846          |
| Keiviite-(Yb)     | $\text{Yb}_2\text{Si}_2\text{O}_7$   | A  | 1982-065  | Russia                           | <i>Mineralogiceskij Zhurnal</i> <b>5</b> (1983), 94  | <i>Soviet Physics Doklady</i> <b>31</b> (1986), 930                      |
| Keldyshite        | $\text{Na}_2\text{ZrSi}_2\text{O}_7$   | A  | 1975-034  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>142</b> (1962), 916   | <i>Doklady Akademii Nauk SSSR</i> <b>238</b> (1978), 573                 |

|                     |   |    |           |                     |  |   |
|---------------------|---|----|-----------|---------------------|--|---|
| Kellyite            | $(\text{Mn}^{2+}, \text{Mg}, \text{Al})_3(\text{Si}, \text{Al})_2\text{O}_5(\text{OH})_4$   | A  | 1974-002  | USA                 | <i>American Mineralogist</i> <b>59</b> (1974), 1153  |   |
| Kelyanite           | $\text{Hg}_{12}\text{SbO}_6\text{BrCl}_2$   | A  | 1981-013  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 330  | <i>American Mineralogist</i> <b>93</b> (2008), 1666   |
| Kemmlitzite         | $\text{SrAl}_3(\text{AsO}_4)(\text{SO}_4)(\text{OH})_6$   | Rd | 1967-021  | Germany             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1969), 201  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 919   |
| Kempite             | $\text{Mn}^{2+}_2\text{Cl}(\text{OH})_3$  | G  | 1924      | USA                 | <i>American Journal of Science</i> <b>8</b> (1924), 145  |   |
| Kenhsuite           | $\text{Hg}_3\text{S}_2\text{Cl}_2$  | A  | 1996-026  | USA                 | <i>Canadian Mineralogist</i> <b>36</b> (1998), 201   |   |
| Kenoplumbomicrolite | $(\text{Pb}, \square)_2\text{Ta}_2\text{O}_6[\square, (\text{OH}), \text{O}]$   | A  | 2015-007a | Russia              | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   | <a href="https://doi.org/10.1180/minmag.2017.081.082">https://doi.org/10.1180/minmag.2017.081.082</a> |
| Kenotobermorite     | $\text{Ca}_4\text{Si}_6\text{O}_{15}(\text{OH})_2(\text{H}_2\text{O})_2 \cdot 3\text{H}_2\text{O}$  | A  | 2014 s.p. | South Africa        | <i>Mineralogical Magazine</i> <b>79</b> (2015), 485  |   |
| Kentbrooksite       | $(\text{Na}, \text{REE})_{15}(\text{Ca}, \text{REE})_6\text{Mn}_3\text{Zr}_3\text{Nb}(\text{Si}_{25}\text{O}_{73})(\text{O}, \text{OH}, \text{H}_2\text{O})_3(\text{F}, \text{Cl})_2$ | A  | 1996-023  | Denmark (Greenland) | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 207  |   |
| Kentrolite          | $\text{Pb}_2\text{Mn}^{3+}_2\text{O}_2(\text{Si}_2\text{O}_7)$  | G  | 1881      | Sweden              | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>5</b> (1881), 32  | <i>American Mineralogist</i> <b>93</b> (2008), 573  |
| Kenyaite            | $\text{Na}_2\text{Si}_{22}\text{O}_{41}(\text{OH})_8 \cdot 6\text{H}_2\text{O}$   | A  | 1967-018  | Kenya               | <i>Science</i> <b>157</b> (1967), 1177   | <i>American Mineralogist</i> <b>68</b> (1983), 818  |
| Kerimasite          | $\text{Ca}_3\text{Zr}_2(\text{SiFe}^{3+}_2)\text{O}_{12}$   | A  | 2009-029  | Tanzania            | <i>Mineralogical Magazine</i> <b>74</b> (2010), 803  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 715   |
| Kermesite           | $\text{Sb}_2\text{OS}_2$  | G  | 1843      | Germany             | <i>Practical mineralogy</i> . Bailliere, London (1843), 61   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 557   |
| Kernite             | $\text{Na}_2\text{B}_4\text{O}_6(\text{OH})_2 \cdot 3\text{H}_2\text{O}$  | G  | 1927      | USA                 | <i>American Mineralogist</i> <b>12</b> (1927), 24  | <i>American Mineralogist</i> <b>58</b> (1973), 21   |
| Kësterite           | $\text{Cu}_2\text{ZnSnS}_4$   | G  | 1956      | Russia              | <i>Trudy Vsesouznogo Magadansk Nauchno-Issledovatel'skii Institut Magadan</i> <b>2</b> (1956), 76                              | <i>Canadian Mineralogist</i> <b>41</b> (2003), 639  |
| Kettnerite          | $\text{CaBiO}(\text{CO}_3)\text{F}$   | G  | 1956      | Czech Republic      | <i>Casopis pro Mineralogii a Geologii</i> <b>1</b> (1956), 195   | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 411   |
| Keutschite          | $\text{Cu}_2\text{AgAsS}_4$   | A  | 2014-038  | Peru                | CNMNC Newsletter 21 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 797  |   |
| Keyite              | $\text{Cu}^{2+}_3\text{Zn}_4\text{Cd}_2(\text{AsO}_4)_6 \cdot 2\text{H}_2\text{O}$  | A  | 1975-002  | Namibia             | <i>Mineralogical Record</i> <b>8</b> (1977), 87  | <i>Canadian Mineralogist</i> <b>34</b> (1996), 623  |
| Keystoneite         | $\text{Mg}_{0.5}\text{NiFe}^{3+}(\text{Te}^{4+}\text{O}_3)_3 \cdot 4.5\text{H}_2\text{O}$   | A  | 1987-049  | USA                 | <i>Joint Annual Meeting of the Geological and Mineralogical Associations of Canada, Program Abstracts</i> <b>13</b> (1988), A4 | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 509  |
| Khademite           | $\text{Al}(\text{SO}_4)\text{F} \cdot 5\text{H}_2\text{O}$  | Rd | 1973-028  | Iran                | <i>Comptes Rendus des Seances de l'Académie des Sciences, Série C</i> <b>277</b> (1973), 1585                                  | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 19  |
| Khaidarkanite       | $\text{Cu}_4\text{Al}_3(\text{OH})_{14}\text{F}_3 \cdot 2\text{H}_2\text{O}$  | A  | 1998-013  | Kyrgyzstan          | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(3)</b> (1999), 58  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 635  |
| Khamrabaevite       | TiC   | A  | 1983-059  | Uzbekistan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 697  |   |
| Khanneshite         | $(\text{Na}, \text{Ca})_3(\text{Ba}, \text{Sr}, \text{Ce}, \text{Ca})_3(\text{CO}_3)_5$   | A  | 1981-025  | Afghanistan         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 321  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(2)</b> (1998), 92                 |
| Kharaelakhite       | $(\text{Cu}, \text{Pt}, \text{Pb}, \text{Fe}, \text{Ni})_9\text{S}_8$   | A  | 1983-080  | Russia              | <i>Mineralogiceskij Zhurnal</i> <b>7</b> (1985), 78  |   |
| Khatyrkite          | $\text{CuAl}_2$   | A  | 1983-085  | Russia (meteorite)  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 90   |   |

|                 |   |   |           |                                  |  |   |
|-----------------|---|---|-----------|----------------------------------|--|---|
| Khesinite       | $\text{Ca}_4(\text{Mg}_2\text{Fe}^{3+}_{10})\text{O}_4(\text{Fe}^{3+}_{10}\text{Si}_2)\text{O}_{36}$  | A | 2014-033  | Israel                           | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 101  |   |
| Khibinskite     | $\text{K}_2\text{ZrSi}_2\text{O}_7$   | A | 1973-014  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 110  | <i>Doklady Akademii Nauk SSSR</i> <b>231</b> (1976), 1351                 |
| Khinite         | $\text{Cu}^{2+}_3\text{PbTe}^{6+}\text{O}_6(\text{OH})_2$   | A | 1978-035  | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 1016  | <i>Mineralogical Magazine</i> <b>72</b> (2008), 763                       |
| Khmaralite      | $\text{Mg}_4(\text{Mg}_3\text{Al}_9)\text{O}_4[\text{Si}_5\text{Be}_2\text{Al}_5\text{O}_{36}]$   | A | 1998-027  | Antarctica                       | <i>American Mineralogist</i> <b>84</b> (1999), 1650  | <i>American Mineralogist</i> <b>89</b> (2004), 627                        |
| Khomyakovite    | $\text{Na}_{12}\text{Sr}_3\text{Ca}_6\text{Fe}_3\text{Zr}_3\text{W}(\text{Si}_{25}\text{O}_{73})(\text{O},\text{OH},\text{H}_2\text{O})_3(\text{Cl},\text{OH})_2$ | A | 1998-042  | Canada                           | <i>Canadian Mineralogist</i> <b>37</b> (1999), 993   |   |
| Khorixasite     | $(\text{Bi}_{0.67}\square_{0.33})\text{Cu}(\text{VO}_4)(\text{OH})$   | A | 2016-048  | Namibia                          | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Khrenovite      | $\text{Na}_3\text{Fe}^{3+}_2(\text{AsO}_4)_3$   | A | 2017-105  | Russia                           | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |   |
| Khrivovite-(Ce) | $\text{CaCe}(\text{MgAlMn}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{F}(\text{OH})$   | A | 1991-055  | Kyrgyzstan                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(3)</b> (1993), 103   | <i>Soviet Physics - Crystallography</i> <b>36</b> (1991), 172             |
| Khvorovite      | $\text{Pb}_4\text{Ca}_2[\text{Si}_8\text{B}_2(\text{Si},\text{B})_2\text{O}_{28}]\text{F}$  | A | 2014-050  | Tajikistan                       | <i>Mineralogical Magazine</i> <b>79</b> (2015), 949  |   |
| Kiddcreekite    | $\text{Cu}_6\text{WSnS}_8$  | A | 1982-106  | Canada                           | <i>Canadian Mineralogist</i> <b>22</b> (1984), 227   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1517                      |
| Kidwellite      | $\text{NaFe}^{3+}_{9+x}(\text{PO}_4)_6(\text{OH})_{11}\cdot 3\text{H}_2\text{O}$ ( $x \approx 0.33$ )   | A | 1974-024  | USA                              | <i>Mineralogical Magazine</i> <b>42</b> (1978), 137  | <i>Mineralogical Magazine</i> <b>68</b> (2004), 147                       |
| Kieftite        | $\text{CoSb}_3$   | A | 1991-052  | Sweden                           | <i>Canadian Mineralogist</i> <b>32</b> (1994), 179   |   |
| Kieserite       | $\text{Mg}(\text{SO}_4)\cdot\text{H}_2\text{O}$   | A | 1967 s.p. | Germany                          | <i>Nova Acta Leopoldina</i> <b>27</b> (1860), 634  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>157</b> (1987), 121 |
| Kihlmanite-(Ce) | $\text{Ce}_2\text{TiO}_2(\text{SiO}_4)(\text{HCO}_3)_2(\text{H}_2\text{O})$   | A | 2012-081  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 483  |   |
| Kilchoanite     | $\text{Ca}_6(\text{SiO}_4)(\text{Si}_3\text{O}_{10})$   | G | 1961      | United Kingdom                   | <i>Nature</i> <b>189</b> (1961), 743   | <i>Mineralogical Magazine</i> <b>38</b> (1971), 26                        |
| Killalaite      | $\text{Ca}_{6.4}[\text{H}_{0.6}\text{Si}_2\text{O}_7]_2(\text{OH})_2$   | A | 1973-033  | Ireland                          | <i>Mineralogical Magazine</i> <b>39</b> (1974), 544  | <i>Mineralogical Magazine</i> <b>41</b> (1977), 363                       |
| Kimrobinsonite  | $\text{Ta}(\text{OH})_3(\text{O},\text{CO}_3)$  | A | 1983-023  | Australia                        | <i>Canadian Mineralogist</i> <b>23</b> (1985), 573   |   |
| Kimuraite-(Y)   | $\text{CaY}_2(\text{CO}_3)_4\cdot 6\text{H}_2\text{O}$  | A | 1984-073  | Japan                            | <i>American Mineralogist</i> <b>71</b> (1986), 1028  |   |
| Kimzeyite       | $\text{Ca}_3\text{Zr}_2(\text{SiAl}_2)\text{O}_{12}$  | A | 1967 s.p. | USA                              | <i>Science</i> <b>127</b> (1958), 1343   | <i>American Mineralogist</i> <b>65</b> (1980), 188                        |
| Kingite         | $\text{Al}_3(\text{PO}_4)_2\text{F}_2(\text{OH})\cdot 7\text{H}_2\text{O}$  | G | 1957      | Australia                        | <i>Mineralogical Magazine</i> <b>31</b> (1957), 351  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 135                        |
| Kingsmountite   | $\text{Ca}_4\text{Fe}^{2+}\text{Al}_4(\text{PO}_4)_6(\text{OH})_4\cdot 12\text{H}_2\text{O}$  | A | 1978-041  | USA                              | <i>Canadian Mineralogist</i> <b>17</b> (1979), 579   |   |
| Kingstonite     | $\text{Rh}_3\text{S}_4$   | A | 1993-046  | Ethiopia                         | <i>Mineralogical Magazine</i> <b>69</b> (2005), 447  |   |
| Kinichilite     | $\text{Mg}_{0.5}\text{Mn}^{2+}\text{Fe}^{3+}(\text{Te}^{4+}\text{O}_3)_3\cdot 4.5\text{H}_2\text{O}$  | A | 1979-031  | Japan                            | <i>Mineralogical Journal</i> <b>10</b> (1981), 333   | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 509                |
| Kinoite         | $\text{Ca}_2\text{Cu}_2\text{Si}_3\text{O}_{10}\cdot 2\text{H}_2\text{O}$   | A | 1969-037  | USA                              | <i>American Mineralogist</i> <b>55</b> (1970), 709   | <i>American Mineralogist</i> <b>56</b> (1971), 193                        |
| Kinoshitalite   | $\text{BaMg}_3(\text{Si}_2\text{Al}_2\text{O}_{10})(\text{OH})_2$   | A | 1973-011  | Japan                            | <i>Chigaku Kenkyu</i> <b>24</b> (1973), 181  | <i>American Mineralogist</i> <b>85</b> (2000), 242                        |
| Kintoreite      | $\text{PbFe}^{3+}_3(\text{PO}_4)(\text{PO}_3\text{OH})(\text{OH})_6$  | A | 1992-045  | Australia                        | <i>Mineralogical Magazine</i> <b>59</b> (1995), 143  | <i>American Mineralogist</i> <b>94</b> (2009), 676                        |
| Kipushite       | $\text{Cu}_6(\text{PO}_4)_2(\text{OH})_6\cdot\text{H}_2\text{O}$  | A | 1983-046  | Democratic Republic of the Congo | <i>Canadian Mineralogist</i> <b>23</b> (1985), 35  |   |
| Kircherite      | $[\text{Na}_5\text{Ca}_2\text{K}](\text{Si}_6\text{Al}_6\text{O}_{24})(\text{SO}_4)_2\cdot 0.33\text{H}_2\text{O}$  | A | 2009-084  | Italy                            | <i>American Mineralogist</i> <b>97</b> (2012), 1494  |   |
| Kirchhoffite    | $\text{CsBSi}_2\text{O}_6$  | A | 2009-094  | Tajikistan                       | <i>Canadian Mineralogist</i> <b>50</b> (2012), 523   |   |
| Kirkiite        | $\text{Pb}_{10}\text{Bi}_3\text{As}_3\text{S}_{19}$   | A | 1984-030  | Greece                           | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 667  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 177                        |
| Kirschsteinite  | $\text{CaFe}^{2+}(\text{SiO}_4)$  | G | 1957      | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>31</b> (1957), 698  | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 969                |

|                |  |    |           |                                  |   |  |
|----------------|--|----|-----------|----------------------------------|---|--|
| Kitagoite      | Pt <sub>7</sub> Cu   | A  | 2013-114  | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>78</b> (2014), 739   |  |
| Kitkaite       | NiTeSe   | A  | 1968 s.p. | Finland                          | <i>American Mineralogist</i> <b>50</b> (1965), 581  |  |
| Kittatinnyite  | Ca <sub>2</sub> Mn <sup>2+</sup> Mn <sup>3+</sup> <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·9H <sub>2</sub> O | A  | 1982-083  | USA                              | <i>American Mineralogist</i> <b>68</b> (1983), 1029   |  |
| Kladnoite      | C <sub>6</sub> H <sub>4</sub> (CO) <sub>2</sub> NH   | G  | 1942      | Czech Republic                   | <i>Rozprawy České Akademie</i> <b>52</b> (1942), 4 p.   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 415                 |
| Klajite        | MnCu <sub>4</sub> (AsO <sub>4</sub> ) <sub>2</sub> (AsO <sub>3</sub> OH) <sub>2</sub> ·9H <sub>2</sub> O                             | A  | 2010-004  | Hungary                          | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 829   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 119                  |
| Klaprothite    | Na <sub>6</sub> (UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>4</sub> (H <sub>2</sub> O) <sub>4</sub>                                    | A  | 2015-087  | USA                              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 753   |  |
| Klebensbergite | Sb <sup>3+</sup> <sub>4</sub> O <sub>4</sub> (SO <sub>4</sub> )(OH) <sub>2</sub>   | Rd | 1980 s.p. | Romania                          | <i>Matematikai és Természet-tudományi Értesítő</i> <b>46</b> (1929), 19                               | <i>American Mineralogist</i> <b>100</b> (2015), 602                  |
| Kleberite      | Fe <sup>3+</sup> Ti <sub>6</sub> O <sub>11</sub> (OH) <sub>5</sub>   | A  | 2012-023  | Germany                          | <i>Mineralogical Magazine</i> <b>77</b> (2013), 45  |  |
| Kleemanite     | ZnAl <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·3H <sub>2</sub> O   | A  | 1978-043  | Australia                        | <i>Mineralogical Magazine</i> <b>43</b> (1979), 93  |  |
| Kleinite       | (Hg <sub>2</sub> N)(Cl,SO <sub>4</sub> )·nH <sub>2</sub> O   | G  | 1905      | USA                              | <i>Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften</i> <b>21</b> (1905), 1091 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1996), 49         |
| Klöchite       | (Fe <sup>2+</sup> Fe <sup>3+</sup> )□ <sub>2</sub> KZn <sub>3</sub> (Si <sub>12</sub> O <sub>30</sub> )                              | A  | 2007-054  | Austria                          | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1115   |  |
| Klockmannite   | Cu <sub>5.2</sub> Se <sub>6</sub>  | G  | 1928      | Argentina                        | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1928), 225                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 167        |
| Klyuchevskite  | K <sub>3</sub> Cu <sub>3</sub> Fe <sup>3+</sup> O <sub>2</sub> (SO <sub>4</sub> ) <sub>4</sub>                                       | A  | 1987-027  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(1)</b> (1989), 70                 | <i>Mineralogical Magazine</i> <b>56</b> (1992), 411                  |
| Knasibfite     | K <sub>3</sub> Na <sub>4</sub> (SiF <sub>6</sub> ) <sub>3</sub> (BF <sub>4</sub> )   | A  | 2006-042  | Italy                            | <i>Canadian Mineralogist</i> <b>46</b> (2008), 447  |  |
| Knorringtonite | Mg <sub>3</sub> Cr <sub>2</sub> (SiO <sub>4</sub> ) <sub>3</sub>   | A  | 1968-010  | Lesotho                          | <i>American Mineralogist</i> <b>53</b> (1968), 1833   | <i>American Mineralogist</i> <b>95</b> (2010), 59                    |
| Koashvite      | Na <sub>6</sub> CaTiSi <sub>6</sub> O <sub>18</sub>  | A  | 1973-026  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 559                     | <i>Mineralogicheskii Zhurnal</i> <b>2(5)</b> (1980), 40              |
| Kobeite-(Y)    | (Y,U)(Ti,Nb) <sub>2</sub> (O,OH) <sub>6</sub> (?)  | A  | 1987 s.p. | Japan                            | <i>Journal of the Geological Society of Japan</i> <b>56</b> (1950), 509                               | <i>Mineralogical Journal</i> <b>3</b> (1961), 139                    |
| Kobellite      | Pb <sub>11</sub> (Cu,Fe) <sub>2</sub> (Bi,Sb) <sub>15</sub> S <sub>35</sub>  | G  | 1841      | Sweden                           | <i>Svenska Vetenskaps-Akademiens Handlingar</i> (1841), 188   | <i>Journal of Mineralogy and Geochemistry</i> <b>191</b> (2013), 109 |
| Kobokoboite    | Al <sub>6</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>6</sub> ·11H <sub>2</sub> O  | A  | 2009-057  | Democratic Republic of the Congo | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 305   |  |
| Kobyrashevite  | Cu <sub>5</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub> ·4H <sub>2</sub> O   | A  | 2011-066  | Russia                           | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 201  |  |
| Kochite        | Ca <sub>2</sub> MnZrNa <sub>3</sub> Ti(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (OF)F <sub>2</sub>                              | Rd | 2002-012  | Denmark (Greenland)              | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 551   |  |
| Kochkarite     | PbBi <sub>4</sub> Te <sub>7</sub>  | A  | 1988-030  | Russia                           | <i>Geologiya Rudnykh Mestorozhdenii</i> <b>31</b> (1989), 98  |  |
| Kochsándorite  | CaAl <sub>2</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·H <sub>2</sub> O  | A  | 2004-037  | Hungary                          | <i>Canadian Mineralogist</i> <b>45</b> (2007), 479  |  |
| Koehlinite     | Bi <sub>2</sub> MoO <sub>6</sub>   | G  | 1914      | Germany                          | <i>Journal of the Washington Academy of Sciences</i> <b>4</b> (1914), 354                             | <i>Acta Crystallographica</i> <b>C40</b> (1984), 2001                |
| Koenenite      | Na <sub>4</sub> Mg <sub>9</sub> Al <sub>4</sub> Cl <sub>12</sub> (OH) <sub>22</sub>  | G  | 1902      | Germany                          | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1902), 493                           | <i>Zeitschrift für Kristallographie</i> <b>126</b> (1968), 7         |
| Kogarkoite     | Na <sub>3</sub> (SO <sub>4</sub> )F  | A  | 1970-038  | Russia                           | <i>American Mineralogist</i> <b>58</b> (1973), 116  | <i>Mineralogical Magazine</i> <b>43</b> (1980), 753                  |
| Kojonenite     | Pd <sub>7-x</sub> SnTe <sub>2</sub> (0.3 ≤ x ≤ 0.8)  | A  | 2013-132  | USA                              | <i>American Mineralogist</i> <b>100</b> (2015), 447   |  |

|              |  |    |           |                                  |   |   |
|--------------|--|----|-----------|----------------------------------|---|---|
| Kokchetavite | $K(AlSi_3O_8)$   | A  | 2004-011  | Kazakhstan                       | <i>Contributions to Mineralogy and Petrology</i> <b>148</b> (2004), 380   |   |
| Kokinosite   | $Na_2Ca_2(V_{10}O_{28}) \cdot 24H_2O$                            | A  | 2013-099  | USA                              | <i>Canadian Mineralogist</i> <b>52</b> (2014), 15   |   |
| Koksharovite | $CaMg_2Fe^{3+}_4(VO_4)_6$  | A  | 2012-092  | Russia                           | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 667   |   |
| Koktaite     | $(NH_4)_2Ca(SO_4)_2 \cdot H_2O$                                  | G  | 1948      | Czech Republic                   | <i>Acta Academiae Scientiarum Naturalium Moravo-Silesiaca</i> <b>20</b> (1948), 1                               |   |
| Kolarite     | $PbTeCl_2$   | A  | 1983-081  | India                            | <i>Canadian Mineralogist</i> <b>23</b> (1985), 501  |   |
| Kolbeckite   | $Sc(PO_4) \cdot 2H_2O$   | A  | 1987 s.p. | Germany                          | <i>Jahrbuch für das Berg-und Hüttenwesen im Sachsen</i> <b>100</b> (1926), 73                                   | <i>Acta Crystallographica</i> <b>C63</b> (2007), i91                      |
| Kolfanite    | $Ca_2Fe^{3+}_3O_2(AsO_4)_3 \cdot 2H_2O$                          | A  | 1981-017  | Russia                           | <i>Mineralogicheskij Zhurnal</i> <b>4(2)</b> (1982), 90   |   |
| Kolicite     | $Zn_4Mn^{2+}_7(AsO_4)_2(SiO_4)_2(OH)_8$                          | A  | 1978-076  | USA                              | <i>American Mineralogist</i> <b>64</b> (1979), 708  | <i>American Mineralogist</i> <b>65</b> (1980), 483                        |
| Kolitschite  | $Pb[Zn_{0.5}, \square_{0.5}]Fe_3(AsO_4)_2(OH)_6$                 | A  | 2008-063  | Australia                        | <i>Australian Journal of Mineralogy</i> <b>14</b> (2008), 63  |   |
| Kolovratite  | $(Ni,Zn)_x(VO_4) \cdot nH_2O$                                    | Q  | 1922      | Kyrgyzstan                       | <i>Comptes Rendus de l'Academie des Sciences de Russie</i> (1922), 37   | <i>Canadian Mineralogist</i> <b>7</b> (1962), 311                         |
| Kolskyite    | $(Ca\square)Ti_2Na_2Ti_2(Si_2O_7)_2O_4(H_2O)_7$                  | Rd | 2013-005  | Russia                           | <i>Canadian Mineralogist</i> <b>51</b> (2013), 921  |   |
| Kolwezite    | $(Cu,Co)_2(CO_3)(OH)_2$  | Rn | 1979-017  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 179   | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 787               |
| Kolymite     | $Cu_7Hg_6$   | A  | 1979-046  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 206                               |   |
| Komarovite   | $(Ca,Sr,Na)_{6-x}(Nb,Ti)_6(Si_4O_{12})(O,OH,F)_{16} \cdot nH_2O$ | A  | 1971-011  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>100</b> (1971), 599                               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 497             |
| Kombatite    | $Pb_{14}O_9(VO_4)_2Cl_4$   | A  | 1985-056  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 519   | <i>American Mineralogist</i> <b>79</b> (1994), 550                        |
| Komkovite    | $BaZrSi_3O_9 \cdot 3H_2O$  | A  | 1988-032  | Russia                           | <i>Mineralogicheskij Zhurnal</i> <b>12(3)</b> (1990), 69  | <i>Doklady Akademii Nauk SSSR</i> <b>320</b> (1991), 1384                 |
| Konderite    | $PbCu_3Rh_8S_{16}$   | A  | 1983-053  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 703                               |   |
| Koninckite   | $Fe^{3+}(PO_4) \cdot 3H_2O$                                      | G  | 1884      | Belgium                          | <i>Société Géologique de Belgique, Mémoires</i> , <b>11</b> (1883-1884), 274                                    | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1159                      |
| Kononovite   | $NaMg(SO_4)F$  | A  | 2013-116  | Russia                           | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 575   |   |
| Konyaite     | $Na_2Mg(SO_4)_2 \cdot 5H_2O$                                     | A  | 1981-003  | Turkey                           | <i>American Mineralogist</i> <b>67</b> (1982), 1035   | <i>American Mineralogist</i> <b>94</b> (2009), 1005                       |
| Koragoite    | $Mn^{2+}_2Mn^{3+}Nb_2(Nb,Ta)_3W_2O_{20}$                         | A  | 1994-049  | Tajikistan                       | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>353A</b> (1996), 341 | <i>Kristallografiya</i> <b>40</b> (1995), 469                             |
| Koritnigite  | $Zn(AsO_3OH) \cdot H_2O$   | A  | 1978-008  | Namibia                          | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 51                          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 316 |
| Kornelite    | $Fe^{3+}_2(SO_4)_3 \cdot 7H_2O$ (?)                              | G  | 1888      | Slovakia                         | <i>Magyar Tudományos Akadémia Értesítője</i> <b>22</b> (1888), 131  | <i>American Mineralogist</i> <b>94</b> (2009), 1620                       |

|                 |   |    |           |                      |  |   |
|-----------------|---|----|-----------|----------------------|--|---|
| Kornerupine     | $(\text{Mg}, \text{Fe}^{2+}, \text{Al}, \square)_{10}(\text{Si}, \text{Al}, \text{B})_5\text{O}_{21}(\text{OH}, \text{F})_2$                                | G  | 1884      | Denmark (Greenland)  | <i>Meddelelser om Grønland</i> <b>7</b> (1884), 19   | <i>American Mineralogist</i> <b>84</b> (1999), 550                                    |
| Korobitsynite   | $(\text{Na}, \square)_4\text{Ti}_2(\text{Si}_4\text{O}_{12})(\text{O}, \text{OH})_2 \cdot 4\text{H}_2\text{O}$  | A  | 1998-019  | Russia               | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(3)</b> (1999), 72  |   |
| Korshunovskite  | $\text{Mg}_2\text{Cl}(\text{OH})_3 \cdot 4\text{H}_2\text{O}$   | A  | 1980-083  | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 324  | <i>Acta Crystallographica</i> <b>6</b> (1953), 40                                     |
| Koryakite       | $\text{NaKMg}_2\text{Al}_2(\text{SO}_4)_6$  | A  | 2018-013  | Russia               | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |   |
| Korzhinskite    | $\text{CaB}_2\text{O}_4 \cdot 0.5\text{H}_2\text{O}$  | A  | 1967 s.p. | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 555   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(4)</b> (1996), 60 |
| Kosmochlor      | $\text{NaCr}^{3+}\text{Si}_2\text{O}_6$   | A  | 1988 s.p. | Mexico               | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>27</b> (1897), 586  | <i>American Mineralogist</i> <b>88</b> (2003), 1025                                   |
| Kosnarite       | $\text{KZr}_2(\text{PO}_4)_3$   | A  | 1991-022  | USA                  | <i>American Mineralogist</i> <b>78</b> (1993), 653   | <i>Zeitschrift für Kristallographie</i> <b>130</b> (1969), 148                        |
| Kostovite       | $\text{AuCuTe}_4$   | A  | 1965-002  | Bulgaria             | <i>American Mineralogist</i> <b>51</b> (1966), 29  | <i>Geochemistry, Mineralogy, Petrology</i> <b>42</b> (2005), 1                        |
| Kostylevite     | $\text{K}_2\text{ZrSi}_3\text{O}_9 \cdot \text{H}_2\text{O}$  | A  | 1982-053  | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 469  | <i>Doklady Akademii Nauk SSSR</i> <b>256</b> (1981), 1860                             |
| Kotoite         | $\text{Mg}_3(\text{BO}_3)_2$  | G  | 1939      | North Korea          | <i>Mineralogische und Petrographische Mitteilungen</i> <b>50</b> (1939), 441   | <i>Zeitschrift für Kristallographie</i> <b>166</b> (1984), 129                        |
| Kottenheimite   | $\text{Ca}_3\text{Si}(\text{SO}_4)_2(\text{OH})_6 \cdot 12\text{H}_2\text{O}$   | A  | 2011-038  | Germany              | <i>Canadian Mineralogist</i> <b>50</b> (2012), 55  |   |
| Köttigite       | $\text{Zn}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$   | G  | 1850      | Germany              | A System of Mineralogy, 3rd ed. Putnam, New York (1850), 487   | <i>American Mineralogist</i> <b>64</b> (1979), 376                                    |
| Kotulskite      | $\text{Pd}(\text{Te}, \text{Bi})_{2-x} (x \approx 0.4)$   | A  | 1967 s.p. | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 33  |   |
| Koutekite       | $\text{Cu}_5\text{As}_2$  | G  | 1958      | Czech Republic       | <i>Nature</i> <b>181</b> (1958), 1553  | <i>Journal of the Less-Common Metals</i> <b>23</b> (1971), 231                        |
| Kovdorskite     | $\text{Mg}_2(\text{PO}_4)(\text{OH}) \cdot 3\text{H}_2\text{O}$   | A  | 1979-066  | Russia               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 341  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>119(6)</b> (1990), 92   |
| Kozoite-(La)    | $\text{La}(\text{CO}_3)(\text{OH})$   | A  | 2002-054  | Japan                | <i>Journal of Mineralogical and Petrological Sciences</i> <b>98</b> (2003), 137  |   |
| Kozoite-(Nd)    | $\text{Nd}(\text{CO}_3)(\text{OH})$   | A  | 1998-063  | Japan                | <i>American Mineralogist</i> <b>85</b> (2000), 1076  | <i>Materials Research Bulletin</i> <b>9</b> (1974), 1577                              |
| Kozyrevskite    | $\text{Cu}_4\text{O}(\text{AsO}_4)_2$   | A  | 2013-023  | Russia               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1553   |   |
| Kraisslite      | $\text{Zn}_3(\text{Mn}, \text{Mg})_{25}(\text{Fe}^{3+}, \text{Al})(\text{As}^{3+}\text{O}_3)_2[(\text{Si}, \text{As}^{5+})\text{O}_4]_{10}(\text{OH})_{16}$ | A  | 1977-003  | USA                  | <i>American Mineralogist</i> <b>63</b> (1978), 938   | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2819                                  |
| Krashennikovite | $\text{KNa}_2\text{CaMg}(\text{SO}_4)_3\text{F}$  | A  | 2011-044  | Russia               | <i>American Mineralogist</i> <b>97</b> (2012), 1788  |   |
| Krásnoite       | $\text{Ca}_3\text{Al}_{7.7}\text{Si}_3\text{P}_4\text{O}_{22.9}(\text{OH})_{13.3}\text{F}_2 \cdot 8\text{H}_2\text{O}$                                      | Rd | 2017 s.p. | Czech Republic / USA | <i>Mineralogical Magazine</i> <b>76</b> (2012), 625  |   |
| Krasnovite      | $\text{Ba}(\text{Al}, \text{Mg})(\text{PO}_4, \text{CO}_3)(\text{OH})_2 \cdot \text{H}_2\text{O}$   | A  | 1991-020  | Russia               | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(3)</b> (1996), 110   |   |



|                |  |   |           |                     |  |   |
|----------------|--|---|-----------|---------------------|--|---|
| Kratochvílite  | $C_{13}H_{10}$                                 | G | 1937      | Czech Republic      | <i>Rozpravy Ceske Akademie, KI II</i> <b>47</b> (1937), 6 p.   | <i>Mineralien-Welt</i> <b>6(4)</b> (1995), 25                                     |
| Krausite       | $KFe^{3+}(SO_4)_2 \cdot H_2O$                  | G | 1931      | USA                 | <i>American Mineralogist</i> <b>16</b> (1931), 352   | <i>American Mineralogist</i> <b>71</b> (1986), 202                                |
| Krauskopfite   | $BaSi_2O_5 \cdot 3H_2O$                        | A | 1964-008  | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 314   | <i>Atti della Accademia Nazionale dei Lincei, Ser. VIII</i> <b>42</b> (1967), 859 |
| Krautite       | $Mn(AsO_3OH) \cdot H_2O$                       | A | 1974-028  | Romania             | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>98</b> (1975), 78                                       | <i>American Mineralogist</i> <b>64</b> (1979), 1248                               |
| Kravtsovite    | $PdAg_2S$                                      | A | 2016-092  | Russia              | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 597  |   |
| Kremersite     | $(NH_4)_2Fe^{3+}Cl_5 \cdot H_2O$               | G | 1853      | Italy               | Das Mohs'sche Mineralsystem. Gerold, Wien (1853)   | <i>Australian Journal of Chemistry</i> <b>31</b> (1978), 2717                     |
| Krennerite     | $Au_3AgTe_8$                                   | G | 1877      | Romania             | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>1</b> (1877), 614   | <i>Canadian Mineralogist</i> <b>50</b> (2012), 119                                |
| Krettnichite   | $PbMn^{3+}_2(VO_4)_2(OH)_2$                    | A | 1998-044  | Germany             | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 145  |   |
| Kribergite     | $Al_5(PO_4)_3(SO_4)(OH)_4 \cdot 4H_2O$         | G | 1945      | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>67</b> (1945), 78   | <i>Mineralogical Magazine</i> <b>53</b> (1989), 385                               |
| Krieselite     | $Al_2(GeO_4)F_2$                               | A | 2000-043a | Namibia             | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>187</b> (2010), 33   |   |
| Krinovite      | $Na_4[Mg_8Cr^{3+}_4]O_4[Si_{12}O_{36}]$        | A | 1967-016  | USA (meteorite)     | <i>Science</i> <b>161</b> (1968), 786  | <i>Zeitschrift für Kristallographie</i> <b>187</b> (1989), 133                    |
| Kristiansenite | $Ca_2ScSn(Si_2O_7)(Si_2O_6OH)$                 | A | 2000-051  | Norway              | <i>Mineralogy and Petrology</i> <b>75</b> (2002), 89   | <i>Zeitschrift für Kristallographie</i> <b>216</b> (2001), 442                    |
| Krivovichevite | $Pb_3Al(OH)_6(SO_4)(OH)$                       | A | 2004-053  | Russia              | <i>Canadian Mineralogist</i> <b>45</b> (2007), 451   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 153                                |
| Kröhnkite      | $Na_2Cu(SO_4)_2 \cdot 2H_2O$                   | G | 1879      | Chile               | Mineralojía. Libreria Central de Servat I CA, Santiago (1879), 250   | <i>Acta Crystallographica</i> <b>B31</b> (1975), 1753                             |
| Krotite        | $CaAl_2O_4$                                    | A | 2010-038  | Morocco (meteorite) | <i>American Mineralogist</i> <b>96</b> (2011), 709   |   |
| Kroupaite      | $KPb_{0.5}[(UO_2)_8O_4(OH)_{10}] \cdot 10H_2O$ | A | 2017-031  | Czech Republic      | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779  |   |
| Kruijenite     | $Ca_4Al_4(SO_4)F_2(OH)_{16} \cdot 2H_2O$       | A | 2018-057  | Germany             | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Krupkaite      | $PbCuBi_3S_6$                                  | A | 1974-020  | Czech Republic      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1974), 533  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 525                                |
| Krut'aite      | $CuSe_2$                                       | A | 1972-001  | Czech Republic      | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 475                                      | <i>Acta Chemica Scandinavica</i> <b>A28</b> (1974), 996                           |
| Krutovite      | $NiAs_2$                                       | A | 1975-009  | Czech Republic      | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 59   | <i>Inorganic Chemistry</i> <b>7</b> (1968), 389                                   |
| Kryachkoite    | $(Al,Cu)_6(Fe,Cu)$                             | A | 2016-062  | Russia (meteorite)  | <i>American Mineralogist</i> <b>102</b> (2017), 690  |   |
| Kryzhanovskite | $(Fe^{3+}, Mn^{2+})_3(PO_4)_2(OH, H_2O)_3$     | G | 1950      | Kazakhstan          | <i>Doklady Akademii Nauk SSSR</i> <b>72</b> (1950), 763  | <i>Mineralogical Magazine</i> <b>43</b> (1980), 789                               |
| Ktenasite      | $(Cu,Zn)_5(SO_4)_2(OH)_6 \cdot 6H_2O$          | G | 1950      | Greece              | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>1</b> (1950), 342   | <i>Zeitschrift für Kristallographie</i> <b>147</b> (1978), 129                    |



|                    |   |    |           |                          |   |  |
|--------------------|---|----|-----------|--------------------------|---|--|
| Kuannersuite-(Ce)  | $\text{NaCeBa}_3(\text{PO}_4)_3\text{F}_{0.5}\text{Cl}_{0.5}$                                 | A  | 2002-013  | Denmark<br>(Greenland)   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 95                                     |  |
| Kudriavite         | $(\text{Cd,Pb})\text{Bi}_2\text{S}_4$   | A  | 2003-011  | Russia                   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 695                                    | <i>Canadian Mineralogist</i> <b>45</b> (2007), 437             |
| Kudryavtsevaite    | $\text{Na}_3\text{MgFe}^{3+}\text{Ti}_4\text{O}_{12}$   | A  | 2012-078  | Botswana                 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 327                                   |  |
| Kukharengoite-(Ce) | $\text{Ba}_2\text{Ce}(\text{CO}_3)_3\text{F}$   | A  | 1995-040  | Canada / Russia          | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 1327                           |  |
| Kukharengoite-(La) | $\text{Ba}_2\text{La}(\text{CO}_3)_3\text{F}$   | A  | 2002-019  | Russia                   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(3)</b> (2003), 55 |  |
| Kukisvumite        | $\text{Na}_6\text{ZnTi}_4\text{O}_4(\text{SiO}_3)_8 \cdot 4\text{H}_2\text{O}$                | A  | 1989-052  | Russia                   | <i>Mineralogicheskii Zhurnal</i> <b>13(2)</b> (1991), 63                              | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 352 |
| Kuksite            | $\text{Pb}_3\text{Zn}_3\text{TeO}_6(\text{PO}_4)_2$   | A  | 1989-018  | Russia                   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(5)</b> (1990), 50 | <i>American Mineralogist</i> <b>95</b> (2010), 933             |
| Kulanite           | $\text{BaFe}^{2+}_2\text{Al}_2(\text{PO}_4)_3(\text{OH})_3$                                   | A  | 1975-012  | Canada                   | <i>Canadian Mineralogist</i> <b>14</b> (1976), 127                                    | <i>Canadian Mineralogist</i> <b>32</b> (1994), 15              |
| Kuliginite         | $\text{Fe}_3\text{Mg}(\text{OH})_6\text{Cl}_2$  | A  | 2016-049  | Russia                   | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135            |  |
| Kuliokite-(Y)      | $\text{Y}_4\text{Al}(\text{SiO}_4)_2(\text{OH})_2\text{F}_5$                                  | A  | 1984-064  | Russia                   | <i>Mineralogicheskii Zhurnal</i> <b>8(2)</b> (1986), 94                               | <i>Soviet Physics Doklady</i> <b>31</b> (1986), 601            |
| Kulkeite           | $\text{Na}_{0.3}\text{Mg}_8\text{Al}(\text{Si,Al})_8\text{O}_{20}(\text{OH})_{10}$            | A  | 1980-031  | Algeria                  | <i>Contributions to Mineralogy and Petrology</i> <b>80</b> (1982), 103                |  |
| Kullerudite        | $\text{NiSe}_2$   | A  | 1967 s.p. | Finland                  | <i>Comptes Rendus de la Société Géologique de Finlande</i> <b>36</b> (1964), 113      |  |
| Kumdykolite        | $\text{Na}(\text{AlSi}_3\text{O}_8)$  | A  | 2007-049  | Kazakhstan               | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 1325                          | <i>American Mineralogist</i> <b>98</b> (2013), 1070            |
| Kummerite          | $\text{Mn}^{2+}\text{Fe}^{3+}\text{Al}(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$ | A  | 2015-036  | Germany                  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1243                                  |  |
| Kumtyubeite        | $\text{Ca}_5(\text{SiO}_4)_2\text{F}_2$   | A  | 2008-045  | Russia                   | <i>American Mineralogist</i> <b>94</b> (2009), 1361                                   |  |
| Kunatite           | $\text{CuFe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$                    | A  | 2007-057  | Australia                | <i>Australian Journal of Mineralogy</i> <b>14</b> (2008), 3                           |  |
| Kupčikite          | $\text{Cu}_{3.4}\text{Fe}_{0.6}\text{Bi}_5\text{S}_{10}$                                      | A  | 2001-017  | Austria                  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1155                                   |  |
| Kupletskite        | $\text{K}_2\text{NaMn}^{2+}_7\text{Ti}_2\text{Si}_8\text{O}_{26}(\text{OH})_4\text{F}$        | G  | 1956      | Russia                   | <i>Doklady Akademii Nauk SSSR</i> <b>108</b> (1956), 933                              | <i>Mineralogical Magazine</i> <b>70</b> (2006), 565            |
| Kupletskite-(Cs)   | $\text{Cs}_2\text{NaMn}^{2+}_7\text{Ti}_2\text{Si}_8\text{O}_{26}(\text{OH})_4\text{F}$       | Rn | 1970-009  | Tajikistan               | <i>Doklady Akademii Nauk SSSR</i> <b>197</b> (1971), 1394                             | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1               |
| Kuramite           | $\text{Cu}_3\text{SnS}_4$   | A  | 1979-013  | Uzbekistan               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>108</b> (1979), 564     |  |
| Kuranakhite        | $\text{PbMn}^{4+}\text{Te}^{6+}\text{O}_6$  | A  | 1974-030  | Russia                   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 310     |  |
| Kuratite           | $\text{Ca}_2(\text{Fe}^{2+}_5\text{Ti})\text{O}_2[\text{Si}_4\text{Al}_2\text{O}_{18}]$       | A  | 2013-109  | Argentina<br>(meteorite) | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1067                                  |  |
| Kurchatovite       | $\text{CaMgB}_2\text{O}_5$  | A  | 1965-034  | Russia                   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>95</b> (1966), 203      | <i>Minerals</i> <b>8</b> (2018), 332                           |
| Kurgantaite        | $\text{CaSrB}_5\text{O}_9\text{Cl} \cdot \text{H}_2\text{O}$                                  | Rd | 2000 s.p. | Kazakhstan               | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 71 |  |
| Kurilite           | $\text{Ag}_8\text{Te}_3\text{Se}$   | A  | 2009-080  | Russia                   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 463                                   | <i>Canadian Mineralogist</i> <b>53</b> (2015), 159             |

|                 |  |    |           |                        |   |  |
|-----------------|--|----|-----------|------------------------|---|--|
| Kurnakovite     | $MgB_3O_3(OH)_5 \cdot 5H_2O$                                     | G  | 1940      | Kazakhstan             | <i>Doklady Akademii Nauk SSSR</i> <b>28</b> (1940), 638                               | <i>American Mineralogist</i> <b>97</b> (2012), 1858                                |
| Kurumsakite     | $Zn_8Al_8V^{5+}_2Si_5O_{35} \cdot 27H_2O$ (?)                    | Q  | 1954      | Kazakhstan             | <i>Izvestiya Akademii Nauk SSSR</i> <b>134(19)</b> (1954), 116                        |  |
| Kusachiite      | $Cu^{2+}Bi^{3+}_2O_4$  | A  | 1992-024  | Japan                  | <i>Mineralogical Magazine</i> <b>59</b> (1995), 545                                   | <i>Journal of Physics: Condensed Matter</i> <b>2</b> (1990), 2205                  |
| Kushiroite      | $CaAlAlSiO_6$  | A  | 2008-059  | Antarctica (meteorite) | <i>American Mineralogist</i> <b>94</b> (2009), 1479                                   |  |
| Kutinaite       | $Ag_6Cu_{14}As_7$  | A  | 1969-034  | Czech Republic         | <i>American Mineralogist</i> <b>55</b> (1970), 1083                                   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1099                               |
| Kutnohorite     | $CaMn^{2+}(CO_3)_2$  | G  | 1903      | Czech Republic         | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1903), 338         | <i>American Mineralogist</i> <b>100</b> (2015), 2242                               |
| Kuzelite        | $Ca_4Al_2(OH)_{12}(SO_4) \cdot 6H_2O$                            | A  | 1996-053  | Germany                | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 423                         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 136                      |
| Kuzmenkoite-Mn  | $K_2MnTi_4(Si_4O_{12})_2(OH)_4 \cdot 5-6H_2O$                    | Rn | 1998-058  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(4)</b> (1999), 42 | <i>Crystallography Reports</i> <b>45</b> (2000), 759                               |
| Kuzmenkoite-Zn  | $K_2ZnTi_4(Si_4O_{12})_2(OH)_4 \cdot 6-8H_2O$                    | A  | 2001-037  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(2)</b> (2002), 45 |  |
| Kuzminite       | HgBr   | A  | 1986-005  | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 595     |  |
| Kuznetsovite    | $Hg^{1+}_2Hg^{2+}(AsO_4)Cl$                                      | A  | 1980-009  | Kyrgyzstan / Russia    | <i>Doklady Akademii Nauk SSSR</i> <b>255</b> (1980), 963                              | <i>Kristallografiya</i> <b>36</b> (1991), 731                                      |
| Kvanefjeldite   | $Na_4CaSi_6O_{14}(OH)_2$   | A  | 1982-079  | Denmark (Greenland)    | <i>Canadian Mineralogist</i> <b>22</b> (1984), 465                                    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 505                      |
| Kyanite         | $Al_2OSiO_4$   | A  | 1967 s.p. | Austria                | <i>Bergmannisches Journal</i> <b>1</b> (1789), 369                                    | <i>American Mineralogist</i> <b>91</b> (2006), 740                                 |
| Kyanoxalite     | $Na_7(Al_{5-6}Si_{6-7}O_{24})(C_2O_4)_{0.5-1.0} \cdot 5H_2O$     | A  | 2008-041  | Russia                 | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(6)</b> (2009), 18    |  |
| Kyawthuite      | $Bi^{3+}Sb^{5+}O_4$  | A  | 2015-078  | Myanmar                | <i>Mineralogical Magazine</i> <b>81</b> (2017), 477                                   |  |
| Kyrgyzstanite   | $ZnAl_4(SO_4)(OH)_{12} \cdot 3H_2O$                              | A  | 2004-024  | Kyrgyzstan             | <i>New Data on Minerals</i> <b>40</b> (2005), 23                                      |  |
| Kyzylkumite     | $Ti_2V^{3+}O_5(OH)$  | A  | 1980-081  | Uzbekistan             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 607     | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>144(2)</b> (2015), 48 |
| Laachite        | $(Ca,Mn)_2Zr_2Nb_2TiFeO_{14}$                                    | A  | 2012-100  | Germany                | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 103                           |  |
| Labuntsovite-Fe | $Na_4K_4Fe^{2+}_2Ti_8O_4(Si_4O_{12})_4(OH)_4 \cdot 10-12H_2O$    | A  | 1998-051a | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(4)</b> (2001), 36 |  |
| Labuntsovite-Mg | $Na_4K_4Mg_2Ti_8O_4(Si_4O_{12})_4(OH)_4 \cdot 10-12H_2O$         | A  | 1998-050a | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(4)</b> (2001), 36 |  |
| Labuntsovite-Mn | $Na_4K_4Mn^{2+}_2Ti_8O_4(Si_4O_{12})_4(OH)_4 \cdot 10-12H_2O$    | Rn | 2000 s.p. | Russia                 | <i>Doklady Akademii Nauk SSSR</i> <b>101</b> (1955), 1113                             | <i>Kristallografiya</i> <b>18</b> (1973), 950                                      |
| Labyrinthite    | $(Na,K,Sr)_{35}Ca_{12}Fe_3Zr_6TiSi_{51}O_{144}(O,OH,H_2O)_9Cl_3$ | A  | 2002-065  | Russia                 | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(2)</b> (2006), 38    | <i>Crystallography Reports</i> <b>46</b> (2001), 752                               |
| Lacroixite      | $NaAl(PO_4)F$  | G  | 1914      | Germany                | <i>Bulletin de la Société Française de Minéralogie</i> <b>37</b> (1914), 157          | <i>American Mineralogist</i> <b>70</b> (1985), 849                                 |

|                   |  |    |            |                |  |   |
|-------------------|--|----|------------|----------------|--|---|
| Laffittite        | AgHgAsS <sub>3</sub>   | A  | 1973-031   | France         | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>97</b> (1974), 48                                     | <i>American Mineralogist</i> <b>68</b> (1983), 235            |
| Laflammeite       | Pd <sub>3</sub> Pb <sub>2</sub> S <sub>2</sub>   | A  | 2000-014   | Finland        | <i>Canadian Mineralogist</i> <b>40</b> (2002), 671   |   |
| Laforêtite        | AgInS <sub>2</sub>   | A  | 1995-006   | France         | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 891  |   |
| Lafossaite        | TiCl   | A  | 2003-032   | Italy          | <i>Mineralogical Record</i> <b>37</b> (2006), 165  |   |
| Lagalyite         | Ca <sub>2x</sub> Mn <sub>1-x</sub> O <sub>2</sub> ·1.5-2H <sub>2</sub> O (x = 0.05-0.08)   | A  | 2016-106   | Germany        | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |   |
| Lahnsteinite      | Zn <sub>4</sub> (SO <sub>4</sub> )(OH) <sub>6</sub> ·3H <sub>2</sub> O   | A  | 2012-002   | Germany        | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>142(1)</b> (2013), 39   | <i>Crystallography Reports</i> <b>57</b> (2012), 737          |
| Laihunite         | (Fe <sup>3+</sup> , Fe <sup>2+</sup> , □) <sub>2</sub> (SiO <sub>4</sub> )   | A  | 1988-xxx ? | China          | <i>Geochimica</i> <b>2</b> (1976), 95  | <i>American Mineralogist</i> <b>71</b> (1986), 1455           |
| Laitakarite       | Bi <sub>4</sub> (Se,S) <sub>3</sub>  | A  | 1967 s.p.  | Finland        | <i>Geologi</i> <b>3</b> (1959), 11   | <i>Doklady Akademii Nauk SSSR</i> <b>303</b> (1988), 1468     |
| Lakargiite        | CaZrO <sub>3</sub>   | A  | 2007-014   | Russia         | <i>American Mineralogist</i> <b>93</b> (2008), 1903  |   |
| Lakebogaite       | NaCaFe <sub>2</sub> H(UO <sub>2</sub> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O        | A  | 2007-001   | Australia      | <i>American Mineralogist</i> <b>93</b> (2008), 691   |   |
| Lalondeite        | (Na,Ca) <sub>6</sub> (Ca,Na) <sub>3</sub> Si <sub>16</sub> O <sub>38</sub> (F,OH) <sub>2</sub> ·3H <sub>2</sub> O                | A  | 2002-026   | Canada         | <i>Canadian Mineralogist</i> <b>47</b> (2009), 181   |   |
| Lammerite         | Cu <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub>   | A  | 1980-016   | Bolivia        | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>28</b> (1981), 157  | <i>American Mineralogist</i> <b>71</b> (1986), 206            |
| Lammerite-β       | Cu <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub>   | A  | 2009-002   | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>140(5)</b> (2011), 46   |   |
| Lamprophyllite    | (SrNa)Ti <sub>2</sub> Na <sub>3</sub> Ti(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>2</sub> (OH) <sub>2</sub>          | Rd | 2016 s.p.  | Russia         | <i>Bulletin de la Société de Géographie de Finlande</i> <b>11(2)</b> (1894), 101   | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 711   |
| Lanarkite         | Pb <sub>2</sub> O(SO <sub>4</sub> )  | G  | 1832       | United Kingdom | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 366   | <i>Zeitschrift für Kristallographie</i> <b>132</b> (1970), 99 |
| Landauite         | (Na,Pb)(Mn <sup>2+</sup> , Y)(Zn,Fe) <sub>2</sub> (Ti,Fe <sup>3+</sup> , Nb) <sub>18</sub> (O,OH,F)O <sub>38</sub>               | A  | 1965-033   | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>166</b> (1966), 1420  | <i>Canadian Mineralogist</i> <b>16</b> (1978), 63             |
| Landesite         | Mn <sup>2+</sup> <sub>9</sub> Fe <sup>3+</sup> <sub>3</sub> (PO <sub>4</sub> ) <sub>8</sub> (OH) <sub>3</sub> ·9H <sub>2</sub> O | Rd | 1964 s.p.  | USA            | <i>American Mineralogist</i> <b>15</b> (1930), 375   | <i>Mineralogical Magazine</i> <b>43</b> (1980), 789           |
| Långbanite        | Mn <sup>2+</sup> <sub>4</sub> Mn <sup>3+</sup> <sub>9</sub> Sb <sup>5+</sup> O <sub>16</sub> (SiO <sub>4</sub> ) <sub>2</sub>    | A  | 1971 s.p.  | Sweden         | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>13</b> (1888), 1  | <i>American Mineralogist</i> <b>76</b> (1991), 1408           |
| Långbanshyttanite | Pb <sub>2</sub> Mn <sub>2</sub> Mg(AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·6H <sub>2</sub> O                          | A  | 2010-071   | Sweden         | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 675  |   |
| Langbeinite       | K <sub>2</sub> Mg <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>   | G  | 1891       | Germany        | <i>Zeitschrift für Angewandte Chemie</i> (1891), 356   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 182 |
| Langisite         | CoAs   | A  | 1968-023   | Canada         | <i>Canadian Mineralogist</i> <b>9</b> (1969), 597  | <i>Acta Chemica Scandinavica</i> <b>A38</b> (1984), 687       |
| Langite           | Cu <sub>4</sub> (SO <sub>4</sub> )(OH) <sub>6</sub> ·2H <sub>2</sub> O   | G  | 1864       | United Kingdom | <i>Philosophical Magazine and Journal of Science</i> <b>28</b> (1864), 403   | <i>Acta Crystallographica</i> <b>C40</b> (1984), 1309         |
| Lanmuchangite     | TiAl(SO <sub>4</sub> ) <sub>2</sub> ·12H <sub>2</sub> O  | A  | 2001-018   | China          | <i>Acta Mineralogica Sinica</i> <b>21</b> (2001), 271  | <i>Acta Crystallographica</i> <b>B56</b> (2000), 204          |
| Lannonite         | HCa <sub>4</sub> Mg <sub>2</sub> Al <sub>4</sub> (SO <sub>4</sub> ) <sub>8</sub> F <sub>9</sub> ·32H <sub>2</sub> O              | A  | 1979-069   | USA            | <i>Mineralogical Magazine</i> <b>47</b> (1983), 37   |   |
| Lansfordite       | Mg(CO <sub>3</sub> )·5H <sub>2</sub> O   | G  | 1888       | USA            | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>14</b> (1888), 255  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1063          |
| Lanthanite-(Ce)   | Ce <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub> ·8H <sub>2</sub> O   | A  | 1983-055   | United Kingdom | <i>American Mineralogist</i> <b>70</b> (1985), 411   |   |

|                 |  |    |           |                |  |  |
|-----------------|--|----|-----------|----------------|--|--|
| Lanthanite-(La) | $\text{La}_2(\text{CO}_3)_3 \cdot 8\text{H}_2\text{O}$   | A  | 1987 s.p. | Sweden         | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 500   | <i>American Mineralogist</i> <b>62</b> (1977), 142             |
| Lanthanite-(Nd) | $\text{Nd}_2(\text{CO}_3)_3 \cdot 8\text{H}_2\text{O}$   | A  | 1979-074  | Brazil         | <i>Geological Survey of Canada</i> <b>1C</b> (1980), 141   | <i>Acta Crystallographica</i> <b>E69</b> (2013), i15           |
| Lapeyreite      | $\text{Cu}_3\text{O}[\text{AsO}_3(\text{OH})]_2 \cdot \text{H}_2\text{O}$  | A  | 2003-023b | France         | <i>American Mineralogist</i> <b>95</b> (2010), 171   |  |
| Laphamite       | $\text{As}_2(\text{Se}, \text{S})_3$   | A  | 1985-021  | USA            | <i>Mineralogical Magazine</i> <b>50</b> (1986), 279  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 269             |
| Lapieite        | $\text{CuNiSbS}_3$   | A  | 1983-002  | Canada         | <i>Canadian Mineralogist</i> <b>22</b> (1984), 561   |  |
| Laplandite-(Ce) | $\text{Na}_4\text{CeTiPSi}_7\text{O}_{22} \cdot 5\text{H}_2\text{O}$   | A  | 1974-005  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 571  |  |
| Laptevitte-(Ce) | $\text{NaFe}^{2+}(\text{REE}_7\text{Ca}_5\text{Y}_3)(\text{SiO}_4)_4(\text{Si}_3\text{B}_2\text{PO}_{18})(\text{BO}_3)\text{F}_{11}$ | A  | 2011-081  | Tajikistan     | <i>New Data on Minerals</i> <b>48</b> (2013), 5  | <i>Zeitschrift für Kristallographie</i> <b>228</b> (2013), 550 |
| Larderellite    | $(\text{NH}_4)\text{B}_5\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$  | G  | 1854      | Italy          | <i>Journal of Science and Arts, Series II</i> <b>17</b> (1854), 129  | <i>Acta Crystallographica</i> <b>B25</b> (1969), 2264          |
| Larisaite       | $\text{Na}(\text{H}_3\text{O})(\text{UO}_2)_3(\text{Se}^{4+}\text{O}_3)_2\text{O}_2 \cdot 4\text{H}_2\text{O}$                       | A  | 2002-061  | USA            | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 367  |  |
| Larnite         | $\text{Ca}_2(\text{SiO}_4)$  | G  | 1929      | United Kingdom | <i>Mineralogical Magazine</i> <b>22</b> (1929), 77   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1696          |
| Larosite        | $(\text{Cu}, \text{Ag})_{21}\text{PbBiS}_{13}$   | A  | 1971-014  | Canada         | <i>Canadian Mineralogist</i> <b>11</b> (1972), 886   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1569            |
| Larsenite       | $\text{ZnPb}(\text{SiO}_4)$  | G  | 1928      | USA            | <i>American Mineralogist</i> <b>13</b> (1928), 334   | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 115 |
| Lasalite        | $\text{Na}_2\text{Mg}_2\text{V}_{10}\text{O}_{28} \cdot 20\text{H}_2\text{O}$  | A  | 2007-005  | USA            | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1365  |  |
| Lasnierite      | $(\text{Ca}, \text{Sr})(\text{Mg}, \text{Fe}^{2+})_2\text{Al}(\text{P}[\text{O}, \text{F}]_4)_3$                                     | A  | 2017-084  | Madagascar     | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |  |
| Latiumite       | $(\text{Ca}, \text{K})_4(\text{Si}, \text{Al})_5\text{O}_{11}(\text{SO}_4, \text{CO}_3)$   | G  | 1953      | Italy          | <i>Mineralogical Magazine</i> <b>30</b> (1953), 39   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 167  |
| Latrappite      | $\text{Ca}_2\text{NbFe}^{3+}\text{O}_6$  | Rd | 2016 s.p. | Canada         | <i>Canadian Mineralogist</i> <b>8</b> (1964), 121  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 107             |
| Lauzeite        | $\text{Mn}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$   | G  | 1954      | Germany        | <i>Naturwissenschaften</i> <b>41</b> (1954), 2   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 309            |
| Laumontite      | $\text{CaAl}_2\text{Si}_4\text{O}_{12} \cdot 4\text{H}_2\text{O}$  | A  | 1997 s.p. | France         | Handbuch der Oryktognosie. Mohn & Winter, Heidelberg (1821), 448   | <i>Zeolites</i> <b>13</b> (1993), 249                          |
| Launayite       | $\text{CuPb}_{10}(\text{Sb}, \text{As})_{13}\text{S}_{20}$   | A  | 1966-021  | Canada         | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191  | <i>Mineralogical Record</i> <b>13</b> (1982), 93               |
| Laurelite       | $\text{Pb}_7\text{F}_{12}\text{Cl}_2$  | A  | 1988-020a | USA            | <i>American Mineralogist</i> <b>74</b> (1989), 927   | <i>American Mineralogist</i> <b>81</b> (1996), 1277            |
| Laurentianite   | $[\text{NbO}(\text{H}_2\text{O})]_3(\text{Si}_2\text{O}_7)_2[\text{Na}(\text{H}_2\text{O})_2]_3$                                     | A  | 2010-018  | Canada         | <i>Canadian Mineralogist</i> <b>50</b> (2012), 1265  |  |
| Laurionite      | $\text{PbCl}(\text{OH})$   | G  | 1887      | Greece         | <i>Annalen des Kaiserlich-Königlichen Naturhistorischen Hofmuseums</i> <b>2</b> (1887), 185  | <i>Zeitschrift für Kristallographie</i> <b>141</b> (1975), 246 |
| Laurite         | $\text{RuS}_2$   | G  | 1866      | Indonesia      | <i>Nachrichten von der Königl. Gesellschaft der Wissenschaften und der Georg-Augusts-Universität</i> (1866), 155                       | <i>Acta Crystallographica</i> <b>C46</b> (1990), 2003          |
| Lausenite       | $\text{Fe}^{3+}_2(\text{SO}_4)_3 \cdot 5\text{H}_2\text{O}$  | G  | 1928      | USA            | <i>American Mineralogist</i> <b>13</b> (1928), 203   | <i>American Mineralogist</i> <b>90</b> (2005), 411             |
| Lautarite       | $\text{Ca}(\text{IO}_3)_2$   | G  | 1891      | Chile          | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>19</b> (1891), 447  | <i>Acta Crystallographica</i> <b>B34</b> (1978), 84            |
| Lautenthalite   | $\text{PbCu}_4(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 1983-029  | Germany        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1993), 401  |  |

|                |   |    |           |                     |   |  |
|----------------|---|----|-----------|---------------------|---|--|
| Lautite        | CuAsS   | G  | 1881      | Germany             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>3</b> (1881), 515          | <i>Acta Crystallographica</i> <b>E64</b> (2008), i22                                   |
| Lavendulan     | NaCaCu <sub>5</sub> (AsO <sub>4</sub> ) <sub>4</sub> Cl·5H <sub>2</sub> O   | G  | 1853      | Czech Republic      | <i>Journal für Praktische Chemie</i> <b>10</b> (1853), 505                                      | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 75                             |
| Låvenite       | (Na,Ca) <sub>4</sub> (Mn <sup>2+</sup> ,Fe <sup>2+</sup> ) <sub>2</sub> (Zr,Ti,Nb) <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (O,F) <sub>4</sub> | G  | 1884      | Norway              | <i>Geologiska Föreningen i Stockholm Förhandlingar</i> <b>7</b> (1884), 598                     | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>28</b> (1981), 99 |
| Lavinskyite    | K(LiCu)Cu <sub>6</sub> (Si <sub>4</sub> O <sub>11</sub> ) <sub>2</sub> (OH) <sub>4</sub>  | A  | 2012-028  | South Africa        | <i>American Mineralogist</i> <b>99</b> (2014), 525  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 811                            |
| Lavoisierite   | Mn <sup>2+</sup> <sub>8</sub> [Al <sub>10</sub> (Mn <sup>3+</sup> Mg)] [Si <sub>11</sub> P]O <sub>44</sub> (OH) <sub>12</sub>                                     | A  | 2012-009  | Italy               | <i>Physics and Chemistry of Minerals</i> <b>40</b> (2013), 239                                  |  |
| Lavrentievite  | Hg <sub>3</sub> S <sub>2</sub> Cl <sub>2</sub>  | A  | 1984-020  | Russia              | <i>Geologiya i Geofizika</i> <b>7</b> (1984), 54  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1239                                    |
| Lawrencite     | FeCl <sub>2</sub>   | G  | 1877      | USA                 | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>84</b> (1877), 66 | <i>Journal of Physics and Chemistry of Solids</i> <b>36</b> (1975), 401                |
| Lawsonbauerite | Mn <sup>2+</sup> <sub>9</sub> Zn <sub>4</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>22</sub> ·8H <sub>2</sub> O   | A  | 1979-004  | USA                 | <i>American Mineralogist</i> <b>64</b> (1979), 949  | <i>American Mineralogist</i> <b>67</b> (1982), 1029                                    |
| Lawsonite      | CaAl <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> )(OH) <sub>2</sub> ·H <sub>2</sub> O  | G  | 1895      | USA                 | <i>University of California, Department of Geology Bulletin</i> <b>1</b> (1895), 301            | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 63                             |
| Lazarenkoite   | CaFe <sup>3+</sup> As <sup>3+</sup> <sub>3</sub> O <sub>7</sub> ·3H <sub>2</sub> O  | A  | 1980-076  | Russia              | <i>Mineralogicheskii Zhurnal</i> <b>3(3)</b> (1981), 92   | Probl. Kristalloghim. Genezisa Miner (1986), 145                                       |
| Lazaridisite   | Cd <sub>3</sub> (SO <sub>4</sub> ) <sub>3</sub> ·8H <sub>2</sub> O  | A  | 2012-043  | Greece              | CNMNC Newsletter 14 - <i>Mineralogical Magazine</i> <b>76</b> (2012), 1281                      |  |
| Lazulite       | MgAl <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub>   | A  | 1967 s.p. | Austria             | Beiträge zur Chemischen Kenntniss der Mineralkörper, Vol. 1. Decker, Berlin (1795), 197         | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 410                          |
| Lazurite       | Na <sub>3</sub> Ca(Si <sub>3</sub> Al <sub>3</sub> )O <sub>12</sub> S   | G  | 1891      | Afghanistan         | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>18</b> (1891), 209                   | <i>Acta Crystallographica</i> <b>C41</b> (1985), 827                                   |
| Lead           | Pb  | G  | ?         | unknown             | <i>Journal of Applied Physics</i> <b>20</b> (1949), 726   | <i>Canadian Mineralogist</i> <b>46</b> (2008), 73                                      |
| Leadamalgam    | HgPb <sub>2</sub>   | A  | 1981-042  | China               | <i>Dizhi Lunping [Geological Review]</i> <b>27</b> (1981), 108                                  |  |
| Leadhillite    | Pb <sub>4</sub> (SO <sub>4</sub> )(CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>2</sub>   | G  | 1832      | United Kingdom      | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 366                          | <i>American Mineralogist</i> <b>90</b> (2005), 1641                                    |
| Lechatelierite | SiO <sub>2</sub>  | Q  | 1915      | unknown             | <i>Bulletin de la Société Française de Minéralogie</i> <b>38</b> (1915), 182                    |  |
| Lecontite      | (NH <sub>4</sub> )Na(SO <sub>4</sub> )·2H <sub>2</sub> O  | G  | 1858      | Honduras            | <i>American Journal of Science and Arts</i> <b>26</b> (1858), 273                               | <i>Acta Crystallographica</i> <b>22</b> (1967), 683                                    |
| Lecoqite-(Y)   | Na <sub>3</sub> Y(CO <sub>3</sub> ) <sub>3</sub> ·6H <sub>2</sub> O   | A  | 2008-069  | Canada              | <i>Canadian Mineralogist</i> <b>48</b> (2010), 95   |  |
| Leesite        | K(H <sub>2</sub> O) <sub>2</sub> [(UO <sub>2</sub> ) <sub>4</sub> O <sub>2</sub> (OH) <sub>5</sub> ]·3H <sub>2</sub> O  | A  | 2016-064  | USA                 | <i>American Mineralogist</i> <b>103</b> (2018), 143   |  |
| Lefontite      | Fe <sub>2</sub> Al <sub>2</sub> Be(PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>   | A  | 2014-075  | Brazil              | CNMNC Newsletter 23 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 51                        |  |
| Legrandite     | Zn <sub>2</sub> (AsO <sub>4</sub> )(OH)·H <sub>2</sub> O  | G  | 1932      | Mexico              | <i>Mineralogical Magazine</i> <b>23</b> (1932), 175   | <i>Canadian Mineralogist</i> <b>51</b> (2013), 233                                     |
| Leguernite     | Bi <sub>12.67</sub> O <sub>14</sub> (SO <sub>4</sub> ) <sub>5</sub>   | A  | 2013-051  | Italy               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1629  |  |
| Lehnerite      | Mn <sup>2+</sup> (UO <sub>2</sub> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> ·8H <sub>2</sub> O   | A  | 1986-032  | Germany             | <i>Aufschluss</i> <b>39</b> (1988), 209   |  |
| Leifite        | Na <sub>7</sub> Be <sub>2</sub> (Si <sub>15</sub> Al <sub>3</sub> )O <sub>39</sub> (F,OH) <sub>2</sub>  | Rd | 2002 s.p. | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>51</b> (1915), 429  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 183                                     |
| Leightonite    | K <sub>2</sub> Ca <sub>2</sub> Cu(SO <sub>4</sub> ) <sub>4</sub> ·2H <sub>2</sub> O   | G  | 1938      | Chile               | <i>American Mineralogist</i> <b>23</b> (1938), 34   | <i>American Mineralogist</i> <b>87</b> (2002), 721                                     |
| Leisingite     | CuMg <sub>2</sub> Te <sup>6+</sup> O <sub>6</sub> ·6H <sub>2</sub> O  | A  | 1995-011  | USA                 | <i>Mineralogical Magazine</i> <b>60</b> (1996), 653   | <i>Canadian Mineralogist</i> <b>35</b> (1997), 759                                     |

|                    |  |    |           |                                  |   |  |
|--------------------|--|----|-----------|----------------------------------|---|--|
| Leiteite           | $ZnAs^{3+}_2O_4$   | A  | 1976-026  | Namibia                          | <i>Mineralogical Record</i> <b>8</b> (1977), 95   | <i>American Mineralogist</i> <b>72</b> (1987), 629                                 |
| Lemanskiite        | $NaCaCu_5(AsO_4)_4Cl \cdot 3H_2O$                                      | A  | 1999-037  | Chile                            | <i>Canadian Mineralogist</i> <b>44</b> (2006), 523  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>146(6)</b> (2017), 43 |
| Lemleinite-Ba      | $Na_4K_4Ba_{2+x}Ti_8(Si_4O_{12})_4(OH,O)_8 \cdot 8H_2O$                | A  | 1998-052a | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 36   | <i>Doklady Akademii Nauk</i> <b>357</b> (1997), 64                                 |
| Lemleinite-K       | $Na_4K_8Ti_8(Si_4O_{12})_4(OH,O)_8 \cdot 8H_2O$                        | Rn | 1997-003  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(5)</b> (1999), 54   | <i>Doklady Akademii Nauk</i> <b>351</b> (1996), 207                                |
| Lemoynite          | $Na_2CaZr_2Si_{10}O_{26} \cdot 5-6H_2O$                                | A  | 1968-013  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1969), 585   | <i>Canadian Mineralogist</i> <b>14</b> (1976), 132                                 |
| Lenaite            | $AgFeS_2$  | A  | 1994-008  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(5)</b> (1995), 85   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 207                                 |
| Lengenbachite      | $Ag_4Cu_2Pb_{18}As_{12}S_{39}$   | G  | 1905      | Switzerland                      | <i>Mineralogical Magazine</i> <b>14</b> (1905), 72  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>166</b> (1994), 169          |
| Leningradite       | $PbCu_3(VO_4)_2Cl_2$   | A  | 1988-014  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>310</b> (1990), 1434   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 445                                 |
| Lennilenapeite     | $K_7(Mg,Mn^{2+},Fe^{2+},Zn)_{46}(Si,Al)_{72}(O,OH)_{216} \cdot 16H_2O$ | A  | 1982-085  | USA                              | <i>Canadian Mineralogist</i> <b>22</b> (1984), 259  |  |
| Lenoblite          | $V^{4+}_2O_4 \cdot 2H_2O$  | A  | 1970-002  | Gabon                            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 235                                     |  |
| Leogangite         | $Cu_{10}(AsO_4)_4(SO_4)(OH)_6 \cdot 8H_2O$                             | A  | 1998-032  | Austria                          | <i>Mineralogy and Petrology</i> <b>81</b> (2004), 187   |  |
| Leonardsenite      | $MgAlF_5 \cdot 2H_2O$  | A  | 2011-059  | Iceland                          | <i>Canadian Mineralogist</i> <b>51</b> (2013), 377  |  |
| Leonite            | $K_2Mg(SO_4)_2 \cdot 4H_2O$  | G  | 1896      | Germany                          | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>48</b> (1896), 632  | <i>American Mineralogist</i> <b>86</b> (2001), 1282                                |
| Leószilárdite      | $Na_6Mg(UO_2)_2(CO_3)_6 \cdot 6H_2O$                                   | A  | 2015-128  | USA                              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1039  |  |
| Lepageite          | $Mn^{2+}_3(Fe^{3+}_7Fe^{2+}_4)O_3[Sb^{3+}_5As^{3+}_8O_{34}]$           | A  | 2018-028  | Poland                           | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Lepersonnite-(Gd)  | $CaGd_2(UO_2)_{24}(CO_3)_8Si_4O_{28} \cdot 60H_2O$                     | A  | 1981-036  | Democratic Republic of the Congo | <i>Canadian Mineralogist</i> <b>20</b> (1982), 231  |  |
| Lepidocrocite      | $Fe^{3+}O(OH)$   | A  | 1980 s.p. | Czech Republic                   | Handbuch der Mineralogie. Vandenhoeck und Ruprecht, Göttingen (1813)  | <i>Journal of Chemical Physics</i> <b>3</b> (1935), 420                            |
| Lepkhenelmitite-Zn | $Ba_2Zn(Ti,Nb)_4(Si_4O_{12})_2(O,OH)_4 \cdot 7H_2O$                    | A  | 2003-003  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(1)</b> (2004), 49   |  |
| Lermontovite       | $U^{4+}(PO_4)(OH) \cdot H_2O$  | G  | 1956      | Russia                           | Handbook for Determination of Uranium Minerals. Gosgeoltekhizdat, Moscow (1956), 199  | <i>Mineralogicheskii Zhurnal</i> <b>5</b> (1983), 82                               |
| Lesukite           | $Al_2(OH)_5Cl \cdot 2H_2O$   | A  | 1996-004  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(2)</b> (1997), 104  |  |
| Letovicite         | $(NH_4)_3H(SO_4)_2$  | G  | 1932      | Czech Republic                   | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>83</b> (1932), 117   | <i>Acta Crystallographica</i> <b>B41</b> (1985), 209                               |
| Leucite            | $K(AlSi_2O_6)$   | A  | 1997 s.p. | Italy                            | <i>Bergmannisches Journal</i> <b>2</b> (1791), 483  | <i>American Mineralogist</i> <b>93</b> (2008), 1588                                |

|                 |   |    |           |                                  |  |   |
|-----------------|---|----|-----------|----------------------------------|--|---|
| Leucophanite    | NaCaBeSi <sub>2</sub> O <sub>6</sub> F  | G  | 1840      | Norway                           | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> (1840), 191   | <i>Mineralogical Magazine</i> <b>71</b> (2007), 625                                     |
| Leucophoenicite | Mn <sup>2+</sup> <sub>7</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH) <sub>2</sub>  | G  | 1899      | USA                              | <i>American Journal of Science</i> <b>8</b> (1899), 339  | <i>American Mineralogist</i> <b>55</b> (1970), 1146                                     |
| Leucophosphite  | KFe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH)·2H <sub>2</sub> O   | G  | 1932      | Australia                        | <i>Journal of the Royal Society of Western Australia</i> <b>18</b> (1932), 69  | <i>American Mineralogist</i> <b>57</b> (1972), 397                                      |
| Leucosphenite   | Na <sub>4</sub> BaTi <sub>2</sub> B <sub>2</sub> Si <sub>10</sub> O <sub>30</sub>   | G  | 1901      | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 137   | <i>Doklady Akademii Nauk SSSR</i> <b>257</b> (1981), 1128                               |
| Leucostaurite   | Pb <sub>2</sub> [B <sub>5</sub> O <sub>9</sub> ]Cl·0.5H <sub>2</sub> O  | A  | 2007-047  | Chile                            | <i>American Mineralogist</i> <b>97</b> (2012), 1206  |   |
| Levantite       | KCa <sub>3</sub> Al <sub>2</sub> (SiO <sub>4</sub> )(S <sub>12</sub> O <sub>7</sub> )(PO <sub>4</sub> )   | A  | 2017-010  | Israel                           | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529 |   |
| Leverettite     | Cu <sub>3</sub> CoCl <sub>2</sub> (OH) <sub>6</sub>   | A  | 2013-011  | Chile                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3047   |   |
| Levinsonite-(Y) | YAl(SO <sub>4</sub> ) <sub>2</sub> (C <sub>2</sub> O <sub>4</sub> )·12H <sub>2</sub> O  | A  | 1996-057  | USA                              | <i>Geochimica et Cosmochimica Acta</i> <b>65</b> (2001), 1101  |   |
| Lévyclaudite    | Pb <sub>8</sub> Cu <sub>3</sub> Sn <sub>7</sub> (Bi,Sb) <sub>3</sub> S <sub>28</sub>  | A  | 1989-034  | Greece                           | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 711   | <i>Acta Crystallographica</i> <b>B62</b> (2006), 775                                    |
| Lévyne-Ca       | Ca <sub>3</sub> (Si <sub>12</sub> Al <sub>6</sub> )O <sub>36</sub> ·18H <sub>2</sub> O  | Rn | 1997 s.p. | Denmark (Faroe Islands)          | <i>Edinburgh Journal of Science</i> <b>2</b> (1825), 323   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 117 |
| Lévyne-Na       | Na <sub>6</sub> (Si <sub>12</sub> Al <sub>6</sub> )O <sub>36</sub> ·18H <sub>2</sub> O  | Rn | 1997 s.p. | Japan                            | <i>Geological Survey of Japan Memoirs</i> <b>11</b> (1974), 283  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2887                                    |
| Leydetite       | Fe(UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> ·11H <sub>2</sub> O   | A  | 2012-065  | France                           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 429  |   |
| Liandratite     | U <sup>6+</sup> Nb <sub>2</sub> O <sub>8</sub>  | A  | 1975-039  | Madagascar                       | <i>American Mineralogist</i> <b>63</b> (1978), 941   |   |
| Liberite        | Li <sub>2</sub> Be(SiO <sub>4</sub> )   | A  | 1967 s.p. | China                            | <i>Acta Geologica Sinica</i> <b>44</b> (1964), 334   | <i>Journal of Mineralogy and Geochemistry</i> <b>191</b> (2014), 311                    |
| Libethenite     | Cu <sub>2</sub> (PO <sub>4</sub> )(OH)  | G  | 1823      | Slovakia                         | Vollständige Charakteristik des Mineral-Systems. Arnoldische, Dresden (1823), 266  | <i>Canadian Mineralogist</i> <b>16</b> (1978), 153                                      |
| Liebauite       | Ca <sub>3</sub> Cu <sub>5</sub> Si <sub>9</sub> O <sub>26</sub>   | A  | 1990-040  | Germany                          | <i>Zeitschrift für Kristallographie</i> <b>200</b> (1992), 115   |   |
| Liebenbergite   | Ni <sub>2</sub> (SiO <sub>4</sub> )   | A  | 1972-033  | South Africa                     | <i>American Mineralogist</i> <b>58</b> (1973), 733   | <i>American Mineralogist</i> <b>81</b> (1996), 1519                                     |
| Liebermannite   | KAlSi <sub>3</sub> O <sub>8</sub>   | A  | 2013-128  | Nigeria (meteorite)              | <i>Meteoritics &amp; Planetary Sciences</i> (2017), 1  |   |
| Liebigite       | Ca <sub>2</sub> (UO <sub>2</sub> )(CO <sub>3</sub> ) <sub>3</sub> ·11H <sub>2</sub> O   | G  | 1848      | Turkey                           | <i>American Journal of Science and Arts</i> <b>5</b> (1848), 336   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 277 |
| Likasite        | Cu <sub>3</sub> (NO <sub>3</sub> )(OH) <sub>5</sub> ·2H <sub>2</sub> O  | G  | 1955      | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>78</b> (1955), 84                                     | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 101                           |
| Lileyite        | Ba <sub>2</sub> Ti <sub>2</sub> Na <sub>2</sub> Fe <sup>2+</sup> Mg(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>2</sub> F <sub>2</sub> | Rd | 2011-021  | Germany                          | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 181  |   |
| Lillianite      | Pb <sub>3-2x</sub> Ag <sub>x</sub> Bi <sub>2+x</sub> S <sub>6</sub>   | G  | 1889      | USA                              | <i>Zeitschrift für Kristallographie</i> <b>17</b> (1889), 67   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 159                                      |
| Lime            | CaO   | G  | 1882      | Italy                            | <i>Memorie della Società Italiana di Scienze Matematiche e Fisiche, detta dei XL, Serie III</i> <b>4</b> (1882), 34 p.                 | <i>Physics and Chemistry of Minerals</i> <b>27</b> (1999), 103                          |
| Linarite        | CuPb(SO <sub>4</sub> )(OH) <sub>2</sub>   | G  | 1822      | Spain                            | <i>Annals of Philosophy</i> <b>4</b> (1822), 117   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 649                                      |



|                  |   |    |           |                   |  |   |
|------------------|---|----|-----------|-------------------|--|---|
| Lindackerite     | $\text{Cu}_5(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 9\text{H}_2\text{O}$  | Rd | 1995 s.p. | Czech Republic    | <i>Jahrbuch der Kaiserlich Königlichen Geologischen Reichsanstalt</i> <b>4</b> (1853), 221 | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1035                    |
| Lindbergite      | $\text{Mn}(\text{C}_2\text{O}_4) \cdot 2\text{H}_2\text{O}$   | A  | 2003-029  | Brazil            | <i>American Mineralogist</i> <b>89</b> (2004), 1087  | <i>Physics and Chemistry of Minerals</i> <b>35</b> (2008), 467                  |
| Lindgrenite      | $\text{Cu}_3(\text{Mo}^{6+}\text{O}_4)_2(\text{OH})_2$  | G  | 1935      | Chile             | <i>American Mineralogist</i> <b>20</b> (1935), 484   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 234                   |
| Lindqvistite     | $\text{Pb}_2\text{Mn}^{2+}\text{Fe}^{3+}_{16}\text{O}_{27}$   | A  | 1991-038  | Sweden            | <i>American Mineralogist</i> <b>78</b> (1993), 1304  |   |
| Lindsleyite      | $(\text{Ba},\text{Sr})(\text{Zr},\text{Ca})(\text{Fe},\text{Mg})_2(\text{Ti},\text{Cr},\text{Fe})_{18}\text{O}_{38}$                                  | A  | 1982-086  | South Africa      | <i>American Mineralogist</i> <b>68</b> (1983), 494   | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1083                             |
| Lindströmite     | $\text{Pb}_3\text{Cu}_3\text{Bi}_7\text{S}_{15}$  | A  | 1975-005a | Sweden            | <i>American Mineralogist</i> <b>61</b> (1976), 15  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 525                              |
| Línkite          | $\text{K}_2\text{Ca}_3[(\text{UO}_2)(\text{CO}_3)_3]_2 \cdot 8\text{H}_2\text{O}$   | A  | 2012-066  | Czech Republic    | <i>Journal of Geosciences</i> <b>62</b> (2017), 201  |   |
| Lingunite        | $\text{NaAlSi}_3\text{O}_8$   | A  | 2004-054  | China (meteorite) | <i>Earth and Planetary Science Letters</i> <b>246</b> (2006), 317                          | <i>International Geology Review</i> <b>49</b> (2007), 854                       |
| Linnaeite        | $\text{Co}^{2+}\text{Co}^{3+}_2\text{S}_4$  | G  | 1845      | Sweden            | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 560             | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>239</b> (1938), 85 |
| Lintisite        | $\text{Na}_3\text{LiTi}_2\text{O}_2(\text{SiO}_3)_4 \cdot 2\text{H}_2\text{O}$  | A  | 1989-025  | Russia            | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(3)</b> (1990), 76      | <i>Zeitschrift für Kristallographie</i> <b>193</b> (1990), 137                  |
| Linzhiite        | $\text{FeSi}_2$   | A  | 2010-011  | China             | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 1047                               |   |
| Liottite         | $\text{Na}_{16}\text{Ca}_8\text{Si}_{18}\text{Al}_{18}\text{O}_{72}(\text{SO}_4)_5\text{Cl}_4$  | A  | 1975-036  | Italy             | <i>American Mineralogist</i> <b>62</b> (1977), 321   | <i>Canadian Mineralogist</i> <b>34</b> (1996), 1021                             |
| Lipscombite      | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2$  | G  | 1962      | Brazil            | <i>American Mineralogist</i> <b>47</b> (1962), 353   | <i>American Mineralogist</i> <b>74</b> (1989), 456                              |
| Lipuite          | $\text{KNa}_8\text{Mn}^{3+}_5\text{Mg}_{0.5}[\text{Si}_{12}\text{O}_{30}(\text{OH})_4](\text{PO}_4)\text{O}_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$ | A  | 2014-085  | South Africa      | CNMNC Newsletter 23 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 51                   |   |
| Liroconite       | $\text{Cu}_2\text{Al}(\text{AsO}_4)(\text{OH})_4 \cdot 4\text{H}_2\text{O}$   | G  | 1825      | United Kingdom    | Treatise on Mineralogy vol. 1. Archibald Constable, Edinburgh (1825), 416                  | <i>Acta Crystallographica</i> <b>C47</b> (1991), 916                            |
| Lisetite         | $\text{Na}_2\text{CaAl}_4(\text{SiO}_4)_4$  | A  | 1985-017  | Norway            | <i>American Mineralogist</i> <b>71</b> (1986), 1372  | <i>American Mineralogist</i> <b>71</b> (1986), 1378                             |
| Lishizhenite     | $\text{ZnFe}^{3+}_2(\text{SO}_4)_4 \cdot 14\text{H}_2\text{O}$  | A  | 1989-002  | China             | <i>Acta Mineralogica Sinica</i> <b>10</b> (1990), 299                                      | <i>Kexue Tongbao</i> <b>33</b> (1988), 1783                                     |
| Lisiguangite     | $\text{CuPtBiS}_3$  | A  | 2007-003  | China             | <i>Acta Geologica Sinica</i> <b>83</b> (2009), 238   |   |
| Lisitsynite      | $\text{KBSi}_2\text{O}_6$   | A  | 2000-008  | Russia            | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(6)</b> (2000), 35      | Applied Mineralogy. Balkema, Rotterdam (2000), 245                              |
| Liskeardite      | $(\text{Al},\text{Fe})_{32}(\text{AsO}_4)_{18}(\text{OH})_{42}(\text{H}_2\text{O})_{22} \cdot 52\text{H}_2\text{O}$                                   | G  | 1878      | United Kingdom    | <i>Nature</i> <b>18</b> (1878), 426  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3125                            |
| Lisllirchnerite  | $\text{Pb}_6\text{Al}(\text{OH})_8\text{Cl}_2(\text{NO}_3)_5 \cdot 2\text{H}_2\text{O}$   | A  | 2015-064  | Argentina         | CNMNC Newsletter 27 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1223                 |   |
| Litharge         | $\text{PbO}$  | G  | 1917      | USA               | <i>American Mineralogist</i> <b>2</b> (1917), 18   | <i>Journal of Solid State Chemistry</i> <b>57</b> (1985), 343                   |
| Lithiomarsturite | $\text{LiMn}^{2+}_2\text{Ca}_2\text{Si}_5\text{O}_{14}(\text{OH})$  | A  | 1988-035  | USA               | <i>American Mineralogist</i> <b>75</b> (1990), 409   | <i>Acta Crystallographica</i> <b>E67</b> (2011), i73                            |
| Lithiophilite    | $\text{LiMn}^{2+}(\text{PO}_4)$   | G  | 1878      | USA               | <i>American Journal of Science and Arts</i> <b>116</b> (1878), 33                          | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1105                             |
| Lithiophorite    | $(\text{Al},\text{Li})(\text{Mn}^{4+},\text{Mn}^{3+})\text{O}_2(\text{OH})_2$   | G  | 1870      | Germany           | <i>Journal für Praktische Chemie</i> <b>110</b> (1870), 203                                | <i>American Mineralogist</i> <b>79</b> (1994), 370                              |
| Lithiophosphate  | $\text{Li}_3(\text{PO}_4)$  | G  | 1957      | Russia            | <i>Doklady Akademii Nauk SSSR</i> <b>112</b> (1957), 124                                   | <i>Journal of Solid State Chemistry</i> <b>115</b> (1995), 313                  |
| Lithiotantite    | $\text{LiTa}_3\text{O}_8$   | A  | 1982-022  | Kazakhstan        | <i>Mineralogiceskiy Zhurnal</i> <b>5(1)</b> (1983), 91                                     | <i>Acta Crystallographica</i> <b>E68</b> (2012), i27                            |
| Lithiowodginite  | $\text{LiTa}_3\text{O}_8$   | A  | 1988-011  | Kazakhstan        | <i>Mineralogiceskiy Zhurnal</i> <b>12(1)</b> (1990), 94                                    | <i>Canadian Mineralogist</i> <b>30</b> (1992), 597                              |

|                |   |    |           |                     |   |   |
|----------------|---|----|-----------|---------------------|---|---|
| Lithosite      | $K_3Al_2Si_4O_{12}(OH)$                             | A  | 1982-049  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 218                     | <i>Soviet Physics Doklady</i> <b>31</b> (1986), 941                               |
| Litidionite    | $KNaCuSi_4O_{10}$                                   | Rn | 2014 s.p. | Italy               | <i>Atti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>19</b> (1880), 175 | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 387                             |
| Litochlebite   | $Ag_2PbBi_4Se_8$                                    | A  | 2009-036  | Czech Republic      | <i>Canadian Mineralogist</i> <b>49</b> (2011), 639  |   |
| Litvinskite    | $Na_3ZrSi_6O_{13}(OH)_5$                            | A  | 1999-017  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(1)</b> (2000), 45                 | <i>Crystallography Reports</i> <b>46</b> (2001), 190                              |
| Liveingite     | $Pb_{20}As_{24}S_{56}$                              | G  | 1901      | Switzerland         | <i>Cambridge Philosophical Society, Proceedings</i> <b>11</b> (1901), 239                             | <i>Zeitschrift für Kristallographie</i> <b>131</b> (1970), 356                    |
| Liversidgeite  | $Zn_6(PO_4)_4 \cdot 7H_2O$                          | A  | 2008-048  | Australia           | <i>American Mineralogist</i> <b>95</b> (2010), 397  |   |
| Livingstonite  | $HgSb_4S_6(S)_2$                                    | G  | 1874      | Mexico              | <i>American Journal of Science and Arts</i> <b>108</b> (1874), 145                                    | <i>Zeitschrift für Kristallographie</i> <b>141</b> (1975), 174                    |
| Lizardite      | $Mg_3Si_2O_5(OH)_4$                                 | G  | 1956      | United Kingdom      | <i>Mineralogical Magazine</i> <b>31</b> (1956), 107   | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1045                               |
| Lobanovite     | $K_2Na(Fe^{2+}_4Mg_2Na)Ti_2(Si_4O_{12})_2O_2(OH)_4$ | A  | 2015 s.p. | Russia              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 175   |   |
| Lokkaite-(Y)   | $CaY_4(CO_3)_7 \cdot 9H_2O$                         | A  | 1969-045  | Finland             | <i>Bulletin of the Geological Society of Finland</i> <b>43</b> (1971), 67                             |   |
| Löllingite     | $FeAs_2$  | G  | 1845      | Austria             | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559                        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 169                     |
| Lombardoite    | $Ba_2Mn^{3+}(AsO_4)_2(OH)$                          | A  | 2016-058  | Italy               | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135                            |   |
| Lomonosovite   | $Na_6Na_2Ti_2Na_2Ti_2(Si_2O_7)_2(PO_4)_2O_4$        | Rd | 1967 s.p. | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>70</b> (1950), 83  | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1207                              |
| Londonite      | $CsBe_4Al_4(B_{11}Be)O_{28}$                        | A  | 1999-014  | Madagascar          | <i>Canadian Mineralogist</i> <b>39</b> (2001), 747  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 241                                |
| Lonecreekite   | $(NH_4)Fe^{3+}(SO_4)_2 \cdot 12H_2O$                | A  | 1982-063  | South Africa        | <i>Annals of the Geological Survey of South Africa</i> <b>17</b> (1983), 29                           |   |
| Lonsdaleite    | C   | A  | 1966-044  | USA                 | <i>Nature</i> <b>214</b> (1967), 587  | <i>Journal of Chemical Physics</i> <b>46</b> (1967), 3437                         |
| Loparite-(Ce)  | $(Na,Ce,Sr)(Ce,Th)(Ti,Nb)_2O_6$                     | A  | 1987 s.p. | Russia              | <i>Transactions of the Northern Scientific and Economic Expedition</i> <b>16</b> (1923), 16           | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 827                            |
| Lopatkaite     | $Pb_5Sb_3AsS_{11}$                                  | A  | 2012-083  | Canada              | CNMNC Newsletter 15 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 1                               |   |
| Lópezite       | $K_2Cr_2O_7$  | Rn | 2007 s.p. | Chile               | <i>American Mineralogist</i> <b>22</b> (1937), 929  | <i>Acta Crystallographica</i> <b>C56</b> (2000), 629                              |
| Lorándite      | $TlAsS_2$   | Rn | 2007 s.p. | Macedonia           | <i>Mathematikai és Természeti tudományi Értesítő</i> <b>12</b> (1894), 473                            | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>168</b> (1995), 213         |
| Loranskite-(Y) | $(Y,Ce,Ca)(Zr,Ta)_2O_6$ (?)                         | A  | 1987 s.p. | Russia              | <i>Zeitschrift für Kristallographie</i> <b>31</b> (1899), 505   | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>250</b> (1960), 3032 |
| Lorenzenite    | $Na_2Ti_2O_3(Si_2O_6)$                              | G  | 1901      | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 9  | <i>American Mineralogist</i> <b>72</b> (1987), 173                                |
| Loseyite       | $Mn^{2+}_4Zn_3(CO_3)_2(OH)_{10}$                    | G  | 1929      | USA                 | <i>American Mineralogist</i> <b>14</b> (1929), 150  | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1323                             |
| Lotharmeyerite | $CaZn_2(AsO_4)_2 \cdot 2H_2O$                       | Rd | 1982-060  | Mexico              | <i>Mineralogical Record</i> <b>14</b> (1983), 35  | <i>Acta Crystallographica</i> <b>E68</b> (2012), i9                               |
| Loudounite     | $NaCa_5Zr_4Si_{16}O_{40}(OH)_{11} \cdot 8H_2O$      | A  | 1982-013  | USA                 | <i>Canadian Mineralogist</i> <b>21</b> (1983), 37   |   |
| Loughlinite    | $Na_2Mg_3Si_6O_{16} \cdot 8H_2O$                    | A  | 1967 s.p. | USA                 | <i>American Mineralogist</i> <b>45</b> (1960), 270  | <i>Fortschritte der Mineralogie</i> <b>40</b> (1962), 50                          |
| Lourenswalsite | $(K,Ba)_2Ti_4(Si,Al)_6O_{14}(OH)_{12}$              | A  | 1987-005  | USA                 | <i>Mineralogical Magazine</i> <b>51</b> (1987), 417   |   |

|                   |  |   |           |                                  |  |  |
|-------------------|--|---|-----------|----------------------------------|--|--|
| Lovdarite         | $K_2Na_6Be_4Si_{14}O_{36} \cdot 9H_2O$                     | A | 1972-009  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>213</b> (1973), 429   | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 809                       |
| Loveringite       | $(Ca,Ce,La)(Zr,Fe)(Mg,Fe)_2(Ti,Fe,Cr,Al)_{18}O_{38}$       | A | 1977-023  | Australia                        | <i>American Mineralogist</i> <b>63</b> (1978), 28  | <i>Canadian Mineralogist</i> <b>17</b> (1979), 635                               |
| Lovozerite        | $Na_3CaZrSi_6O_{15}(OH)_3$                                 | G | 1939      | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>25</b> (1939), 753  | <i>Crystallography Reports</i> <b>46</b> (2001), 937                             |
| Löweite           | $Na_{12}Mg_7(SO_4)_{13} \cdot 15H_2O$                      | G | 1847      | Austria                          | <i>Abhandlungen der Böhmisches Gesellschaft der Wissenschaften</i> <b>4</b> (1847), 663                      | <i>American Mineralogist</i> <b>55</b> (1970), 378                               |
| Luanheite         | $Ag_3Hg$   | A | 1983-083  | China                            | <i>Acta Mineralogica Sinica</i> <b>4</b> (1984), 97  |  |
| Luanshiweite      | $KLiAl_{1.5}(Si_{3.5}Al_{0.5})O_{10}(OH)_2$                | A | 2011-102  | China                            | <i>Acta Mineralogica Sinica</i> <b>33</b> (2013), 713  |  |
| Luberoite         | $Pt_5Se_4$   | A | 1990-047  | Democratic Republic of the Congo | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 683   | <i>Journal of the Less Common Metals</i> <b>55</b> (1977), 185                   |
| Lucabindiite      | $(K,NH_4)As_4O_6(Cl,Br)$                                   | A | 2011-010  | Italy                            | <i>American Mineralogist</i> <b>98</b> (2013), 470   |  |
| Lucasite-(Ce)     | $CeTi_2O_5(OH)$  | A | 1986-020  | Australia                        | <i>American Mineralogist</i> <b>72</b> (1987), 1006  |  |
| Lucchesiite       | $CaFe^{2+}_3Al_6(Si_6O_{18})(BO_3)_3(OH)_3O$               | A | 2015-043  | Sri Lanka / Czech Republic       | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1  | <i>Canadian Mineralogist</i> <b>52</b> (2014), 285                               |
| Luddenite         | $Cu_2Pb_2Si_5O_{14} \cdot 14H_2O$                          | A | 1981-032  | USA                              | <i>Mineralogical Magazine</i> <b>46</b> (1982), 363  |  |
| Ludjibaite        | $Cu_5(PO_4)_2(OH)_4$                                       | A | 1987-009  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>111</b> (1988), 167  | <i>American Mineralogist</i> <b>66</b> (1981), 169                               |
| Ludlamite         | $Fe^{2+}_3(PO_4)_2 \cdot 4H_2O$                            | G | 1885      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>6</b> (1885), 23  | <i>Journal of Chemical Physics</i> <b>44</b> (1966), 2223                        |
| Ludlockite        | $PbFe^{3+}_4As^{3+}_{10}O_{22}$                            | A | 1969-046  | Namibia                          | <i>Mineralogical Society of Japan Special Paper</i> <b>1</b> (1970), 264                                     | <i>Canadian Mineralogist</i> <b>34</b> (1996), 79                                |
| Ludwigite         | $Mg_2Fe^{3+}O_2(BO_3)$                                     | G | 1874      | Romania                          | <i>Mineralogische Mittheilungen</i> (1874), 59   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1343                              |
| Lueshite          | $NaNbO_3$  | A | 1962 s.p. | Democratic Republic of the Congo | <i>Académie Royal des Sciences d'Outre-Mer, Bulletin des Séances</i> <b>5</b> (1959), 1251                   | <i>Journal of the American Chemical Society</i> <b>132</b> (2010), 8732          |
| Luetheite         | $Cu_2Al_2(AsO_4)_2(OH)_4 \cdot H_2O$                       | A | 1976-011  | USA                              | <i>Mineralogical Magazine</i> <b>41</b> (1977), 27   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 25                               |
| Luinaite-(OH)     | $(Na, \square)(Fe^{2+}, Mg)_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$ | A | 2009-046  | Australia                        | nyp  | <i>Norsk Bergverksmuseum Skrift</i> <b>50</b> (2013), 23-41                      |
| Lukechangite-(Ce) | $Na_3Ce_2(CO_3)_4F$  | A | 1996-033  | Canada                           | <i>American Mineralogist</i> <b>82</b> (1997), 1255  |  |
| Lukkulaisvaaraite | $Pd_{14}Ag_2Te_9$  | A | 2013-115  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1743   |  |
| Lukrahnite        | $CaCuFe^{3+}(AsO_4)_2(OH, H_2O)_2$                         | A | 1999-030  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 481  |  |
| Lulzacite         | $Sr_2Fe^{2+}_3Al_4(PO_4)_4(OH)_{10}$                       | A | 1998-039  | France                           | <i>Comptes Rendus de l'Académie des Sciences, Sér. Ila</i> <b>330</b> (2000), 317                            | <i>Comptes Rendus de l'Académie des Sciences, Série IIC</i> <b>3</b> (2000), 301 |
| Lüneburgite       | $Mg_3[B_2(OH)_6(PO_4)_2] \cdot 6H_2O$                      | G | 1870      | Germany                          | <i>Sitzungsberichte der Königlich Bayerische Akademie der Wissenschaften zu München</i> <b>1</b> (1870), 291 | <i>American Mineralogist</i> <b>76</b> (1991), 1400                              |
| Lunijianlaite     | $Li_{0.7}Al_{6.2}(Si_7Al)O_{20}(OH, O)_{10}$               | A | 1989-056  | China                            | <i>Acta Mineralogica Sinica</i> <b>10</b> (1990), 289  | <i>Acta Mineralogica Sinica</i> <b>12</b> (1992), 7                              |
| Lun'okite         | $MgMn^{2+}Al(PO_4)_2(OH) \cdot 4H_2O$                      | A | 1982-058  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 232                            |  |
| Luobusaite        | $Fe_{0.84}Si_2$  | A | 2005-052a | China                            | <i>Acta Geologica Sinica</i> <b>80</b> (2007), 1487  |  |
| Luogufengite      | $Fe_2O_3$  | A | 2016-005  | USA                              | <i>American Mineralogist</i> <b>102</b> (2017), 711  |  |

|                           |  |    |           |                     |   |   |
|---------------------------|--|----|-----------|---------------------|---|---|
| Lusernaite-(Y)            | $Y_4Al(CO_3)_2(OH,F)_{11} \cdot 6H_2O$               | A  | 2011-108  | Italy               | <i>American Mineralogist</i> <b>98</b> (2013), 1322   |   |
| Luzonite                  | $Cu_3AsS_4$  | G  | 1874      | Philippines         | <i>Mineralogische Mittheilungen</i> (1874), 257   | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 1                            |
| Lyonsite                  | $Cu^{2+}_3Fe^{3+}_4(VO_4)_6$                         | A  | 1986-041  | El Salvador         | <i>American Mineralogist</i> <b>72</b> (1987), 1000   |   |
| Macaulayite               | $Fe^{3+}_{24}Si_4O_{43}(OH)_2$                       | A  | 1981-062  | United Kingdom      | <i>Mineralogical Magazine</i> <b>48</b> (1984), 127   |   |
| Macdonaldite              | $BaCa_4Si_{16}O_{36}(OH)_2 \cdot 10H_2O$             | A  | 1964-010  | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 314  | <i>Atti della Accademia Nazionale dei Lincei, Serie 8</i> <b>45</b> (1968), 399         |
| Macedonite                | $PbTiO_3$  | A  | 1970-010  | Macedonia           | <i>American Mineralogist</i> <b>56</b> (1971), 387  | <i>Acta Crystallographica</i> <b>B34</b> (1978), 1065                                   |
| Macfallite                | $Ca_2Mn^{3+}_3(SiO_4)(Si_2O_7)(OH)_3$                | A  | 1974-057  | USA                 | <i>Mineralogical Magazine</i> <b>43</b> (1979), 325   | <i>American Mineralogist</i> <b>93</b> (2008), 1851                                     |
| Machatschkiite            | $Ca_6(AsO_4)(AsO_3OH)_3(PO_4) \cdot 15H_2O$          | A  | 1976-010  | Germany             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>24</b> (1977), 125     | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 145 |
| Machiite                  | $Al_2Ti_3O_9$  | A  | 2016-067  | Australia           | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315                  |   |
| Mackayite                 | $Fe^{3+}Te^{4+}_2O_5(OH)$                            | G  | 1944      | USA                 | <i>American Mineralogist</i> <b>29</b> (1944), 211  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 145                           |
| Mackinawite               | $(Fe,Ni)_{1+x}S$ ( $x = 0-0.07$ )                    | A  | 1967 s.p. | USA                 | <i>U.S. Geological Survey Professional Paper</i> <b>475-D</b> (1964), 64                    | <i>Mineralogical Magazine</i> <b>59</b> (1995), 677                                     |
| Macphersonite             | $Pb_4(SO_4)(CO_3)_2(OH)_2$                           | A  | 1982-105  | United Kingdom      | <i>Mineralogical Magazine</i> <b>48</b> (1984), 227   | <i>Mineralogical Magazine</i> <b>62</b> (1998), 451                                     |
| Macquartite               | $Cu_2Pb_7(CrO_4)_4(SiO_4)_2(OH)_2$                   | A  | 1979-037  | USA                 | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 530                                       |   |
| Madocite                  | $Pb_{19}(Sb,As)_{16}S_{43}$                          | A  | 1966-015  | Canada              | <i>Canadian Mineralogist</i> <b>9</b> (1967), 7   | <i>Mineralogical Record</i> <b>13</b> (1982), 93  |
| Magadiite                 | $Na_2Si_4O_{29} \cdot 11H_2O$                        | A  | 1967-017  | Kenya               | <i>Science</i> <b>157</b> (1967), 1177  | <i>Clays and Clay Minerals</i> <b>36</b> (1988), 409                                    |
| Magbasite                 | $KBaFe^{3+}Mg_7Si_8O_{22}(OH)_2F_6$                  | A  | 1968 s.p. | China               | <i>Doklady Akademii Nauk SSSR</i> <b>163</b> (1965), 718                                    | <i>Mineralogical Magazine</i> <b>78</b> (2014), 29                                      |
| Maghagendorfite           | $(Na, \square)MgMn^{2+}(Fe^{2+}, Fe^{3+})_2(PO_4)_3$ | A  | 1979 s.p. | USA                 | <i>Mineralogical Magazine</i> <b>43</b> (1979), 227   |   |
| Maghemite                 | $(Fe^{3+}_{0.67} \square_{0.33})Fe^{3+}_2O_4$        | Rd | 2018 s.p. | South Africa        | <i>Economic Geology</i> <b>22</b> (1927), 845   | <i>Physics and Chemistry of Minerals</i> <b>22</b> (1995), 21                           |
| Maghrebite                | $MgAl_2(AsO_4)_2(OH)_2 \cdot 8H_2O$                  | A  | 2005-044  | Morocco             | <i>Lapis</i> <b>31</b> (2006), 69   | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 717                             |
| Magnesio-arfvedsonite     | $NaNa_2(Mg_4Fe^{3+})Si_8O_{22}(OH)_2$                | A  | 2013-137  | Myanmar             | <i>Mineralogical Magazine</i> <b>79</b> (2015), 253   |   |
| Magnesioaubertite         | $MgAl(SO_4)_2Cl \cdot 14H_2O$                        | A  | 1982-015  | Italy               | <i>Aufschluss</i> <b>39</b> (1988), 97  |   |
| Magnesiobeltrandoite-2N3S | $(Mg_6Al_2)(Al_{18}Fe^{3+}_2)O_{38}(OH)_2$           | A  | 2016-073  | Italy               | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 545                                 |   |
| Magnesiocanutite          | $NaMnMg_2[AsO_4]_2[AsO_2(OH)_2]$                     | A  | 2016-057  | Chile               | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1523  |   |
| Magnesiocarpholite        | $MgAl_2Si_2O_6(OH)_4$                                | A  | 1978-027  | France              | <i>American Journal of Science</i> <b>283-A</b> (1983), 72                                  | <i>American Mineralogist</i> <b>66</b> (1981), 1080                                     |
| Magnesioclhoritoid        | $MgAl_2O(SiO_4)(OH)_2$                               | Rn | 1987 s.p. | Switzerland / Italy | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>43</b> (1963), 269 | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 67                               |
| Magnesioclhorophoenicite  | $Mg_3Zn_2(AsO_4)(OH,O)_6$                            | Rd | 1981 s.p. | USA                 | <i>U.S. Geological Survey Professional Paper</i> <b>180</b> (1935), 124                     | <i>Canadian Mineralogist</i> <b>19</b> (1981), 333                                      |
| Magnesiocromite           | $MgCr_2O_4$  | G  | 1873      | Germany             | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>25</b> (1873), 394            | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1305                                     |
| Magnesiocopiapite         | $MgFe^{3+}_4(SO_4)_6(OH)_2 \cdot 20H_2O$             | G  | 1938      | USA                 | <i>American Mineralogist</i> <b>23/2</b> (1938), 3  | <i>Mineralogical Magazine</i> <b>71</b> (2007), 553                                     |

|                                  |  |    |           |            |   |   |
|----------------------------------|--|----|-----------|------------|---|---|
| Magnesiocoulsonite               | MgV <sub>2</sub> O <sub>4</sub>  | A  | 1994-034  | Russia     | Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva <b>124(4)</b> (1995), 91  | Zeitschrift für Anorganische und Allgemeine Chemie <b>500</b> (1983), 188                             |
| Magnesioidumortierite            | MgAl <sub>6</sub> BSi <sub>3</sub> O <sub>17</sub> (OH)  | Rd | 1992-050  | Italy      | European Journal of Mineralogy <b>7</b> (1995), 167   | European Journal of Mineralogy <b>7</b> (1995), 525   |
| Magnesio-ferri-fluoro-hornblende | □Ca <sub>2</sub> (Mg <sub>4</sub> Fe <sup>3+</sup> )(Si <sub>7</sub> Al)O <sub>22</sub> F <sub>2</sub>   | A  | 2014-091  | Italy      | Mineralogical Magazine <b>80</b> (2016), 269  |   |
| Magnesioferrite                  | MgFe <sup>3+</sup> <sub>2</sub> O <sub>4</sub>   | G  | 1859      | Italy      | Annalen der Physik und Chemie <b>107</b> (1859), 451  | American Mineralogist <b>90</b> (2005), 219   |
| Magnesiofluckite                 | CaMg(AsO <sub>3</sub> OH) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub>   | A  | 2017-103  | Chile      | CNMNC Newsletter 42 - Mineralogical Magazine <b>82</b> (2018), 445; European Journal of Mineralogy <b>30</b> (2018), 405  |   |
| Magnesio-fluoro-arfvedsonite     | NaNa <sub>2</sub> (Mg <sub>4</sub> Fe <sup>3+</sup> )Si <sub>8</sub> O <sub>22</sub> F <sub>2</sub>  | Rd | 2012 s.p. | Russia     | Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva <b>129(6)</b> (2000), 28  |   |
| Magnesio-fluoro-hastingsite      | NaCa <sub>2</sub> (Mg <sub>4</sub> Fe <sup>3+</sup> )(Si <sub>6</sub> Al <sub>2</sub> )O <sub>22</sub> F <sub>2</sub>                                      | Rd | 2012 s.p. | Romania    | European Journal of Mineralogy <b>18</b> (2006), 503  |   |
| Magnesio-foitite                 | □(Mg <sub>2</sub> Al)Al <sub>6</sub> (Si <sub>6</sub> O <sub>18</sub> )(BO <sub>3</sub> ) <sub>3</sub> (OH) <sub>3</sub> (OH)                              | Rd | 1998-037  | Japan      | Canadian Mineralogist <b>37</b> (1999), 1439  | Canadian Mineralogist <b>44</b> (2006), 959   |
| Magnesio-hastingsite             | NaCa <sub>2</sub> (Mg <sub>4</sub> Fe <sup>3+</sup> )(Si <sub>6</sub> Al <sub>2</sub> )O <sub>22</sub> (OH) <sub>2</sub>                                   | Rd | 2012 s.p. | Canada     | American Mineralogist <b>13</b> (1928), 287   | Zeitschrift für Kristallographie <b>156</b> (1981), 197   |
| Magnesiohatertite                | (Na,Ca) <sub>2</sub> Ca(Mg,Fe <sup>3+</sup> ) <sub>2</sub> (AsO <sub>4</sub> ) <sub>3</sub>  | A  | 2016-078  | Russia     | CNMNC Newsletter 34 - Mineralogical Magazine <b>80</b> (2016), 1315   |   |
| Magnesiohögbomite-2N2S           | (Mg,Fe,Al,Ti) <sub>22</sub> (O,OH) <sub>32</sub>   | Rn | 2001 s.p. | Sweden     | Bulletin of the Geological Institution of the University of Upsala <b>15</b> (1916), 289                                  | European Journal of Mineralogy <b>14</b> (2002), 389  |
| Magnesiohögbomite-2N3S           | (Mg,Fe,Zn,Ti) <sub>4</sub> (Al,Fe) <sub>10</sub> O <sub>19</sub> (OH)  | Rn | 2001 s.p. | Tanzania   | Mineralogical Magazine <b>33</b> (1963), 563  | American Mineralogist <b>87</b> (2002), 277   |
| Magnesiohögbomite-2N4S           | [(Mg <sub>8.43</sub> Fe <sup>2+</sup> <sub>1.57</sub> ) <sub>2=10</sub> Al <sub>22</sub> Ti <sup>4+</sup> <sub>2</sub> O <sub>46</sub> (OH) <sub>2</sub> ] | A  | 2010-084  | Antarctica | American Mineralogist <b>97</b> (2012), 268   |   |
| Magnesiohögbomite-6N6S           | (Mg,Al,Fe) <sub>3</sub> (Al,Ti) <sub>8</sub> O <sub>15</sub> (OH)  | Rn | 2001 s.p. | Tanzania   | Neues Jahrbuch für Mineralogie Monatshefte (1990), 401  | American Mineralogist <b>87</b> (2002), 277   |
| Magnesio-hornblende              | □Ca <sub>2</sub> (Mg <sub>4</sub> Al)(Si <sub>7</sub> Al)O <sub>22</sub> (OH) <sub>2</sub>   | A  | 2017-059  | Namibia    | CNMNC Newsletter 39 - Mineralogical Magazine <b>81</b> (2017), 1279; European Journal of Mineralogy <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/minmag.2017.081.093">https://doi.org/10.1180/minmag.2017.081.093</a> |
| Magnesiohulsite                  | Mg <sub>2</sub> Fe <sup>3+</sup> O <sub>2</sub> (BO <sub>3</sub> )   | A  | 1983-074  | China      | Acta Mineralogica Sinica <b>5</b> (1985), 97  | Acta Petrologica et Mineralogica <b>10</b> (1991), 339  |
| Magnesiokoritnigite              | Mg(AsO <sub>3</sub> OH)·H <sub>2</sub> O   | A  | 2013-049  | Chile      | Mineralogical Magazine <b>77</b> (2013), 3081   |   |
| Magnesioleydetite                | Mg(UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> ·11H <sub>2</sub> O  | A  | 2017-063  | USA        | CNMNC Newsletter 39 - Mineralogical Magazine <b>81</b> (2017), 1279; European Journal of Mineralogy <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/mgm.2018.118">https://doi.org/10.1180/mgm.2018.118</a>               |
| Magnesioneptunite                | KNa <sub>2</sub> Li(Mg,Fe) <sub>2</sub> Ti <sub>2</sub> Si <sub>8</sub> O <sub>24</sub>  | A  | 2009-009  | Russia     | Zapiski Rossiyskogo Mineralogicheskogo Obshchestva <b>140(1)</b> (2011), 47   |   |
| Magnesionigerite-2N1S            | (Mg,Al,Zn) <sub>2</sub> (Al,Sn) <sub>6</sub> O <sub>11</sub> (OH)  | Rn | 2001 s.p. | China      | Earth Science - Journal of Wuhan College of Geology <b>14</b> (1989), 413   | European Journal of Mineralogy <b>14</b> (2002), 389  |
| Magnesionigerite-6N6S            | (Mg,Al,Zn) <sub>3</sub> (Al,Sn,Fe) <sub>8</sub> O <sub>15</sub> (OH)   | Rn | 2001 s.p. | China      | Earth Science - Journal of Wuhan College of Geology <b>14</b> (1989), 413   | European Journal of Mineralogy <b>14</b> (2002), 389  |
| Magnesiopascoite                 | Ca <sub>2</sub> MgV <sup>5+</sup> <sub>10</sub> O <sub>28</sub> ·16H <sub>2</sub> O  | A  | 2007-025  | USA        | Canadian Mineralogist <b>46</b> (2008), 679   |   |
| Magnesio-riebeckite              | □Na <sub>2</sub> (Mg <sub>3</sub> Fe <sup>3+</sup> <sub>2</sub> )Si <sub>8</sub> O <sub>22</sub> (OH) <sub>2</sub>   | Rd | 2012 s.p. | Japan      | Journal of the Geological Society of Japan <b>63</b> (1957), 698  | Mineralogical Magazine <b>81</b> (2017), 1431   |
| Magnesiorowlandite-(Y)           | Y <sub>4</sub> (Mg,Fe)(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> F <sub>2</sub>  | A  | 2012-010  | Japan      | Journal of Mineralogical and Petrological Sciences <b>109</b> (2014), 109   |   |

|                         |   |    |           |                    |  |  |
|-------------------------|---|----|-----------|--------------------|--|--|
| Magnesiostauroilite     | $Mg(Mg, Li)_3(Al, Mg)_{18}Si_8O_{44}(OH)_4$           | A  | 1992-035  | Italy              | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 167  | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 453    |
| Magnesiotaaffeite-2N'2S | $Mg_3BeAl_6O_{16}$                                    | Rn | 2001 s.p. | Sri Lanka          | <i>Mineralogical Magazine</i> <b>29</b> (1951), 765  | <i>Canadian Mineralogist</i> <b>50</b> (2012), 21              |
| Magnesiotaaffeite-6N'3S | $Mg_2BeAl_6O_{12}$                                    | Rn | 2001 s.p. | Australia          | <i>Mineralogical Magazine</i> <b>36</b> (1967), 305  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 393  |
| Magnesiovesuvianite     | $Ca_{19}Mg(Al_{11}Mg)Si_{18}O_{69}(OH)_9$             | A  | 2015-104  | Macedonia          | <i>Journal of Geosciences</i> <b>62</b> (2017), 25   |  |
| Magnesiovoltaite        | $K_2Mg_5Fe^{3+}_3Al(SO_4)_{12} \cdot 18H_2O$          | A  | 2015-095  | Chile              | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 1005   |  |
| Magnesiozippeite        | $Mg(UO_2)_2(SO_4)O_2 \cdot 3.5H_2O$                   | Rd | 1971-007  | USA                | <i>Canadian Mineralogist</i> <b>14</b> (1976), 429   | <i>Mineralogy and Petrology</i> <b>107</b> (2013), 211         |
| Magnesite               | $Mg(CO_3)$  | A  | 1962 s.p. | Italy              | Mineralogische Tabellen, 2nd ed. Rottmann, Berlin (1808), 48   | <i>Physics and Chemistry of Minerals</i> <b>24</b> (1997), 122 |
| Magnetite               | $Fe^{2+}Fe^{3+}_2O_4$                                 | G  | 1845      | ?                  | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 546   | <i>Physics and Chemistry of Minerals</i> <b>34</b> (2007), 627 |
| Magnetoplumbite         | $PbFe^{3+}_{12}O_{19}$                                | G  | 1925      | Sweden             | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>47</b> (1925), 283  | <i>American Mineralogist</i> <b>74</b> (1989), 1186            |
| Magnioursilite          | $Mg_4(UO_2)_4(Si_2O_5)_5(OH)_6 \cdot 20H_2O$          | G  | 1957      | Tajikistan         | <i>Atomnaya Energiya Voprosy Geologii Urana, Supplement</i> <b>6</b> (1957), 61  |  |
| Magnolite               | $Hg^{1+}_2(Te^{4+}O_3)$                               | G  | 1877      | USA                | <i>American Philosophical Society</i> <b>17</b> (1877), 113  | <i>Canadian Mineralogist</i> <b>27</b> (1989), 133             |
| Magnussonite            | $Mn^{2+}_{10}As^{3+}_6O_{18}(OH, Cl)_2$               | Rd | 1984 s.p. | Sweden             | <i>Arkiv för Kemi, Mineralogi och Geologi</i> <b>2</b> (1957), 133   | <i>American Mineralogist</i> <b>69</b> (1984), 800             |
| Mahnertite              | $(Na, Ca, K)Cu_3(AsO_4)_2Cl \cdot 5H_2O$              | A  | 1994-035  | France             | <i>Archives de Sciences de Genève</i> <b>49</b> (1996), 119  | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 687    |
| Maikainite              | $Cu_{10}Fe_3MoGe_3S_{16}$                             | A  | 1992-038  | Kazakhstan         | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>393A</b> (2003), 1329                       |  |
| Majakite                | $PdNiAs$  | A  | 1974-038  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 698  |  |
| Majindeite              | $Mg_2Mo_3O_8$   | A  | 2012-079  | Mexico (meteorite) | <i>American Mineralogist</i> <b>101</b> (2016), 1161   |  |
| Majorite                | $Mg_3(MgSi)(SiO_4)_3$                                 | A  | 1969-018  | Australia          | <i>Science</i> <b>168</b> (1970), 832  | <i>American Mineralogist</i> <b>79</b> (1994), 581             |
| Majzlanite              | $K_2Na(ZnNa)Ca(SO_4)_4$                               | A  | 2018-016  | Russia             | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |  |
| Makarochkinite          | $Ca_4[Fe^{2+}_8Fe^{3+}_2Ti_2]O_4[Si_8Be_2Al_2O_{36}]$ | A  | 2002-009a | Russia             | <i>American Mineralogist</i> <b>90</b> (2005), 1402  | <i>Kristallografiya</i> <b>35</b> (1990), 1388                 |
| Makatite                | $Na_2Si_4O_8(OH)_2 \cdot 4H_2O$                       | A  | 1969-003  | Kenya              | <i>American Mineralogist</i> <b>55</b> (1970), 358   | <i>Zeitschrift für Kristallographie</i> <b>159</b> (1982), 203 |
| Mäkinenite              | $NiSe$  | A  | 1967 s.p. | Finland            | <i>Comptes Rendus de la Société Géologique de Finlande</i> <b>36</b> (1964), 113   |  |
| Makovickyite            | $Cu_{1.12}Ag_{0.81}Pb_{0.27}Bi_{5.35}S_9$             | A  | 1986-027  | Austria / Romania  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>168</b> (1994), 147  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 515             |
| Malachite               | $Cu_2(CO_3)(OH)_2$                                    | G  | ?         | unknown            | Mineralogia, eller Mineralriktet. Lars Salvius, Stockholm (1747), 279  | <i>Zeitschrift für Kristallographie</i> <b>145</b> (1977), 412 |
| Malanite                | $Cu^{1+}(Ir^{3+}Pt^{4+})S_4$                          | Rd | 1995-003  | China              | <i>Acta Geologica Sinica</i> <b>70</b> (1996), 309   |  |
| Malayaite               | $CaSnO(SiO_4)$  | A  | 1964-024  | Malaysia           | <i>Mineralogical Magazine</i> <b>35</b> (1965), 622  | <i>American Mineralogist</i> <b>81</b> (1996), 595             |
| Maldonite               | $Au_2Bi$  | G  | 1869      | Australia          | <i>Neues Jahrbuch</i> <b>3</b> (1969), 287   | <i>Zeitschrift für Kristallographie</i> <b>90</b> (1935), 322  |

|                        |  |    |           |            |  |  |
|------------------------|--|----|-----------|------------|--|--|
| Maleevite              | BaB <sub>2</sub> Si <sub>2</sub> O <sub>8</sub>  | A  | 2002-027  | Tajikistan | <i>Canadian Mineralogist</i> <b>42</b> (2004), 107   |  |
| Malhmoodite            | Fe <sup>2+</sup> Zr(PO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O  | Rn | 1992-001  | USA        | <i>American Mineralogist</i> <b>78</b> (1993), 437   | <i>Mineralogical Magazine</i> <b>59</b> (1995), 166  |
| Malinkoite             | NaBSiO <sub>4</sub>  | A  | 2000-009  | Russia     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(6)</b> (2000), 35  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 159   |
| Malladrite             | Na <sub>2</sub> SiF <sub>6</sub>   | G  | 1926      | Italy      | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VI</i> <b>4</b> (1926), 171   |  |
| Mallardite             | Mn(SO <sub>4</sub> )·7H <sub>2</sub> O   | G  | 1879      | USA        | <i>Bulletin de la Société Française de Minéralogie</i> <b>2</b> (1879), 117  | <i>Journal of the Japanese Association of Mineralogists Petrologists and Economic Geologists</i> <b>74</b> (1979), 406 |
| Mallestigite           | Pb <sub>3</sub> Sb(SO <sub>4</sub> )(AsO <sub>4</sub> )(OH) <sub>6</sub> ·3H <sub>2</sub> O  | A  | 1996-043  | Austria    | <i>Mitteilungen der Österreichischen Mineralogischen Gesellschaft</i> <b>143</b> (1998), 225   |  |
| Malyshevite            | PdCuBiS <sub>3</sub>   | A  | 2006-012  | Russia     | <i>New Data on Minerals</i> <b>41</b> (2006), 14   |  |
| Mambertiite            | BiMo <sup>5+</sup> <sub>2.8</sub> O <sub>8</sub> (OH)  | A  | 2013-098  | Italy      | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 405  |  |
| Mammothite             | Pb <sub>6</sub> Cu <sub>4</sub> AlSb <sup>5+</sup> O <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> Cl <sub>4</sub> (OH) <sub>16</sub>   | A  | 1983-076a | USA        | <i>Mineralogical Record</i> <b>16</b> (1985), 117  | <i>Canadian Mineralogist</i> <b>52</b> (2014), 687   |
| Manaevite-(Ce)         | Ca <sub>11</sub> (Ce,H <sub>2</sub> O,Ca) <sub>8</sub> Mg(Al,Fe) <sub>4</sub> (Mg,Ti,Fe <sup>3+</sup> ) <sub>8</sub> [Si <sub>2</sub> O <sub>7</sub> ] <sub>4</sub> [(SiO <sub>4</sub> ) <sub>8</sub> (H <sub>4</sub> O <sub>4</sub> ) <sub>2</sub> ](OH) <sub>9</sub> | A  | 2018-046  | Russia     | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |  |
| Manaksite              | KNaMn <sup>2+</sup> Si <sub>4</sub> O <sub>10</sub>  | A  | 1990-024  | Russia     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 112   | <i>Minerals as Advanced Materials I</i> . Springer, Berlin (2008), 153   |
| Manandonite            | Li <sub>2</sub> Al <sub>4</sub> (Si <sub>2</sub> AlB)O <sub>10</sub> (OH) <sub>8</sub>   | G  | 1912      | Madagascar | <i>Bulletin de la Société Française de Minéralogie</i> <b>35</b> (1912), 223   | <i>American Mineralogist</i> <b>80</b> (1995), 387   |
| Mandarinoite           | Fe <sup>3+</sup> <sub>2</sub> (Se <sup>4+</sup> O <sub>3</sub> ) <sub>3</sub> ·6H <sub>2</sub> O   | A  | 1977-049  | Bolivia    | <i>Canadian Mineralogist</i> <b>16</b> (1978), 605   | <i>Canadian Mineralogist</i> <b>22</b> (1984), 475   |
| Maneckite              | (Na□)Ca <sub>2</sub> Fe <sup>2+</sup> <sub>2</sub> (Fe <sup>3+</sup> Mg)Mn <sub>2</sub> (PO <sub>4</sub> ) <sub>6</sub> ·2H <sub>2</sub> O   | A  | 2015-056  | Poland     | <i>Mineralogical Magazine</i> <b>81</b> (2017), 723  |  |
| Manganarsite           | Mn <sup>2+</sup> <sub>3</sub> As <sup>3+</sup> <sub>2</sub> O <sub>4</sub> (OH) <sub>4</sub>   | A  | 1985-037  | Sweden     | <i>American Mineralogist</i> <b>71</b> (1986), 1517  |  |
| Manganbabingtonite     | Ca <sub>2</sub> Mn <sup>2+</sup> Fe <sup>3+</sup> Si <sub>5</sub> O <sub>14</sub> (OH)   | A  | 1971 s.p. | Russia     | <i>Doklady Akademii Nauk SSSR</i> <b>169</b> (1966), 434   |  |
| Manganbelyankinite     | Mn <sup>2+</sup> (Ti,Nb) <sub>5</sub> O <sub>12</sub> ·9H <sub>2</sub> O   | Q  | 1957      | Russia     | <i>Akademiya Nauk SSSR, Trudy Institut Mineralogii, Geokhimii i Kristalloghimii Redkikh Elementov</i> <b>1</b> (1957), 41                |  |
| Manganberzeliite       | (NaCa <sub>2</sub> )Mn <sup>2+</sup> <sub>2</sub> (AsO <sub>4</sub> ) <sub>3</sub>   | G  | 1894      | Sweden     | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>23</b> (1894), 590  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1081   |
| Manganflurlite         | ZnMn <sup>2+</sup> <sub>3</sub> Fe <sup>3+</sup> (PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>7</sub> ·2H <sub>2</sub> O  | A  | 2017-076  | Germany    | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 | <a href="https://doi.org/10.1127/ejm/2018/0030-2793">https://doi.org/10.1127/ejm/2018/0030-2793</a>                    |
| Mangangordonite        | Mn <sup>2+</sup> Al <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O  | A  | 1989-023  | USA        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 169  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 265  |
| Manganhumite           | Mn <sup>2+</sup> <sub>7</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH) <sub>2</sub>   | A  | 1969-021  | Sweden     | <i>Mineralogical Magazine</i> <b>42</b> (1978), 133  | <i>American Mineralogist</i> <b>63</b> (1978), 874   |
| Manganiakasakaite-(La) | CaLa(Mn <sup>3+</sup> AlMn <sup>2+</sup> )[Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)  | A  | 2017-028  | Italy      | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779  |  |
| Manganiandrosite-(Ce)  | MnCe(Mn <sup>3+</sup> AlMn <sup>2+</sup> )[Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)  | A  | 2002-049  | Italy      | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 569  |  |
| Manganiandrosite-(La)  | MnLa(Mn <sup>3+</sup> AlMn <sup>2+</sup> )[Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)  | Rn | 1994-048  | Greece     | <i>American Mineralogist</i> <b>81</b> (1996), 735   |  |
| Manganiceladonite      | KMgMn <sup>3+</sup> Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub>  | A  | 2015-052  | Italy      | <i>Mineralogical Magazine</i> <b>81</b> (2017), 167  |  |



|                              |  |    |           |              |   |   |
|------------------------------|--|----|-----------|--------------|---|---|
| Mangani-dellaventuraite      | $\text{NaNa}_2(\text{MgMn}^{3+}_2\text{Ti}^{4+}\text{Li})\text{Si}_8\text{O}_{22}\text{O}_2$   | Rd | 2012 s.p. | India        | <i>American Mineralogist</i> <b>90</b> (2005), 304  |   |
| Manganilvaite                | $\text{CaFe}^{2+}\text{Fe}^{3+}\text{Mn}^{2+}(\text{Si}_2\text{O}_7)\text{O}(\text{OH})$   | A  | 2002-016  | Bulgaria     | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1027   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1043   |
| Mangani-obertiite            | $\text{NaNa}_2(\text{Mg}_3\text{Mn}^{3+}\text{Ti}^{4+})\text{Si}_8\text{O}_{22}\text{O}_2$   | Rd | 2012 s.p. | Germany      | <i>American Mineralogist</i> <b>85</b> (2000), 236  | CNMNC Newsletter 22 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 1241  |
| Manganite                    | $\text{Mn}^{3+}\text{O}(\text{OH})$  | G  | 1826      | Germany      | <i>Edinburgh Journal of Science</i> <b>4</b> (1826), 41   | <i>Journal of Solid State Chemistry</i> <b>133</b> (1997), 486  |
| Manganiotharmeyerite         | $\text{CaMn}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2$  | A  | 2001-026  | Switzerland  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1597   |   |
| Manganoblödite               | $\text{Na}_2\text{Mn}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$  | A  | 2012-029  | USA          | <i>Mineralogical Magazine</i> <b>77</b> (2013), 367   |   |
| Manganochromite              | $\text{Mn}^{2+}\text{Cr}_2\text{O}_4$  | A  | 1975-020  | Australia    | <i>American Mineralogist</i> <b>63</b> (1978), 1166   | <i>Journal of Applied Physics</i> <b>37</b> (1966), 1436  |
| Manganoendialyte             | $\text{Na}_{14}\text{Ca}_6\text{Mn}_3\text{Zr}_3[\text{Si}_{26}\text{O}_{72}(\text{OH})_2](\text{H}_2\text{O}, \text{Cl}, \text{O}, \text{OH})_6$                    | A  | 2009-039  | Brazil       | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(4)</b> (2010), 35                                      |   |
| Mangano-ferri-eckermannite   | $\text{NaNa}_2(\text{Mn}^{2+}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Japan        | <i>Journal of the Japanese Association of Mineralogists, Petrologists and Economic Geologists</i> <b>62</b> (1969), 311 | <i>Acta Crystallographica</i> <b>E66</b> (2010), i83  |
| Manganohörnesite             | $\text{Mn}^{2+}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$   | Rn | 2007 s.p. | Sweden       | <i>Arkiv för Mineralogi och Geologi</i> <b>1</b> (1951), 333  |   |
| Manganokaskasite             | $(\text{Mo}, \text{Nb})\text{S}_2 \cdot (\text{Mn}_{1-x}\text{Al}_x)(\text{OH})_{2+x}$   | A  | 2013-026  | Russia       | <i>Mineralogical Magazine</i> <b>78</b> (2014), 663   |   |
| Manganokhomyakovite          | $\text{Na}_{12}\text{Sr}_3\text{Ca}_6\text{Mn}_3\text{Zr}_3\text{W}(\text{Si}_{25}\text{O}_{73})(\text{O}, \text{OH}, \text{H}_2\text{O})_3(\text{Cl}, \text{OH})_2$ | A  | 1998-043  | Canada       | <i>Canadian Mineralogist</i> <b>37</b> (1999), 993  |   |
| Manganokukisvumite           | $\text{Na}_6\text{MnTi}_4\text{Si}_8\text{O}_{28} \cdot 4\text{H}_2\text{O}$   | A  | 2002-029  | Canada       | <i>Canadian Mineralogist</i> <b>42</b> (2004), 781  |   |
| Manganolangbeinite           | $\text{K}_2\text{Mn}^{2+}_2(\text{SO}_4)_3$  | G  | 1924      | Italy        | <i>Rendiconti dell'Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>30</b> (1924), 123                    | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Classe di Scienze Fisiche, Matematiche e Naturali, Serie VIII</i> <b>2</b> (1947), 451 |
| Mangano-mangani-ungarettiite | $\text{NaNa}_2(\text{Mn}^{2+}_2\text{Mn}^{3+}_3)\text{Si}_8\text{O}_{22}\text{O}_2$  | Rd | 2012 s.p. | Australia    | <i>American Mineralogist</i> <b>80</b> (1995), 165  |   |
| Manganonaujakasite           | $\text{Na}_6\text{Mn}^{2+}\text{Al}_4\text{Si}_8\text{O}_{26}$   | A  | 1999-031  | Russia       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(4)</b> (2000), 48                                   |   |
| Manganoneptunite             | $\text{KNa}_2\text{LiMn}^{2+}_2\text{Ti}_2\text{Si}_8\text{O}_{24}$  | Rn | 2007 s.p. | Russia       | <i>Transactions of the Northern Scientific and Economic Expedition</i> <b>16</b> (1923), 16                             | <i>Geology of Ore Deposits</i> <b>49</b> (2007), 835  |
| Manganonordite-(Ce)          | $\text{Na}_3\text{SrCeMn}^{2+}_6\text{Si}_6\text{O}_{17}$  | A  | 1997-007  | Russia       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(1)</b> (1998), 32                                   | <i>Crystallography Reports</i> <b>44</b> (1999), 565  |
| Manganoquadratite            | $\text{AgMnAsS}_3$   | A  | 2011-008  | Peru         | <i>American Mineralogist</i> <b>97</b> (2012), 1199   |   |
| Manganosegelerite            | $\text{Mn}^{2+}_2\text{Fe}^{3+}(\text{PO}_4)_2(\text{OH}) \cdot 4\text{H}_2\text{O}$   | A  | 1984-055  | Russia       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(2)</b> (1992), 95                                   |   |
| Manganosite                  | $\text{MnO}$   | G  | 1874      | Sweden       | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>2</b> (1874), 179  | <i>Journal of Solid State Chemistry</i> <b>58</b> (1985), 56  |
| Manganostibite               | $\text{Mn}^{2+}_7\text{Sb}^{5+}\text{As}^{5+}\text{O}_{12}$  | G  | 1874      | Sweden       | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>7</b> (1884), 210  | <i>American Mineralogist</i> <b>55</b> (1970), 1489   |
| Manganotychite               | $\text{Na}_6\text{Mn}^{2+}_2(\text{CO}_3)_4(\text{SO}_4)$  | A  | 1989-039  | Russia       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(5)</b> (1990), 46                                   |   |
| Manganvesuvianite            | $\text{Ca}_{19}\text{Mn}^{3+}\text{Al}_{10}\text{Mg}_2(\text{SiO}_4)_{10}(\text{Si}_2\text{O}_7)_4\text{O}(\text{OH})_9$   | A  | 2000-040  | South Africa | <i>Mineralogical Magazine</i> <b>66</b> (2002), 137   |   |

|                    |  |   |           |             |  |  |
|--------------------|--|---|-----------|-------------|--|--|
| Mangazeite         | $\text{Al}_2(\text{SO}_4)(\text{OH})_4 \cdot 3\text{H}_2\text{O}$  | A | 2005-021a | Russia      | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(4)</b> (2006), 20   |  |
| Manitobaite        | $\text{Na}_{16}\text{Mn}^{2+}_{25}\text{Al}_8(\text{PO}_4)_{30}$   | A | 2008-064  | Canada      | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1455  | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1221                  |
| Manjiroite         | $\text{Na}(\text{Mn}^{4+}_7\text{Mn}^{3+})\text{O}_{16}$   | A | 1966-009  | Japan       | <i>Journal of the Japanese Association of Mineralogists, Petrologists, and Economic Geologists</i> <b>58</b> (1967), 39                  |  |
| Mannardite         | $\text{Ba}(\text{Ti}_6\text{V}^{3+}_2)\text{O}_{16}$   | A | 1983-013  | Canada      | <i>Canadian Mineralogist</i> <b>24</b> (1986), 55  | <i>Canadian Mineralogist</i> <b>24</b> (1986), 67                    |
| Mansfieldite       | $\text{Al}(\text{AsO}_4) \cdot 2\text{H}_2\text{O}$  | G | 1948      | USA         | <i>American Mineralogist</i> <b>33</b> (1948), 122   | <i>Acta Crystallographica</i> <b>E65</b> (2009), i6                  |
| Mantienneite       | $\text{KMg}_2\text{Al}_2\text{Ti}(\text{PO}_4)_4(\text{OH})_3 \cdot 15\text{H}_2\text{O}$  | A | 1983-048  | Cameroon    | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>107</b> (1984), 737                                     |  |
| Maohokite          | $\text{MgFe}_2\text{O}_4$  | A | 2017-047  | China       | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931  |  |
| Maoniupingite-(Ce) | $(\text{Ce}, \text{Ca})_4(\text{Fe}^{3+}, \text{Ti}, \text{Fe}^{2+}, \square)(\text{Ti}, \text{Fe}^{3+}, \text{Fe}^{2+}, \text{Nb})_4\text{Si}_4\text{O}_{22}$ | A | 2003-017  | China       | <i>Chenji Yu Tetisi Dizhi</i> <b>25</b> (2005), 210  | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 969          |
| Mapimite           | $\text{Zn}_2\text{Fe}^{3+}_3(\text{AsO}_4)_3(\text{OH})_4 \cdot 10\text{H}_2\text{O}$  | A | 1978-070  | Mexico      | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 582  | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1040                |
| Mapiquiroite       | $(\text{Sr}, \text{Pb})(\text{U}, \text{Y})\text{Fe}_2(\text{Ti}, \text{Fe}^{3+})_{18}\text{O}_{38}$   | A | 2013-010  | Italy       | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 427  |  |
| Marathonite        | $\text{Pd}_{25}\text{Ge}_9$  | A | 2016-080  | Canada      | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315   |  |
| Marcasite          | $\text{FeS}_2$   | G | 1845      | unknown     | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Physics and Chemistry of Minerals</i> <b>7</b> (1981), 177        |
| Marchettiite       | $\text{C}_5\text{H}_7\text{N}_5\text{O}_3$   | A | 2017-066  | Italy       | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |  |
| Marcobaldiite      | $\text{Pb}_{12}(\text{Sb}_3\text{As}_2\text{Bi})_{26}\text{S}_{21}$  | A | 2015-109  | Italy       | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 581  |  |
| Marécottite        | $\text{Mg}_3\text{O}_6(\text{UO}_2)_8(\text{SO}_4)_4(\text{OH})_2 \cdot 28\text{H}_2\text{O}$  | A | 2001-056  | Switzerland | <i>American Mineralogist</i> <b>88</b> (2003), 676   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 649                  |
| Margaritasite      | $\text{Cs}_2(\text{UO}_2)_2(\text{VO}_4)_2 \cdot \text{H}_2\text{O}$   | A | 1980-093  | Mexico      | <i>American Mineralogist</i> <b>67</b> (1982), 1273  |  |
| Margarite          | $\text{CaAl}_2\text{Si}_2\text{Al}_2\text{O}_{10}(\text{OH})_2$  | A | 1998 s.p. | Austria     | Oryctographie der Gefürsteten Grafschaft Tirols. Wagner, Innsbruck (1821), 32  | <i>American Mineralogist</i> <b>60</b> (1975), 1023                  |
| Margarosanite      | $\text{Ca}_2\text{PbSi}_3\text{O}_9$   | G | 1916      | USA         | <i>American Journal of Science</i> <b>42</b> (1916), 159   | <i>Journal of Mineralogy and Geochemistry</i> <b>193</b> (2016), 205 |
| Marialite          | $\text{Na}_4\text{Al}_3\text{Si}_9\text{O}_{24}\text{Cl}$  | G | 1866      | Italy       | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>18</b> (1866), 634   | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1527                  |
| Marianoite         | $\text{Na}_2\text{Ca}_4(\text{Nb}, \text{Zr})_2(\text{Si}_2\text{O}_7)_2(\text{O}, \text{F})_4$  | A | 2005-005a | Canada      | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1023  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1275                  |
| Marićite           | $\text{NaFe}^{2+}(\text{PO}_4)$  | A | 1976-024  | Canada      | <i>Canadian Mineralogist</i> <b>15</b> (1977), 396   | <i>Canadian Mineralogist</i> <b>15</b> (1977), 518                   |
| Maricopaite        | $\text{Ca}_2\text{Pb}_7(\text{Si}_{36}\text{Al}_{12})\text{O}_{99} \cdot n(\text{H}_2\text{O}, \text{OH})$   | A | 1985-036  | USA         | <i>Canadian Mineralogist</i> <b>26</b> (1988), 309   | <i>American Mineralogist</i> <b>79</b> (1994), 175                   |
| Mariinskite        | $\text{BeCr}_2\text{O}_4$  | A | 2011-057  | Russia      | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(6)</b> (2012), 43   | <i>Crystallography Reports</i> <b>59</b> (2014), 30                  |
| Marinaite          | $\text{Cu}_2\text{Fe}^{3+}\text{O}_2(\text{BO}_3)$   | A | 2016-021  | Russia      | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  |  |

|                 |  |   |           |                                  |   |   |
|-----------------|--|---|-----------|----------------------------------|---|---|
| Marinellite     | $\text{Na}_{42}\text{Ca}_6\text{Al}_{36}\text{Si}_{36}\text{O}_{144}(\text{SO}_4)_8\text{Cl}_2 \cdot 6\text{H}_2\text{O}$  | A | 2002-021  | Italy                            | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1019  |   |
| Markascherite   | $\text{Cu}_3(\text{MoO}_4)(\text{OH})_4$   | A | 2010-051  | USA                              | <i>American Mineralogist</i> <b>97</b> (2012), 197  |   |
| Markcooperite   | $\text{Pb}_2(\text{UO}_2)\text{TeO}_6$   | A | 2009-045  | USA                              | <i>American Mineralogist</i> <b>95</b> (2010), 1554   | <i>Zeitschrift für Kristallographie</i> <b>125</b> (1967), 459  |
| Markeyite       | $\text{Ca}_9(\text{UO}_2)_4(\text{CO}_3)_{13} \cdot 28\text{H}_2\text{O}$  | A | 2016-090  | USA                              | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149  | <a href="https://doi.org/10.1180/minmag.2017.081.085">https://doi.org/10.1180/minmag.2017.081.085</a> |
| Markhininite    | $\text{TlBi}(\text{SO}_4)_2$   | A | 2012-040  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1687  |   |
| Marklite        | $\text{Cu}_5(\text{CO}_3)_2(\text{OH})_6 \cdot 6\text{H}_2\text{O}$  | A | 2015-101  | Germany                          | CNMNC Newsletter 29 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 199   |   |
| Marokite        | $\text{CaMn}^{3+}_2\text{O}_4$   | A | 1963-005  | Morocco                          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>86</b> (1963), 359                                     | <i>Journal of Alloys and Compounds</i> <b>353</b> (2003), 5   |
| Marrite         | $\text{AgPbAsS}_3$   | G | 1905      | Switzerland                      | <i>Mineralogical Magazine</i> <b>14</b> (1905), 72  | <i>Zeitschrift für Kristallographie</i> <b>125</b> (1967), 459  |
| Marrucciite     | $\text{Hg}_3\text{Pb}_{16}\text{Sb}_{18}\text{S}_{46}$   | A | 2006-015  | Italy                            | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 267   | <i>Acta Crystallographica</i> <b>E63</b> (2007), i190   |
| Marshite        | $\text{CuI}$   | G | 1892      | Australia                        | <i>Proceedings of the Royal Society of New South Wales</i> <b>26</b> (1892), 328  | <i>Canadian Mineralogist</i> <b>35</b> (1997), 785  |
| Marsturite      | $\text{NaCaMn}^{2+}_3\text{Si}_5\text{O}_{14}(\text{OH})$  | A | 1977-047  | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 1187   | <i>American Mineralogist</i> <b>99</b> (2014), 1462   |
| Marthozite      | $\text{Cu}^{2+}(\text{UO}_2)_3(\text{Se}^{4+}\text{O}_3)_2\text{O}_2 \cdot 8\text{H}_2\text{O}$  | A | 1968-016  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>92</b> (1969), 278                                     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 797  |
| Martinandresite | $\text{Ba}_2(\text{Al}_4\text{Si}_{12}\text{O}_{32}) \cdot 10\text{H}_2\text{O}$   | A | 2017-038  | Switzerland                      | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |   |
| Martinite       | $(\text{Na}, \square, \text{Ca})_{12}\text{Ca}_4(\text{Si}, \text{S}, \text{B})_{14}\text{B}_2\text{O}_{38}(\text{OH}, \text{Cl})_2\text{F}_2 \cdot 4\text{H}_2\text{O}$ | A | 2001-059  | Canada                           | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1281   |   |
| Martyite        | $\text{Zn}_3\text{V}_2\text{O}_7(\text{OH})_2 \cdot 2\text{H}_2\text{O}$   | A | 2007-026  | USA                              | <i>Canadian Mineralogist</i> <b>46</b> (2008), 687  |   |
| Marumoite       | $\text{Pb}_{32}\text{As}_{40}\text{S}_{92}$  | A | 1998-004  | Switzerland                      | <i>Le Règne Minéral</i> <b>30</b> (1999), 33  | <i>Mineral Deposit Research: Meeting the Global Challenge</i> <b>1</b> (2005), 695                    |
| Maruyamaite     | $\text{K}(\text{MgAl}_2)(\text{Al}_5\text{Mg})(\text{BO}_3)_3(\text{Si}_6\text{O}_{18})(\text{OH})_3\text{O}$  | A | 2013-123  | Kazakhstan                       | <i>American Mineralogist</i> <b>101</b> (2016), 355   |   |
| Mascagnite      | $(\text{NH}_4)_2(\text{SO}_4)$   | G | 1800      | Italy                            | <i>Mineralogische Tabellen</i> . Rottmann, Berlin (1800), 79 p.   | <i>Physica Status Solidi</i> <b>A99</b> (1987), 131   |
| Maslovite       | $\text{PtBiTe}$  | A | 1978-002  | Russia                           | <i>Geologiya Rudnykh Mestorozhdeniy</i> <b>21</b> (1979), 94  | <i>American Mineralogist</i> <b>74</b> (1989), 1168   |
| Massicot        | $\text{PbO}$   | G | 1841      | Germany                          | <i>Nouveau Manuel Complet de Minéralogie</i> . Roret, Paris (1841), 346   | <i>Acta Crystallographica</i> <b>C41</b> (1985), 1281   |
| Masutomilite    | $\text{KLiAlMn}^{2+}(\text{Si}_3\text{Al})\text{O}_{10}(\text{F}, \text{OH})_2$  | A | 1974-046  | Japan                            | <i>Mineralogical Journal</i> <b>8</b> (1976), 95  | <i>Mineralogical Journal</i> <b>13</b> (1986), 13   |
| Masuyite        | $\text{Pb}(\text{UO}_2)_3\text{O}_3(\text{OH})_2 \cdot 3\text{H}_2\text{O}$  | G | 1947      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>70</b> (1947), B212  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1483   |
| Mathesiusite    | $\text{K}_5(\text{UO}_2)_4(\text{SO}_4)_4(\text{VO}_5)(\text{H}_2\text{O})_4$  | A | 2013-046  | Czech Republic                   | <i>American Mineralogist</i> <b>99</b> (2014), 625  |   |
| Mathewrogersite | $\text{Pb}_7\text{FeAl}_3\text{GeSi}_{12}\text{O}_{36}(\text{OH}, \text{H}_2\text{O})_6$   | A | 1984-042  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 203   |   |
| Mathiasite      | $(\text{K}, \text{Ba}, \text{Sr})(\text{Zr}, \text{Fe})(\text{Mg}, \text{Fe})_2(\text{Ti}, \text{Cr}, \text{Fe})_{18}\text{O}_{38}$                                      | A | 1982-087  | South Africa                     | <i>American Mineralogist</i> <b>68</b> (1983), 494  | <i>Acta Crystallographica</i> <b>C39</b> (1983), 421  |
| Matildite       | $\text{AgBiS}_2$   | A | 1982 s.p. | Peru                             | <i>I metalli</i> . Nistri, Pisa (1883), 136   | <i>Acta Crystallographica</i> <b>12</b> (1959), 46  |
| Matioliite      | $\text{NaMgAl}_5(\text{PO}_4)_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | A | 2005-011  | Brazil                           | <i>American Mineralogist</i> <b>91</b> (2006), 1932   |   |

|                 |   |    |          |                |   |   |
|-----------------|---|----|----------|----------------|---|---|
| Matlockite      | PbClF   | G  | 1851     | United Kingdom | <i>Philosophical Magazine, Series IV</i> <b>2</b> (1851), 120                             | <i>Mineralogical Magazine</i> <b>60</b> (1996), 833                                     |
| Matsubaraite    | Sr <sub>4</sub> Ti <sub>5</sub> O <sub>8</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>   | A  | 2000-027 | Japan          | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 1119                              |   |
| Mattagamite     | CoTe <sub>2</sub>   | A  | 1972-003 | Canada         | <i>Canadian Mineralogist</i> <b>12</b> (1973), 55   | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>239</b> (1938), 126        |
| Matteuccite     | NaH(SO <sub>4</sub> )·H <sub>2</sub> O  | G  | 1952     | Italy          | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VIII</i> <b>12</b> (1952), 23    | <i>Atti dell'Accademia delle Scienze di Torino</i> <b>109</b> (1975), 531               |
| Mattheddeite    | Pb <sub>5</sub> (SiO <sub>4</sub> ) <sub>1.5</sub> (SO <sub>4</sub> ) <sub>1.5</sub> Cl   | A  | 1985-019 | United Kingdom | <i>Scottish Journal of Geology</i> <b>23</b> (1987), 1                                    | <i>Mineralogical Magazine</i> <b>70</b> (2006), 265                                     |
| Matulaite       | Fe <sup>3+</sup> Al <sub>7</sub> (PO <sub>4</sub> ) <sub>4</sub> (PO <sub>3</sub> OH) <sub>2</sub> (OH) <sub>8</sub> (H <sub>2</sub> O) <sub>8</sub> ·8H <sub>2</sub> O | Rd | 1977-013 | USA            | <i>Aufschluss</i> <b>31</b> (1980), 55  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 517                                     |
| Matyhite        | Ca <sub>18</sub> (Ca, □) <sub>2</sub> Fe <sup>2+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>14</sub>  | A  | 2015-121 | Argentina      | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691                 | <a href="https://doi.org/10.1180/mgm.2018.125">https://doi.org/10.1180/mgm.2018.125</a> |
| Maucherite      | Ni <sub>11</sub> As <sub>8</sub>  | G  | 1913     | Germany        | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1913), 225               | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 855                             |
| Mavlyanovite    | Mn <sub>5</sub> Si <sub>3</sub>   | A  | 2008-026 | Uzbekistan     | <i>Mineralogical Magazine</i> <b>73</b> (2009), 43  |   |
| Mawbyite        | PbFe <sup>3+</sup> <sub>2</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub>  | A  | 1988-049 | Australia      | <i>American Mineralogist</i> <b>74</b> (1989), 1377                                       | <i>Mineralogical Magazine</i> <b>61</b> (1997), 685                                     |
| Mawsonite       | Cu <sub>6</sub> Fe <sub>2</sub> SnS <sub>8</sub>  | A  | 1964-030 | Australia      | <i>American Mineralogist</i> <b>50</b> (1965), 900  | <i>Canadian Mineralogist</i> <b>14</b> (1976), 529                                      |
| Maxwellite      | NaFe <sup>3+</sup> (AsO <sub>4</sub> )F   | A  | 1987-044 | USA            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 363                             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1995), 97                            |
| Mayingite       | IrBiTe  | A  | 1993-016 | China          | <i>Acta Mineralogica Sinica</i> <b>15</b> (1995), 5                                       |   |
| Mazzettiite     | Ag <sub>3</sub> HgPbSbTe <sub>5</sub>   | A  | 2004-003 | USA            | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1739                                       |   |
| Mazzite-Mg      | Mg <sub>5</sub> (Si <sub>26</sub> Al <sub>10</sub> )O <sub>72</sub> ·30H <sub>2</sub> O   | A  | 1973-045 | France         | <i>Contributions to Mineralogy and Petrology</i> <b>45</b> (1974), 99                     | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 5                                     |
| Mazzite-Na      | Na <sub>8</sub> (Si <sub>28</sub> Al <sub>8</sub> )O <sub>72</sub> ·30H <sub>2</sub> O  | A  | 2003-058 | USA            | <i>American Mineralogist</i> <b>90</b> (2005), 1186                                       |   |
| Mbobomkulite    | (Ni,Cu)Al <sub>4</sub> (NO <sub>3</sub> ,SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>12</sub> ·3H <sub>2</sub> O   | A  | 1979-078 | South Africa   | <i>Annals of the Geological Survey of South Africa</i> <b>14</b> (1980), 1                |   |
| Mcallisterite   | Mg <sub>2</sub> [B <sub>6</sub> O <sub>7</sub> (OH) <sub>6</sub> ] <sub>2</sub> ·9H <sub>2</sub> O  | A  | 1963-012 | USA            | <i>American Mineralogist</i> <b>50</b> (1965), 629  | <i>Atti dell'Accademia Nazionale dei Lincei, Rendiconti</i> <b>47</b> (1969), 352       |
| Mcalpineite     | Cu <sub>3</sub> Te <sup>6+</sup> O <sub>6</sub>   | A  | 1992-025 | USA            | <i>Mineralogical Magazine</i> <b>58</b> (1994), 417                                       | <i>American Mineralogist</i> <b>98</b> (2013), 1899                                     |
| Mcauslanite     | Fe <sup>2+</sup> <sub>3</sub> Al <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> (PO <sub>3</sub> OH)F·18H <sub>2</sub> O  | A  | 1986-051 | Canada         | <i>Canadian Mineralogist</i> <b>26</b> (1988), 917  |   |
| Mcbirneyite     | Cu <sub>3</sub> (VO <sub>4</sub> ) <sub>2</sub>   | A  | 1985-007 | El Salvador    | <i>Journal of Volcanology and Geothermal Research</i> <b>33</b> (1987), 183               | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1546                                   |
| Mconnellite     | Cu <sup>1+</sup> CrO <sub>2</sub>   | A  | 1967-037 | Guyana         | <i>U.S. Geological Survey Professional Paper</i> <b>887</b> (1976), 1                     | <i>Journal of the American Chemical Society</i> <b>77</b> (1955), 896                   |
| Mccrillisite    | NaCs(Be,Li)Zr <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> ·1-2H <sub>2</sub> O   | A  | 1991-023 | USA            | <i>Canadian Mineralogist</i> <b>32</b> (1994), 839  |   |
| Mcgillite       | Mn <sup>2+</sup> <sub>8</sub> Si <sub>6</sub> O <sub>15</sub> (OH) <sub>8</sub> Cl <sub>2</sub>   | A  | 1979-024 | Canada         | <i>Canadian Mineralogist</i> <b>18</b> (1980), 31   | <i>Canadian Mineralogist</i> <b>22</b> (1984), 265                                      |
| Mcgovernite     | Mn <sub>19</sub> Zn <sub>3</sub> (AsO <sub>3</sub> )(AsO <sub>4</sub> ) <sub>3</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH) <sub>21</sub>                                | G  | 1927     | USA            | <i>American Mineralogist</i> <b>12</b> (1927), 373  | <i>American Mineralogist</i> <b>65</b> (1980), 957                                      |
| Mcguinnessite   | CuMg(CO <sub>3</sub> )(OH) <sub>2</sub>   | A  | 1977-027 | USA            | <i>Mineralogical Record</i> <b>12</b> (1981), 143   | <i>Zeitschrift für Kristallographie, suppl.</i> <b>23</b> (2006), 505                   |
| Mckelveyite-(Y) | NaBa <sub>3</sub> (Ca,U)Y(CO <sub>3</sub> ) <sub>6</sub> ·3H <sub>2</sub> O   | Rd | 1964-025 | USA            | <i>American Mineralogist</i> <b>50</b> (1965), 593  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>119(5)</b> (1990), 76     |
| Mckinstryite    | (Ag,Cu) <sub>2</sub> S  | A  | 1966-012 | Canada         | <i>Economic Geology</i> <b>61</b> (1966), 1383  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 73                                      |
| Mcnearite       | NaCa <sub>5</sub> (AsO <sub>4</sub> )(AsO <sub>3</sub> OH) <sub>4</sub> ·4H <sub>2</sub> O  | A  | 1980-017 | France         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>61</b> (1981), 1 |   |

|                   |   |    |           |                     |   |  |
|-------------------|---|----|-----------|---------------------|---|--|
| Medaite           | $\text{Mn}^{2+}_6\text{V}^{5+}\text{Si}_5\text{O}_{18}(\text{OH})$                                    | A  | 1979-062  | Italy               | <i>American Mineralogist</i> <b>67</b> (1982), 85   | <i>Acta Crystallographica</i> <b>B37</b> (1981), 1972                            |
| Medenbachite      | $\text{Bi}_2\text{Fe}^{3+}\text{Cu}^{2+}(\text{AsO}_4)_2\text{O}(\text{OH})_3$                        | A  | 1993-048  | Germany             | <i>American Mineralogist</i> <b>81</b> (1996), 505  |  |
| Meerschautite     | $(\text{Ag,Cu})_{5.5}\text{Pb}_{42.4}(\text{Sb,As})_{45.1}\text{S}_{112}\text{O}_{0.8}$               | A  | 2013-061  | Italy               | <i>Mineralogical Magazine</i> <b>80</b> (2016), 675   |  |
| Megacyclite       | $\text{KNa}_8\text{Si}_9\text{O}_{18}(\text{OH})_9 \cdot 19\text{H}_2\text{O}$                        | A  | 1991-015  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(1)</b> (1993), 125                    | <i>New Data on Minerals</i> <b>42</b> (2007), 81                                 |
| Megakalsilite     | $\text{KAISiO}_4$   | A  | 2001-008  | Russia              | <i>Canadian Mineralogist</i> <b>40</b> (2002), 961  |  |
| Megawite          | $\text{CaSnO}_3$  | A  | 2009-090  | Russia              | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2563  | <i>Physics and Chemistry of Minerals</i> <b>36</b> (2009), 403                   |
| Meieranite        | $\text{Na}_2\text{Sr}_3\text{MgSi}_6\text{O}_{17}$  | A  | 2015-009  | South Africa        | CNMNC Newsletter 25 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 529                                 |  |
| Meierite          | $\text{Ba}_{44}\text{Si}_{66}\text{Al}_{30}\text{O}_{192}\text{Cl}_{25}(\text{OH})_{33}$              | A  | 2014-039  | Canada              | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1249   |  |
| Meionite          | $\text{Ca}_4\text{Al}_6\text{Si}_6\text{O}_{24}(\text{CO}_3)$   | G  | 1801      | Italy               | Traité de Minéralogie, Vol. 2. Chez Louis, Paris (1801), 586  | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1527                              |
| Meisserite        | $\text{Na}_5(\text{UO}_2)(\text{SO}_4)_3(\text{SO}_3\text{OH})(\text{H}_2\text{O})$                   | A  | 2013-039  | USA                 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2975  |  |
| Meitnerite        | $(\text{NH}_4)(\text{UO}_2)(\text{SO}_4)(\text{OH}) \cdot 2\text{H}_2\text{O}$                        | A  | 2017-065  | USA                 | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 999   |  |
| Meixnerite        | $\text{Mg}_6\text{Al}_2(\text{OH})_{16}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$                       | A  | 1974-003  | Austria             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 79                    | <i>Aufschluss</i> <b>49</b> (1998), 230  |
| Mejillonesite     | $\text{NaMg}_2(\text{PO}_3\text{OH})(\text{PO}_4)(\text{OH}) \cdot \text{H}_5\text{O}_2$              | A  | 2010-068  | Chile               | <i>American Mineralogist</i> <b>97</b> (2012), 19   |  |
| Melanarsite       | $\text{K}_3\text{Cu}_7\text{Fe}^{3+}\text{O}_4(\text{AsO}_4)_4$                                       | A  | 2014-048  | Russia              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 855   |  |
| Melanocerite-(Ce) | $\text{Ce}_5(\text{SiO}_4, \text{BO}_4)_3(\text{OH}, \text{O})$                                       | Q  | 1887      | Norway              | <i>Geologiska Föreningen i Stockholm Förhandlingar</i> <b>9</b> (1887), 247                               | <i>Trudy Mineralogicheskogo Muzeya, Akademiya Nauk SSSR</i> <b>21</b> (1972), 12 |
| Melanophlogite    | $\text{C}_2\text{H}_{17}\text{O}_5 \cdot \text{Si}_{46}\text{O}_{92}$                                 | Rd | 1962 s.p. | Italy               | <i>Neues Jahrbuch für Mineralogie</i> (1876), 250   | <i>American Mineralogist</i> <b>93</b> (2008), 88                                |
| Melanostibite     | $\text{Mn}^{2+}(\text{Sb}^{5+}, \text{Fe}^{3+})\text{O}_3$  | A  | 1971 s.p. | Sweden              | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>21</b> (1893), 246                             | <i>American Mineralogist</i> <b>53</b> (1968), 1104                              |
| Melanotekite      | $\text{Pb}_2\text{Fe}^{3+}_2\text{O}_2(\text{Si}_2\text{O}_7)$  | G  | 1880      | Sweden              | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>37(6)</b> (1880), 53                  | <i>American Mineralogist</i> <b>93</b> (2008), 573                               |
| Melanothallite    | $\text{Cu}_2\text{OCl}_2$   | G  | 1870      | Italy               | <i>Rendiconti della Regia Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>9</b> (1870), 86 | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1185                              |
| Melanovanadite    | $\text{Ca}(\text{V}^{5+}, \text{V}^{4+})_4\text{O}_{10} \cdot 5\text{H}_2\text{O}$                    | G  | 1921      | Peru                | <i>Proceedings of the National Academy of Sciences</i> <b>7</b> (1921), 249                               | <i>American Mineralogist</i> <b>72</b> (1987), 637                               |
| Melanterite       | $\text{Fe}(\text{SO}_4) \cdot 7\text{H}_2\text{O}$  | G  | 1850      | unknown             | Handbuch der Bestimmenden Mineralogie, 2nd ed. Braumüller and Seidel, Wien (1850), 489                    | <i>Periodico di Mineralogia</i> <b>87</b> (2018), 89                             |
| Melcherite        | $\text{Ba}_2\text{Na}_2\text{Mg}[\text{Nb}_6\text{O}_{19}] \cdot 6\text{H}_2\text{O}$                 | A  | 2015-018  | Brazil              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 111   |  |
| Meliphanite       | $\text{Ca}_4(\text{Na,Ca})_4\text{Be}_4\text{AlSi}_7\text{O}_{24}(\text{F}, \text{O})_4$              | G  | 1852      | Norway              | <i>Journal für Praktische Chemie</i> <b>55</b> (1852), 449  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 971                               |
| Melkovite         | $\text{CaFe}^{3+}_2\text{Mo}_5\text{O}_{10}(\text{PO}_4)_2(\text{OH})_{12} \cdot 8\text{H}_2\text{O}$ | A  | 1968-033  | Kazakhstan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>98</b> (1969), 207                          |  |
| Melliniite        | $(\text{Ni,Fe})_4\text{P}$  | A  | 2005-027  | Morocco (meteorite) | <i>American Mineralogist</i> <b>91</b> (2006), 451  |  |

|                    |   |   |          |                |   |   |
|--------------------|---|---|----------|----------------|---|---|
| Mellite            | $\text{Al}_2\text{C}_6(\text{COO})_6 \cdot 16\text{H}_2\text{O}$  | G | 1793     | Germany        | Systema Naturae per Regna Tria Naturae, Vol. 3. Georg Emanuel Beer, Lipsia (1793), 282  | <i>Journal of Solid State Chemistry</i> <b>92</b> (1991), 101                       |
| Mellizinkalite     | $\text{K}_3\text{Zn}_2\text{Cl}_7$  | A | 2014-010 | Russia         | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 247   |   |
| Melonite           | $\text{NiTe}_2$   | G | 1868     | USA            | <i>American Journal of Science</i> <b>45</b> (1868), 313  | <i>American Mineralogist</i> <b>31</b> (1946), 204                                  |
| Mélonjosephite     | $\text{CaFe}^{2+}\text{Fe}^{3+}(\text{PO}_4)_2(\text{OH})$  | A | 1973-012 | Morocco        | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>96</b> (1973), 135                                     | <i>American Mineralogist</i> <b>62</b> (1977), 60                                   |
| Menchettiite       | $\text{Pb}_5\text{Mn}_3\text{Ag}_2\text{Sb}_6\text{As}_4\text{S}_{24}$  | A | 2011-009 | Peru           | <i>American Mineralogist</i> <b>97</b> (2012), 440  |   |
| Mendeleevite-(Ce)  | $\text{Cs}_8(\text{Ce}, \text{REE}, \text{Ca})_{30}(\text{Si}_{70}\text{O}_{175})(\text{OH}, \text{F}, \text{H}_2\text{O})_{35}$              | A | 2009-092 | Tajikistan     | <i>Doklady Earth Sciences</i> <b>452</b> (2013), 1023   | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2583                                |
| Mendeleevite-(Nd)  | $\text{Cs}_8(\text{Nd}, \text{REE}, \text{Ca})_{30}(\text{Si}_{70}\text{O}_{175})(\text{OH}, \text{F}, \text{H}_2\text{O})_{35}$              | A | 2015-031 | Tajikistan     | <i>Mineralogical Magazine</i> <b>81</b> (2017), 113   |   |
| Mendigite          | $\text{Mn}_2\text{Mn}_2\text{MnCa}(\text{Si}_3\text{O}_9)_2$  | A | 2014-007 | Germany        | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>144(2)</b> (2015), 48  |   |
| Mendipite          | $\text{Pb}_3\text{O}_2\text{Cl}_2$  | G | 1839     | United Kingdom | Grundriss der Mineralogie, mit Einschluss der Geognosie und Petrefactenkunde. Schrag, Nurnberg (1839), 604                              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 563                       |
| Mendozavilite-KCa  | $[\text{K}_2(\text{H}_2\text{O})_{15}\text{Ca}(\text{H}_2\text{O})_6][\text{Mo}_8\text{P}_2\text{Fe}^{3+}_3\text{O}_{34}(\text{OH})_3]$       | A | 2011-088 | Chile          | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175  |   |
| Mendozavilite-NaCu | $[\text{Na}_2(\text{H}_2\text{O})_{15}\text{Cu}(\text{H}_2\text{O})_6][\text{Mo}_8\text{P}_2\text{Fe}^{3+}_3\text{O}_{34}(\text{OH})_3]$      | A | 2011-039 | Chile          | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175  |   |
| Mendozavilite-NaFe | $[\text{Na}_2(\text{H}_2\text{O})_{15}\text{Fe}^{3+}(\text{H}_2\text{O})_6][\text{Mo}_8\text{P}_2\text{Fe}^{3+}_3\text{O}_{35}(\text{OH})_2]$ | A | 1982-009 | Mexico         | <i>Boletín de Mineralogía</i> <b>2(1)</b> (1986), 13  | <i>Australian Journal of Mineralogy</i> <b>8</b> (2002), 11                         |
| Mendozite          | $\text{NaAl}(\text{SO}_4)_2 \cdot 11\text{H}_2\text{O}$   | G | 1868     | Argentina      | A System of Mineralogy, 5th ed. Wiley, New York (1868), 653   | <i>American Mineralogist</i> <b>57</b> (1972), 1081                                 |
| Meneghinite        | $\text{Pb}_{13}\text{CuSb}_7\text{S}_{24}$  | G | 1852     | Italy          | <i>Atti dell'Accademia dei Georgofili</i> <b>30</b> (1852), 84  | <i>Comptes Rendus de l'Academie des Sciences, Geoscience</i> <b>334</b> (2002), 529 |
| Menezesite         | $\text{Ba}_3\text{MgZr}_4\text{Nb}_{12}\text{O}_{42} \cdot 12\text{H}_2\text{O}$  | A | 2005-023 | Brazil         | <i>American Mineralogist</i> <b>93</b> (2008), 81   |   |
| Mengeite           | $\text{Ba}(\text{Mg}, \text{Mn}^{2+})\text{Mn}^{3+}_4(\text{PO}_4)_4(\text{OH})_4 \cdot 4\text{H}_2\text{O}$                                  | A | 2018-035 | Australia      | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Mengxianminite     | $\text{Ca}_2\text{Sn}_2\text{Mg}_3\text{Al}_8(\text{BO}_3)(\text{BeO}_4)\text{O}_6]_2$  | A | 2015-070 | China          | <i>American Mineralogist</i> <b>102</b> (2017), 2136  |   |
| Meniaylovite       | $\text{Ca}_4\text{AlSi}(\text{SiO}_4)\text{F}_{13} \cdot 12\text{H}_2\text{O}$  | A | 2002-050 | Russia         | <i>Vulkanologiya i Seismologiya</i> <b>2</b> (2004), 3  | <i>American Mineralogist</i> <b>66</b> (1981), 392                                  |
| Menshikovite       | $\text{Pd}_3\text{Ni}_2\text{As}_3$   | A | 1993-057 | Russia         | <i>Canadian Mineralogist</i> <b>40</b> (2002), 679  |   |
| Menzerite-(Y)      | $(\text{CaY}_2)\text{Mg}_2(\text{SiO}_4)_3$   | A | 2009-050 | Canada         | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1157   |   |
| Mercallite         | $\text{KH}(\text{SO}_4)$  | G | 1935     | Italy          | <i>Rendiconti dell'Accademia Nazionale dei Lincei</i> <b>21</b> (1935), 385   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 1875                               |
| Mercury            | Hg  | G | ?        | unknown        | original paper?   |   |
| Mereheadite        | $\text{Pb}_{47}\text{O}_{24}(\text{OH})_{13}\text{Cl}_{25}(\text{BO}_3)_2(\text{CO}_3)$   | A | 1996-045 | United Kingdom | <i>Mineralogical Magazine</i> <b>62</b> (1998), 687   | <i>Mineralogical Magazine</i> <b>73</b> (2009), 103                                 |
| Mereiterite        | $\text{K}_2\text{Fe}^{2+}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$   | A | 1993-045 | Greece         | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 559  |   |
| Merelaniite        | $\text{Pb}_4\text{Mo}_4\text{VSbS}_{15}$  | A | 2016-042 | Tanzania       | <i>Minerals</i> <b>6</b> (2016), 115  |   |
| Merenskyite        | $\text{PdTe}_2$   | A | 1965-016 | South Africa   | <i>Mineralogical Magazine</i> <b>35</b> (1966), 815   |   |
| Meridianiite       | $\text{Mg}(\text{SO}_4) \cdot 11\text{H}_2\text{O}$   | A | 2007-011 | Canada         | <i>American Mineralogist</i> <b>92</b> (2007), 1756   |   |

|                    |  |    |           |  |  |  |
|--------------------|--|----|-----------|--|--|--|
| Merlinoite         | $K_5Ca_2(Si_{23}Al_9)O_{64} \cdot 24H_2O$  | A  | 1976-046  | Italy  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1977), 355                            | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 371    |
| Merrhueite         | $(K,Na)_2(Fe^{2+},Mg)_5Si_{12}O_{30}$      | A  | 1965-020  | Romania  | <i>Science</i> <b>149</b> (1965), 972  | <i>Acta Crystallographica</i> <b>28</b> (1972), 267            |
| Merrillite         | $Ca_9NaMg(PO_4)_7$                         | Rd | 1976 s.p. | Italy (meteorite) / India (meteorite) / Poland (meteorite) / USA (meteorite) | <i>American Mineralogist</i> <b>2</b> (1917), 119  | <i>American Mineralogist</i> <b>100</b> (2015), 2753           |
| Mertieite-I        | $Pd_{5+x}(Sb,As)_{2-x}$ ( $x = 0.1-0.2$ )  | Rd | 1971-016  | USA  | <i>American Mineralogist</i> <b>58</b> (1973), 1   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 321             |
| Mertieite-II       | $Pd_8Sb_{2.5}As_{0.5}$                     | G  | ?         | USA  | <i>American Mineralogist</i> <b>58</b> (1973), 1   | <i>Mineralogical Magazine</i> <b>82</b> (2018), S247           |
| Merwinite          | $Ca_3Mg(SiO_4)_2$                          | G  | 1921      | USA  | <i>American Mineralogist</i> <b>6</b> (1921), 143  | <i>American Mineralogist</i> <b>57</b> (1972), 1355            |
| Mesaite            | $CaMn^{2+}_5(V_2O_7)_3 \cdot 12H_2O$       | A  | 2015-069  | USA  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 319                                      |  |
| Mesolite           | $Na_2Ca_2(Si_9Al_6)O_{30} \cdot 8H_2O$     | A  | 1997 s.p. | Iceland ?  | <i>Journal für Chemie und Physik</i> <b>8</b> (1813), 353                                | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 571    |
| Messelite          | $Ca_2Fe^{2+}(PO_4)_2 \cdot 2H_2O$          | A  | 1890      | Germany  | <i>Zeitschrift für Kristallographie</i> <b>17</b> (1890), 93                             | <i>Zeitschrift für Kristallographie</i> <b>218</b> (2003), 553 |
| Meta-aluminite     | $Al_2(SO_4)(OH)_4 \cdot 5H_2O$             | A  | 1967-013  | USA  | <i>American Mineralogist</i> <b>53</b> (1968), 717                                       | <i>Zeitschrift für Kristallographie</i> <b>151</b> (1980), 141 |
| Meta-alunogen      | $Al_2(SO_4)_3 \cdot 14H_2O$                | Q  | 1942      | Chile  | <i>Academy of Natural Science of Philadelphia, Notulae Naturae</i> <b>101</b> (1942)     | <i>Mineralogical Magazine</i> <b>63</b> (1999), 413            |
| Meta-ankoleite     | $K(UO_2)(PO_4) \cdot 3H_2O$                | A  | 1963-013  | Uganda   | <i>Bulletin of the Geological Survey of Great Britain</i> <b>25</b> (1966), 49           |  |
| Meta-autunite      | $Ca(UO_2)_2(PO_4)_2 \cdot 6H_2O$           | G  | 1904      | USA  | <i>Bulletin de la Société Française de Minéralogie</i> <b>27</b> (1904), 222             | <i>American Mineralogist</i> <b>90</b> (2005), 1308            |
| Metaborite         | $HBO_2$                                    | A  | 1967 s.p. | Kazakhstan   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>93</b> (1964), 629         | <i>Acta Crystallographica</i> <b>C56</b> (2000), 276           |
| Metacalcioranoite  | $(Ca,Na,Ba)U_2O_7 \cdot 2H_2O$             | A  | 1971-054  | Russia   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 75         |  |
| Metacinnabar       | $HgS$                                      | G  | 1870      | USA  | <i>Journal für Praktische Chemie</i> <b>110</b> (1870), 319                              | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 957    |
| Metadelrioite      | $SrCa(VO_3)_2(OH)_2$                       | A  | 1967-006  | USA  | <i>American Mineralogist</i> <b>55</b> (1970), 185                                       |  |
| Metahaiweeite      | $Ca(UO_2)_2Si_6O_{15} \cdot nH_2O$         | A  | 1962 s.p. | USA  | <i>American Mineralogist</i> <b>44</b> (1959), 839                                       |  |
| Metaheinrichite    | $Ba(UO_2)_2(AsO_4)_2 \cdot 8H_2O$          | G  | 1958      | USA / Germany  | <i>American Mineralogist</i> <b>43</b> (1958), 1134                                      |  |
| Metahewettite      | $CaV^{5+}_6O_{16} \cdot 3H_2O$             | G  | 1914      | USA  | <i>Proceedings of the American Philosophical Society</i> <b>53</b> (1914), 31            | <i>Canadian Mineralogist</i> <b>7</b> (1962), 219              |
| Metahohmannite     | $Fe^{3+}_2O(SO_4)_2 \cdot 4H_2O$           | G  | 1938      | Chile  | <i>American Mineralogist</i> <b>23</b> (1938), 669                                       | <i>American Mineralogist</i> <b>89</b> (2004), 265             |
| Metakahlerite      | $Fe^{2+}(UO_2)_2(AsO_4)_2 \cdot 8H_2O$     | G  | 1958      | Germany  | <i>Jahreshefte des Geologischen Landesamtes in Baden-Württemberg</i> <b>3</b> (1958), 17 | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1699            |
| Metakirchheimerite | $Co(UO_2)_2(AsO_4)_2 \cdot 8H_2O$          | G  | 1958      | Germany  | <i>Jahreshefte des Geologischen Landesamtes in Baden-Württemberg</i> <b>3</b> (1958), 17 | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1699            |
| Metaköttigite      | $(Zn,Fe^{3+})_3(AsO_4)_2 \cdot 8(H_2O,OH)$ | A  | 1979-077  | Mexico   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 506                            |  |



|                        |   |    |           |                                  |   |   |
|------------------------|---|----|-----------|----------------------------------|---|---|
| Metalodévite           | $Zn(UO_2)_2(AsO_4)_2 \cdot 10H_2O$                                | A  | 1972-014  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 360 |   |
| Metamunirite           | $NaV^{5+}O_3$   | A  | 1990-044  | USA                              | <i>Mineralogical Magazine</i> <b>55</b> (1991), 509   | <i>Acta Crystallographica</i> <b>B40</b> (1984), 102                                    |
| Metanatroautunite      | $Na(UO_2)(PO_4) \cdot 3H_2O$                                      | Rn | 1987 s.p. | Tajikistan                       | <i>Soviet Journal of Atomic Energy</i> <b>3</b> (1957), 1068  | <i>American Mineralogist</i> <b>97</b> (2012), 735                                      |
| Metanováčekite         | $Mg(UO_2)_2(AsO_4)_2 \cdot 8H_2O$                                 | Rn | 2007 s.p. | Germany                          | <i>Jahreshefte des Geologischen Landesamt Baden-Württemberg</i> <b>3</b> (1958), 17                 |   |
| Metarauchite           | $Ni(UO_2)_2(AsO_4)_2 \cdot 8H_2O$                                 | A  | 2008-050  | Czech Republic                   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 335  |   |
| Metarossite            | $CaV^{5+}_2O_6 \cdot 2H_2O$                                       | G  | 1927      | USA                              | <i>Proceedings of the United States National Museum</i> <b>72</b> (1927), 1                         | <i>Canadian Mineralogist</i> <b>6</b> (1960), 448                                       |
| Metasaléeite           | $Mg(UO_2)_2(PO_4)_2 \cdot 8H_2O$                                  | G  | 1950      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>35</b> (1950), 525  |   |
| Metaschoderite         | $Al(PO_4) \cdot 3H_2O$  | A  | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>47</b> (1962), 637  |   |
| Metaschoepite          | $(UO_2)_8O_2(OH)_{12} \cdot 10H_2O$                               | G  | 1960      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>45</b> (1960), 1026   | <i>Acta Crystallographica</i> <b>B56</b> (2000), 577                                    |
| Metasideronatriite     | $Na_2Fe^{3+}(SO_4)_2(OH) \cdot H_2O$                              | G  | 1938      | Chile                            | <i>American Mineralogist</i> <b>23</b> (1938), 733  | <i>American Mineralogist</i> <b>95</b> (2010), 329                                      |
| Metastibnite           | $Sb_2S_3$   | G  | 1888      | USA                              | <i>Proceedings of the American Philosophical Society</i> <b>25</b> (1888), 170                      | <i>Revue de Chimie Minérale</i> <b>20</b> (1983), 196                                   |
| Metastudtite           | $UO_4 \cdot 2H_2O$  | A  | 1981-055  | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>68</b> (1983), 456  |   |
| Metaswitzerite         | $Mn^{2+}_3(PO_4)_2 \cdot 4H_2O$                                   | Rd | 1981-027a | USA                              | <i>American Mineralogist</i> <b>71</b> (1986), 1221   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 255 |
| Metatamboite           | $Fe^{3+}_3(OH)(H_2O)_2(SO_4)(Te^{4+}O_3)_3[Te^{4+}O(OH)_2](H_2O)$ | A  | 2016-060  | Chile                            | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135                          |   |
| Metathénardite         | $Na_2(SO_4)$  | A  | 2015-102  | Russia                           | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407                           |   |
| Metatorbernite         | $Cu(UO_2)_2(PO_4)_2 \cdot 8H_2O$                                  | G  | 1916      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>17</b> (1916), 326   | <i>American Mineralogist</i> <b>95</b> (2010), 1132                                     |
| Metatyuyamunite        | $Ca(UO_2)_2(VO_4)_2 \cdot 3H_2O$                                  | G  | 1954      | USA                              | <i>Bulletin of the United States Geological Survey</i> <b>1009-B</b> (1954), 37                     | <i>American Mineralogist</i> <b>41</b> (1956), 187                                      |
| Metauramphite          | $(NH_4)_2(UO_2)_2(PO_4)_2 \cdot 6H_2O$                            | Q  | 1957 ?    | Russia                           | <i>Voprosy Geologii Urana</i> (1957), 67  | <i>Mineralogical Record</i> <b>39</b> (2008), 131                                       |
| Metauranocircite-I     | $Ba(UO_2)_2(PO_4)_2 \cdot 6H_2O$                                  | Rn | 2007 s.p. | Germany                          | <i>Bulletin de la Société Française de Minéralogie</i> <b>27</b> (1904), 222                        | <i>Doklady Chemistry</i> <b>389</b> (2003), 58  |
| Metauranopilite        | $(UO_2)_6(SO_4)(OH)_{10} \cdot 5H_2O$                             | Rn | 2007 s.p. | Czech Republic                   | <i>Ceská Spolecnost Nauk, Trída Matematiko-Prírodovedecká Vestník</i> <b>2</b> (1935), 1            | <i>American Mineralogist</i> <b>37</b> (1952), 950                                      |
| Metauranospinite       | $Ca(UO_2)_2(AsO_4)_2 \cdot 8H_2O$                                 | Rn | 2007 s.p. | Germany                          | <i>Jahreshefte des Geologischen Landesamtes in Baden-Württemberg</i> <b>3</b> (1958), 17            | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>9</b> (1965), 252  |
| Metavandendriesscheite | $PbU_7O_{22} \cdot nH_2O$   | G  | 1960      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>45</b> (1960), 1026   |   |

|                     |  |    |           |                                  |  |   |
|---------------------|--|----|-----------|----------------------------------|--|---|
| Metavanmeersscheite | $U(VO_2)_3(PO_4)_2(OH)_6 \cdot 2H_2O$  | A  | 1981-010  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 125  |   |
| Metavanuralite      | $Al(VO_2)_2(VO_4)_2(OH) \cdot 8H_2O$   | A  | 1970-003  | Gabon                            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 242  |   |
| Metavariscite       | $Al(PO_4) \cdot 2H_2O$   | A  | 1967 s.p. | USA                              | <i>American Mineralogist</i> <b>10</b> (1925), 23  | <i>Acta Crystallographica</i> <b>B29</b> (1973), 2292   |
| Metavauxite         | $Fe^{2+}Al_2(PO_4)_2(OH)_2 \cdot 8H_2O$                                      | G  | 1927      | Bolivia                          | <i>American Mineralogist</i> <b>12</b> (1927), 264   | <i>Naturwissenschaften</i> <b>54</b> (1967), 561  |
| Metavivianite       | $Fe^{2+}Fe^{3+}_2(PO_4)_2(OH)_2 \cdot 6H_2O$                                 | A  | 1973-049  | USA                              | <i>American Mineralogist</i> <b>59</b> (1974), 896   | <i>Mineralogical Magazine</i> <b>76</b> (2012), 743   |
| Metavoltine         | $K_2Na_6Fe^{2+}Fe^{3+}_6O_2(SO_4)_{12} \cdot 18H_2O$                         | G  | 1883      | Iran                             | <i>Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften</i> <b>87</b> (1883), 141 | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>23</b> (1976), 155             |
| Metazellerite       | $Ca(UO_2)(CO_3)_2 \cdot 3H_2O$   | A  | 1965-032  | USA                              | <i>American Mineralogist</i> <b>51</b> (1966), 1567  |   |
| Metazeunerite       | $Cu(UO_2)_2(AsO_4)_2 \cdot 8H_2O$  | G  | 1937      | Germany                          | <i>Geochemist's and Mineralogist's Compendium</i> (1937) 173   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 489  |
| Meurigite-K         | $KFe^{3+}_8(PO_4)_6(OH)_7 \cdot 6.5H_2O$                                     | Rn | 1995-022  | USA                              | <i>Mineralogical Magazine</i> <b>60</b> (1996), 787  | <i>American Mineralogist</i> <b>92</b> (2007), 1518   |
| Meurigite-Na        | $[Na(H_2O)_{2.5}][Fe^{3+}_8(PO_4)_6(OH)_7(H_2O)_4]$                          | A  | 2007-024  | USA                              | <i>American Mineralogist</i> <b>94</b> (2009), 720   |   |
| Meyerhofferite      | $CaB_3O_3(OH)_5 \cdot H_2O$  | G  | 1914      | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>4</b> (1914), 354  | <i>Canadian Mineralogist</i> <b>31</b> (1993), 305  |
| Meymacite           | $WO_3 \cdot 2H_2O$   | Rd | 1965 s.p. | France                           | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>79</b> (1874), 639  | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>88</b> (1965), 613 |
| Meyrowitzite        | $Ca(UO_2)(CO_3)_2 \cdot 5H_2O$   | A  | 2018-039  | USA                              | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879    |   |
| Mgriite             | $(Cu,Fe)_3AsSe_3$  | A  | 1980-100  | Germany                          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 215  | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Mianningite         | $(\square, Pb, Ce, Na)(U^{4+}, Mn, U^{6+})Fe^{3+}_2(Ti, Fe^{3+})_{18}O_{38}$ | A  | 2014-072  | China                            | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 331  |   |
| Miargyrite          | $AgSbS_2$  | G  | 1829      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>15</b> (1829), 451   | <i>American Mineralogist</i> <b>87</b> (2002), 753  |
| Miassite            | $Rh_{17}S_{15}$  | A  | 1997-029  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(2)</b> (2001), 41  | <i>Acta Crystallographica</i> <b>15</b> (1962), 1198  |
| Micheelsenite       | $(Ca, Y)_3Al(PO_3OH)(CO_3)(OH)_6 \cdot 12H_2O$                               | A  | 1999-033  | Denmark (Greenland)              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 337  |   |
| Michenerite         | $PdBiTe$   | Rd | 1971-006a | Canada                           | <i>Canadian Mineralogist</i> <b>6</b> (1958), 200  | <i>Canadian Mineralogist</i> <b>12</b> (1973), 61   |
| Microcline          | $K(AlSi_3O_8)$   | G  | 1830      | Norway                           | <i>Journal für Chemie und Physik</i> <b>60</b> (1830), 316   | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 263  |
| Microsommite        | $[(Na, K)_6(SO_4)][Ca_2Cl_2][(Si_6Al_6O_{24})]$                              | G  | 1872      | Italy                            | <i>Rendiconto dell'Accademia delle Scienze Fisiche e Matematiche</i> <b>11</b> (1872), 210   | <i>Physics and Chemistry of Minerals</i> <b>28</b> (2001), 509                                      |
| Middendorfitite     | $K_3Na_2Mn_5Si_{12}(O, OH)_{36} \cdot 2H_2O$                                 | A  | 2005-028  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(3)</b> (2006), 42   |   |
| Middlebackite       | $Cu_2C_2O_4(OH)_2$   | A  | 2015-115  | Australia                        | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  | <a href="https://doi.org/10.1180/mgm.2018.136">https://doi.org/10.1180/mgm.2018.136</a>             |

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|--------------------|--|---|----------|----------------|--|---|
| Mieite-(Y)         | $Y_4Ti(SiO_4)_2O[F,(OH)]_6$                          | A | 2014-020 | Japan          | <i>Journal of Mineralogical and Petrological Sciences</i> <b>110</b> (2015), 135   |   |
| Miersite           | AgI  | G | 1898     | Australia      | <i>Nature</i> <b>57</b> (1898), 574  | <i>Mineralogical Magazine</i> <b>62</b> (1998), 471   |
| Miessiite          | $Pd_{11}Te_2Se_2$                                    | A | 2006-013 | Finland        | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1221  |   |
| Miguelromeroite    | $Mn_5(AsO_3OH)_2(AsO_4)_2(H_2O)_4$                   | A | 2008-066 | Mexico         | <i>American Mineralogist</i> <b>94</b> (2009), 1535  |   |
| Miharaite          | $PbCu_4FeBiS_6$                                      | A | 1976-012 | Japan          | <i>American Mineralogist</i> <b>65</b> (1980), 784   | <i>Doklady Akademii Nauk SSSR</i> <b>299</b> (1988), 123  |
| Mikasaite          | $Fe^{3+}_2(SO_4)_3$                                  | A | 1992-015 | Japan          | <i>Mineralogical Magazine</i> <b>58</b> (1994), 649  | <i>Zeitschrift für Kristallographie</i> <b>144</b> (1976), 341                                      |
| Milanriederite     | $Ca_{19}Fe^{3+}Al_4(Mg_4Al_4)Si_{18}O_{67}(OH)_{11}$ | A | 2018-041 | Namibia        | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Milarite           | $KCa_2(Be_2AlSi_{12})O_{30} \cdot H_2O$              | G | 1870     | Switzerland    | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1870), 80   | <i>European Journal of Mineralogy</i> <b>1</b> (1989), 353  |
| Millerite          | NiS  | G | 1845     | Czech Republic | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Physics and Chemistry of Minerals</i> <b>31</b> (2004), 321                                      |
| Millisite          | $NaCaAl_6(PO_4)_4(OH)_9 \cdot 3H_2O$                 | G | 1930     | USA            | <i>American Mineralogist</i> <b>15</b> (1930), 307   | <i>American Mineralogist</i> <b>45</b> (1960), 547  |
| Millosevichite     | $Al_2(SO_4)_3$                                       | G | 1913     | Italy          | <i>Rendiconti dell'Accademia dei Lincei, Classe di Scienze Fisiche, Matematiche e Naturali, Serie V</i> <b>22</b> (1913), 303            | <i>Zeitschrift für Kristallographie</i> <b>204</b> (1993), 57                                       |
| Millsite           | $CuTeO_3 \cdot 2H_2O$                                | A | 2015-086 | Norway         | <i>Mineralogical Magazine</i> <b>82</b> (2018), 433  |   |
| Milotaite          | PdSbSe   | A | 2003-056 | Czech Republic | <i>Canadian Mineralogist</i> <b>43</b> (2005), 689   |   |
| Mimetite           | $Pb_5(AsO_4)_3Cl$                                    | G | 1845     | Germany        | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845)  | <i>Canadian Mineralogist</i> <b>29</b> (1991), 369  |
| Minasgeraisite-(Y) | $CaBe_2Y_2Si_2O_{10}$                                | A | 1983-090 | Brazil         | <i>American Mineralogist</i> <b>71</b> (1986), 603   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 301   |
| Minasragrite       | $V^{4+}O(SO_4) \cdot 5H_2O$                          | G | 1915     | Peru           | <i>Journal of the Washington Academy of Sciences</i> <b>5</b> (1915), 7  | <i>Acta Crystallographica</i> <b>B35</b> (1979), 1545   |
| Mineevite-(Y)      | $Na_{25}BaY_2(CO_3)_{11}(HCO_3)_4(SO_4)_2F_2Cl$      | A | 1991-048 | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(6)</b> (1992), 138   |   |
| Minehillite        | $(K,Na)_2Ca_{28}Zn_5Al_4Si_{40}O_{112}(OH)_{16}$     | A | 1983-001 | USA            | <i>American Mineralogist</i> <b>69</b> (1984), 1150  | <i>American Mineralogist</i> <b>80</b> (1995), 173  |
| Minguzzite         | $K_3Fe^{3+}(C_2O_4)_3 \cdot 3H_2O$                   | G | 1955     | Italy          | <i>Accademia Nazionale dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali</i> <b>18</b> (1955), 392          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>81</b> (1958), 245 |
| Minium             | $Pb^{2+}_2Pb^{4+}O_4$                                | G | 1806     | Germany        | <i>Philosophical Transactions of the Royal Society of London</i> <b>96</b> (1806), 267   | <i>Journal of Solid State Chemistry</i> <b>23</b> (1978), 327                                       |
| Minjiangite        | $BaBe_2(PO_4)_2$                                     | A | 2013-021 | China          | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1195   |   |
| Minnesotaite       | $Fe^{2+}_3Si_4O_{10}(OH)_2$                          | G | 1944     | USA            | <i>American Mineralogist</i> <b>29</b> (1944), 363   | <i>Canadian Mineralogist</i> <b>24</b> (1986), 479  |
| Minohlite          | $(Cu,Zn)_7(SO_4)_2(OH)_{10} \cdot 8H_2O$             | A | 2012-035 | Japan          | <i>Mineralogical Magazine</i> <b>77</b> (2013), 335  |   |
| Minrecordite       | $CaZn(CO_3)_2$                                       | A | 1980-096 | Namibia        | <i>Mineralogical Record</i> <b>13</b> (1982), 131  |   |
| Minyulite          | $KAl_2(PO_4)_2F \cdot 4H_2O$                         | G | 1933     | Australia      | <i>Journal of the Royal Society of Western Australia</i> <b>19</b> (1933), 13  | <i>American Mineralogist</i> <b>62</b> (1977), 256  |
| Mirabilite         | $Na_2(SO_4) \cdot 10H_2O$                            | G | 1845     | unknown        | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 488   | <i>Physics and Chemistry of Minerals</i> <b>36</b> (2009), 29                                       |

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|-----------------|---|----|-----------|-----------------|---|---|
| Misakiite       | $\text{Cu}_3\text{Mn}(\text{OH})_6\text{Cl}_2$  | A  | 2013-131  | Japan           | <i>Mineralogical Magazine</i> <b>81</b> (2017), 485   |   |
| Misenite        | $\text{K}_8(\text{SO}_4)(\text{SO}_3\text{OH})_6$   | G  | 1849      | Italy           | <i>Atti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli</i> <b>8</b> (1849), 322  | <i>U.S. Geological Survey Bulletin</i> <b>679</b> (1921), 111                           |
| Miserite        | $\text{K}_{1.5-x}(\text{Ca}, \text{Y}, \text{REE})_5[\text{Si}_6\text{O}_{15}][\text{Si}_2\text{O}_7](\text{OH}, \text{F})_2 \cdot y\text{H}_2\text{O}$ | G  | 1950      | USA             | <i>American Mineralogist</i> <b>35</b> (1950), 911  | <i>Doklady Earth Sciences</i> <b>406</b> (2006), 74                                     |
| Mitridatite     | $\text{Ca}_2\text{Fe}^{3+}_3\text{O}_2(\text{PO}_4)_3 \cdot 3\text{H}_2\text{O}$  | G  | 1914      | Ukraine         | <i>Zapiski Krymskogo Obshchestva Estestvoispytatelei</i> <b>4</b> (1914), 104   | <i>Inorganic Chemistry</i> <b>16</b> (1977), 1096                                       |
| Mitrofanovite   | $\text{Pt}_3\text{Te}_4$  | A  | 2017-112  | Russia          | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405      | <a href="https://doi.org/10.1180/mgm.2018.150">https://doi.org/10.1180/mgm.2018.150</a> |
| Mitryaevaite    | $\text{Al}_5(\text{PO}_4)_2[(\text{P}, \text{S})\text{O}_3(\text{OH}, \text{O})]_2\text{F}_2(\text{OH})_2 \cdot 14.5\text{H}_2\text{O}$                 | A  | 1991-035  | Kazakhstan      | <i>Canadian Mineralogist</i> <b>39</b> (2001), 179  |   |
| Mitscherlichite | $\text{K}_2\text{CuCl}_4 \cdot 2\text{H}_2\text{O}$   | G  | 1925      | Italy           | <i>Annali del Reale Osservatorio Vesuviano, Serie III</i> <b>2</b> (1925), 7  | <i>Acta Crystallographica</i> <b>B26</b> (1970), 827                                    |
| Mixite          | $\text{Cu}_6\text{Bi}(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$   | G  | 1880      | Czech Republic  | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>4</b> (1880), 277  | <i>Physics and Chemistry of Minerals</i> <b>24</b> (1997), 411                          |
| Miyahisaite     | $(\text{Sr}, \text{Ca})_2\text{Ba}_3(\text{PO}_4)_3\text{F}$  | A  | 2011-043  | Japan           | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 121  |   |
| Moctezumite     | $\text{Pb}(\text{UO}_2)(\text{Te}^{4+}\text{O}_3)_2$  | A  | 1965-004  | Mexico          | <i>American Mineralogist</i> <b>50</b> (1965), 1158   | <i>American Mineralogist</i> <b>78</b> (1993), 835                                      |
| Modderite       | $\text{CoAs}$   | G  | 1923      | South Africa    | <i>Journal of the Chemical, Metallurgical and Mining Society of South Africa</i> <b>24</b> (1923), 90                                       | <i>Acta Crystallographica</i> <b>B40</b> (1984), 14                                     |
| Moëloite        | $\text{Pb}_6\text{Sb}_6\text{S}_{14}(\text{S})_3$   | A  | 1998-045  | Italy           | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 599   |   |
| Mogánite        | $\text{SiO}_2 \cdot n\text{H}_2\text{O}$  | Rn | 1999-035  | Spain           | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 21  | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 693                              |
| Mogovidite      | $\text{Na}_9(\text{Ca}, \text{Na})_{12}\text{Fe}_2\text{Zr}_3\text{Si}_{25}\text{O}_{72}(\text{CO}_3)(\text{OH})_4$                                     | A  | 2004-040  | Russia          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(6)</b> (2005), 36  | <i>Doklady Akademii Nauk</i> <b>400</b> (2005), 640                                     |
| Mohite          | $\text{Cu}_2\text{SnS}_3$   | A  | 1981-015  | Uzbekistan      | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 110   |   |
| Möhnite         | $(\text{NH}_4)\text{K}_2\text{Na}(\text{SO}_4)_2$   | A  | 2014-101  | Chile           | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 643  |   |
| Mohrite         | $(\text{NH}_4)_2\text{Fe}^{2+}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$  | A  | 1964-023  | Italy           | <i>Accademia Nazionale dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali, Serie VIII</i> <b>36</b> (1964), 524 | <i>Acta Crystallographica</i> <b>22</b> (1967), 775                                     |
| Moissanite      | $\text{SiC}$  | G  | 1905      | USA (meteorite) | <i>American Journal of Science</i> <b>19</b> (1905), 396  | <i>American Mineralogist</i> <b>92</b> (2007), 403                                      |
| Mojaveite       | $\text{Cu}_6[\text{Te}^{6+}\text{O}_4(\text{OH})_2](\text{OH})_7\text{Cl}$  | A  | 2013-120  | USA             | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1325  |   |
| Molinelloite    | $\text{Cu}(\text{H}_2\text{O})(\text{OH})\text{V}^{4+}\text{O}(\text{V}^{5+}\text{O}_4)$  | A  | 2016-055  | Italy           | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135  |   |
| Moluranite      | $\text{H}_4\text{U}^{4+}(\text{UO}_2)_3(\text{MoO}_4)_7 \cdot 18\text{H}_2\text{O}$   | G  | 1959      | Russia          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>88</b> (1959), 564  |   |
| Molybdenite     | $\text{MoS}_2$  | G  | 1796      | unknown         | <i>Elements of Mineralogy, Vol. 2. Elmsly, London</i> (1796), 319   | <i>American Mineralogist</i> <b>55</b> (1970), 1857                                     |
| Molybdite       | $\text{MoO}_3$  | Rd | 1963 s.p. | Czech Republic  | <i>Acta Universitatis Carolinae Geologica</i> <b>1</b> (1963), 1  |   |

|                    |  |    |           |                    |  |   |
|--------------------|--|----|-----------|--------------------|--|---|
| Molybdoferrocite   | $\text{CuPb}_2(\text{MoO}_4)(\text{AsO}_4)(\text{OH})$   | A  | 1982-062  | Namibia            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 289  |   |
| Molybdomenite      | $\text{PbSe}^{4+}\text{O}_3$   | Rn | 2007 s.p. | Argentina          | <i>Bulletin de la Société Minéralogique de France</i> <b>5</b> (1882), 90  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2003), 145                     |
| Molybdophyllite    | $\text{Pb}_8\text{Mg}_9[\text{Si}_{10}\text{O}_{28}(\text{OH})_8\text{O}_2(\text{CO}_3)_3]\cdot\text{H}_2\text{O}$ | G  | 1901      | Sweden             | <i>Bulletin of the Geological Institution of the University of Upsala</i> <b>5</b> (1901), 81  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 493                               |
| Molysite           | $\text{FeCl}_3$  | G  | 1868      | Italy              | <i>A System of Mineralogy</i> , 5th ed. (1868), 118  | <i>Journal of Applied Crystallography</i> <b>22</b> (1989), 173                   |
| Momoiite           | $\text{Mn}^{2+}_3\text{V}^{3+}_2(\text{SiO}_4)_3$  | A  | 2009-026  | Japan              | <i>Journal of Mineralogical and Petrological Sciences</i> <b>105</b> (2010), 92  |   |
| Monazite-(Ce)      | $\text{Ce}(\text{PO}_4)$   | Rn | 1987 s.p. | Russia             | <i>Journal für Chemie und Physik</i> <b>55</b> (1829), 301   | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Monazite-(La)      | $\text{La}(\text{PO}_4)$   | Rn | 1966 s.p. | Kazakhstan         | <i>Doklady Akademii Nauk SSSR</i> <b>49</b> (1945), 353  | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Monazite-(Nd)      | $\text{Nd}(\text{PO}_4)$   | A  | 1986-052  | Italy              | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>67</b> (1987), 103  | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Monazite-(Sm)      | $\text{Sm}(\text{PO}_4)$   | A  | 2001-001  | Canada             | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1649  | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Moncheite          | $\text{Pt}(\text{Te},\text{Bi})_2$   | A  | 1967 s.p. | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 33  | <i>Geochimica</i> (1975), 184   |
| Monetite           | $\text{Ca}(\text{PO}_3\text{OH})$  | G  | 1882      | Puerto Rico        | <i>American Journal of Science</i> <b>23</b> (1882), 400   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1223                             |
| Mongolite          | $\text{Ca}_4\text{Nb}_6\text{Si}_5\text{O}_{24}(\text{OH})_{10}\cdot 6\text{H}_2\text{O}$                          | A  | 1983-027  | Mongolia           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 374  |   |
| Monimolite         | $\text{Pb}_2\text{Sb}^{5+}_2\text{O}_7$  | Q  | 2013 s.p. | Sweden             | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>22</b> (1865), 227   |   |
| Monipite           | $\text{MoNiP}$   | A  | 2007-033  | Mexico (meteorite) | <i>American Mineralogist</i> <b>99</b> (2014), 198   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 2820                             |
| Monohydrocalcite   | $\text{Ca}(\text{CO}_3)\cdot\text{H}_2\text{O}$  | G  | 1964      | Kyrgyzstan         | <i>Kristallografiya</i> <b>9</b> (1964), 109   | <i>American Mineralogist</i> <b>93</b> (2008), 1014                               |
| Montanite          | $\text{Bi}^{3+}_2\text{Te}^{6+}\text{O}_6\cdot 2\text{H}_2\text{O}$  | Q  | 1868      | USA                | <i>American Journal of Science</i> <b>45</b> (1868), 318   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>255</b> (1980), 968 |
| Montbrayite        | $(\text{Au},\text{Ag},\text{Sb},\text{Bi},\text{Pb})_{23}(\text{Te},\text{Sb},\text{Bi},\text{Pb})_{38}$           | Rd | 2017 s.p. | Canada             | <i>American Mineralogist</i> <b>31</b> (1946), 515   | <i>Canadian Mineralogist</i> <b>56</b> (2018), 129                                |
| Montdorite         | $\text{KFe}^{2+}_{1.5}\text{Mn}^{2+}_{0.5}\text{Mg}_{0.5}\text{Si}_4\text{O}_{10}(\text{F},\text{OH})_2$           | Rd | 1998 s.p. | France             | <i>Contributions to Mineralogy and Petrology</i> <b>68</b> (1979), 117   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 905                                |
| Montebrasite       | $\text{LiAl}(\text{PO}_4)(\text{OH})$  | G  | 1871      | France             | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>73</b> (1871), 306   | <i>American Mineralogist</i> <b>75</b> (1990), 992                                |
| Monteneveite       | $\text{Ca}_3\text{Sb}^{5+}_2(\text{Fe}^{3+}_2\text{Fe}^{2+})\text{O}_{12}$   | A  | 2018-060  | Italy              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Monteponite        | $\text{CdO}$   | G  | 1946      | Italy              | <i>Economic Geology</i> <b>41</b> (1946), 761  | <i>Physics and Chemistry of Minerals</i> <b>26</b> (1999), 644                    |
| Monteregianite-(Y) | $\text{KNa}_2\text{YSi}_6\text{O}_{19}\cdot 5\text{H}_2\text{O}$   | A  | 1972-026  | Canada             | <i>Canadian Mineralogist</i> <b>16</b> (1978), 561   | <i>American Mineralogist</i> <b>72</b> (1987), 365                                |
| Montesommaite      | $\text{K}_9(\text{Si}_{23}\text{Al}_9)\text{O}_{64}\cdot 10\text{H}_2\text{O}$                                     | A  | 1988-038  | Italy              | <i>American Mineralogist</i> <b>75</b> (1990), 1415  |   |
| Montetrisaite      | $\text{Cu}_6(\text{SO}_4)(\text{OH})_{10}\cdot 2\text{H}_2\text{O}$  | A  | 2007-009  | Italy              | <i>Canadian Mineralogist</i> <b>47</b> (2009), 143   |   |
| Montgomeryite      | $\text{Ca}_4\text{MgAl}_4(\text{PO}_4)_6(\text{OH})_4\cdot 12\text{H}_2\text{O}$                                   | G  | 1940      | USA                | <i>American Mineralogist</i> <b>25</b> (1940), 315   | <i>American Mineralogist</i> <b>59</b> (1974), 843                                |



|                     |   |    |           |                                  |  |  |
|---------------------|---|----|-----------|----------------------------------|--|--|
| Monticellite        | CaMg(SiO <sub>4</sub> )   | G  | 1831      | Italy                            | <i>Philosophical Magazine</i> <b>10</b> (1831), 256  | <i>American Mineralogist</i> <b>72</b> (1987), 748             |
| Montmorillonite     | (Na,Ca) <sub>0.3</sub> (Al,Mg) <sub>2</sub> Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub> ·nH <sub>2</sub> O  | G  | 1847      | France                           | <i>Bulletin de la Société Géologique de France</i> <b>4</b> (1847), 168                      | <i>Physics and Chemistry of Minerals</i> <b>35</b> (2008), 49  |
| Montroseite         | (V <sup>3+</sup> ,Fe <sup>2+</sup> ,V <sup>4+</sup> )O(OH)  | G  | 1953      | USA                              | <i>American Mineralogist</i> <b>38</b> (1953), 1235  | <i>American Mineralogist</i> <b>40</b> (1955), 861             |
| Montroyalite        | Sr <sub>4</sub> Al <sub>8</sub> (CO <sub>3</sub> ) <sub>3</sub> (OH) <sub>26</sub> ·10H <sub>2</sub> O  | A  | 1985-001  | Canada                           | <i>Canadian Mineralogist</i> <b>24</b> (1986), 455   |  |
| Montroydite         | HgO   | G  | 1903      | USA                              | <i>American Journal of Science</i> <b>16</b> (1903), 259                                     | <i>Acta Chemica Scandinavica</i> <b>18</b> (1964), 1305        |
| Mooihoekite         | Cu <sub>9</sub> Fe <sub>9</sub> S <sub>16</sub>   | A  | 1971-019  | South Africa                     | <i>American Mineralogist</i> <b>57</b> (1972), 689   | <i>Acta Crystallographica</i> <b>B29</b> (1973), 2365          |
| Moolooite           | Cu(C <sub>2</sub> O <sub>4</sub> )·nH <sub>2</sub> O  | A  | 1980-082  | Australia                        | <i>Mineralogical Magazine</i> <b>50</b> (1986), 295  | <i>Inorganic Chemistry</i> <b>19</b> (1980), 2074              |
| Mooreite            | Mg <sub>15</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>26</sub> ·8H <sub>2</sub> O  | G  | 1929      | USA                              | <i>American Mineralogist</i> <b>14</b> (1929), 165   | <i>Acta Crystallographica</i> <b>B36</b> (1980), 1304          |
| Moorhouseite        | Co(SO <sub>4</sub> )·6H <sub>2</sub> O  | A  | 1963-008  | Canada                           | <i>Canadian Mineralogist</i> <b>8</b> (1965), 166  | <i>Acta Crystallographica</i> <b>C44</b> (1988), 599           |
| Mopungite           | NaSb <sup>5+</sup> (OH) <sub>6</sub>  | A  | 1982-020  | USA                              | <i>Mineralogical Record</i> <b>16</b> (1985): 73   | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 431         |
| Moraesite           | Be <sub>2</sub> (PO <sub>4</sub> )(OH)·4H <sub>2</sub> O  | G  | 1953      | Brazil                           | <i>American Mineralogist</i> <b>38</b> (1953), 1126  | <i>Zeitschrift für Kristallographie</i> <b>201</b> (1992), 253 |
| Moraskoite          | Na <sub>2</sub> Mg(PO <sub>4</sub> )F   | A  | 2013-084  | Poland (meteorite)               | <i>Mineralogical Magazine</i> <b>79</b> (2015), 387  |  |
| Mordenite           | (Na <sub>2</sub> ,Ca,K <sub>2</sub> ) <sub>4</sub> (Al <sub>8</sub> Si <sub>40</sub> )O <sub>96</sub> ·28H <sub>2</sub> O   | A  | 1997 s.p. | Canada                           | <i>Journal of the Chemical Society</i> <b>17</b> (1864), 100                                 | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 485    |
| Moreauite           | Al <sub>3</sub> (UO <sub>2</sub> )(PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>2</sub> ·13H <sub>2</sub> O   | A  | 1984-010  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 9  |  |
| Morelandite         | Ca <sub>2</sub> Ba <sub>3</sub> (AsO <sub>4</sub> ) <sub>3</sub> Cl   | A  | 1977-035  | Sweden                           | <i>Canadian Mineralogist</i> <b>16</b> (1978), 601   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 163    |
| Morenosite          | Ni(SO <sub>4</sub> )·7H <sub>2</sub> O  | G  | 1850      | Spain                            | <i>A System of Mineralogy</i> , 3rd ed. Wiley, New York (1850), 679                          | <i>Acta Crystallographica</i> <b>B53</b> (1997), 325           |
| Morimotoite         | Ca <sub>3</sub> (TiFe <sup>2+</sup> )(SiO <sub>4</sub> ) <sub>3</sub>   | A  | 1992-017  | Japan                            | <i>Mineralogical Magazine</i> <b>59</b> (1995), 115  |  |
| Morinite            | NaCa <sub>2</sub> Al <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH)F <sub>4</sub> ·2H <sub>2</sub> O   | A  | 1967 s.p. | France                           | <i>Bulletin de la Société Française de Minéralogie</i> <b>14</b> (1891), 187                 | <i>Canadian Mineralogist</i> <b>17</b> (1979), 93              |
| Morozeviczite       | Pb <sub>3</sub> Ge <sub>1-x</sub> S <sub>4</sub>  | A  | 1974-036  | Poland                           | <i>Rudy i Metale Niezelazne</i> <b>20</b> (1975), 288  |  |
| Morrisonite         | Ca <sub>11</sub> (As <sup>3+</sup> V <sup>4+</sup> <sub>2</sub> V <sup>5+</sup> <sub>10</sub> As <sup>5+</sup> <sub>6</sub> O <sub>51</sub> ) <sub>2</sub> ·78H <sub>2</sub> O              | A  | 2014-088  | USA                              | <i>Canadian Mineralogist</i> <b>54</b> (2016), 145   |  |
| Mosandrite-(Ce)     | (Ca <sub>3</sub> REE)[(H <sub>2</sub> O) <sub>2</sub> Ca <sub>0.5</sub> □ <sub>0.5</sub> Ti(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> | Rd | 2016 s.p. | Norway                           | <i>Jahres-Bericht über die Fortschritte der Chemie und Mineralogie</i> <b>21</b> (1842), 178 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2753           |
| Moschelite          | HgI   | A  | 1987-038  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 524                                | <i>Acta Crystallographica</i> <b>E68</b> (2012), i11           |
| Moschellandsbergite | Ag <sub>2</sub> Hg <sub>3</sub>   | G  | 1938      | Germany                          | <i>American Mineralogist</i> <b>23</b> (1938), 761   | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 903     |
| Mosesite            | (Hg <sub>2</sub> N)Cl   | G  | 1910      | USA                              | <i>American Journal of Science</i> <b>30</b> (1910), 202                                     | <i>American Mineralogist</i> <b>38</b> (1953), 1225            |
| Moskvinitite-(Y)    | Na <sub>2</sub> KYSi <sub>6</sub> O <sub>15</sub>   | A  | 2002-031  | Tajikistan                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(6)</b> (2003), 15        | <i>Mineralogical Magazine</i> <b>80</b> (2016), 31             |
| Mössbauerite        | Fe <sup>3+</sup> <sub>6</sub> O <sub>4</sub> (OH) <sub>8</sub> (CO <sub>3</sub> )·3H <sub>2</sub> O   | A  | 2012-049  | France                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 447  |  |
| Mottanaite-(Ce)     | Ca <sub>4</sub> Ce <sub>2</sub> Al(Be <sub>1.5</sub> □ <sub>0.5</sub> ) <sub>22</sub> [B <sub>4</sub> Si <sub>4</sub> O <sub>22</sub> ]O <sub>2</sub>                                       | Rd | 2001-020  | Italy                            | <i>American Mineralogist</i> <b>87</b> (2002), 739   |  |
| Mottramite          | PbCu(VO <sub>4</sub> )(OH)  | G  | 1876      | United Kingdom                   | <i>Proceedings of the Royal Society of London</i> <b>25</b> (1876), 109                      | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1119            |

|                 |  |    |           |                                  |   |  |
|-----------------|--|----|-----------|----------------------------------|---|--|
| Motukoreaite    | $Mg_6Al_3(OH)_{18}[Na(H_2O)_6](SO_4)_2 \cdot 6H_2O$                            | Q  | 1976-033  | New Zealand                      | <i>Mineralogical Magazine</i> <b>41</b> (1977), 389   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 263  |
| Mounanaite      | $PbFe^{3+}_2(VO_4)_2(OH)_2$  | A  | 1968-031  | Gabon                            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>92</b> (1969), 196 | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179    |
| Mountainite     | $KNa_2Ca_2[Si_8O_{19}(OH)] \cdot 6H_2O$  | G  | 1957      | South Africa                     | <i>Mineralogical Magazine</i> <b>31</b> (1957), 611   | <i>Zeitschrift für Kristallographie</i> <b>224</b> (2009), 389 |
| Mountkeithite   | $(Mg_{1-x}Fe^{3+}_x)(SO_4)_{x/2}(OH)_2 \cdot nH_2O$ ( $x < 0.5$ , $n > 3x/2$ ) | A  | 1980-038  | Australia                        | <i>Mineralogical Magazine</i> <b>44</b> (1981), 345   |  |
| Mourite         | $(UO_2)(Mo^{6+})_5O_{16} \cdot 5H_2O$  | A  | 1967 s.p. | Kazakhstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 67                     | <i>Geokhimiya</i> <b>10</b> (1980), 1557                       |
| Moydite-(Y)     | $YB(OH)_4(CO_3)$   | A  | 1985-025  | Canada                           | <i>Canadian Mineralogist</i> <b>24</b> (1986), 665  | <i>Canadian Mineralogist</i> <b>24</b> (1986), 675             |
| Mozartite       | $CaMn^{3+}(SiO_4)(OH)$   | A  | 1991-016  | Italy                            | <i>Canadian Mineralogist</i> <b>31</b> (1993), 331  | <i>American Mineralogist</i> <b>82</b> (1997), 841             |
| Mozgovaite      | $PbBi_4(S,Se)_7$   | A  | 1998-060  | Italy                            | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1499   |  |
| Mpororoite      | $Al_2O(WO_4)_2 \cdot 6H_2O$  | A  | 1970-037  | Uganda                           | <i>Bulletin of the Geological Society of Finland</i> <b>44</b> (1972), 107                          | <i>Mineralogical Magazine</i> <b>48</b> (1984), 397            |
| Mrázekite       | $Bi_2Cu_3(PO_4)_2O_2(OH)_2 \cdot 2H_2O$  | A  | 1990-045  | Slovakia                         | <i>Canadian Mineralogist</i> <b>30</b> (1992), 215  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 365             |
| Mroseite        | $CaTe^{4+}O_2(CO_3)$   | A  | 1974-032  | Mexico                           | <i>Canadian Mineralogist</i> <b>13</b> (1975), 286  | <i>Canadian Mineralogist</i> <b>13</b> (1975), 383             |
| Mückeite        | $CuNiBiS_3$  | A  | 1988-018  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 193                                       | <i>Acta Crystallographica</i> <b>C46</b> (1990), 127           |
| Muirite         | $Ba_{10}Ca_2Mn^{2+}TiSi_{10}O_{30}(OH,Cl,F)_{10}$                              | A  | 1964-013  | USA                              | <i>American Mineralogist</i> <b>50</b> (1965), 1314   | <i>Doklady Akademii Nauk SSSR</i> <b>221</b> (1975), 343       |
| Mukhinite       | $Ca_2(Al_2V^{3+})[Si_2O_7][SiO_4]O(OH)$  | A  | 1968-035  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>185</b> (1969), 1342   |  |
| Mullite         | $Al_{4+2x}Si_{2-2x}O_{10-x}$ ( $x \approx 0.4$ )                               | G  | 1924      | United Kingdom                   | <i>Journal of the Washington Academy of Sciences</i> <b>14</b> (1924), 183                          | <i>American Mineralogist</i> <b>76</b> (1991), 332             |
| Mummeite        | $Cu_{0.58}Ag_{3.11}Pb_{1.10}Bi_{6.65}S_{13}$                                   | A  | 1986-025  | USA                              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 555                                       |  |
| Munakataite     | $Pb_2Cu_2(Se^{4+}O_3)(SO_4)(OH)_4$   | A  | 2007-012  | Japan                            | <i>Journal of Mineralogical and Petrological Sciences</i> <b>103</b> (2008), 327                    | <i>Mineralogical Magazine</i> <b>74</b> (2010), 991            |
| Mundite         | $Al(UO_2)_3(PO_4)_2(OH)_3 \cdot 5.5H_2O$                                       | A  | 1980-075  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 669   |  |
| Mundrabbillaite | $(NH_4)_2Ca(PO_3OH)_2 \cdot H_2O$  | A  | 1978-058  | Australia                        | <i>Mineralogical Magazine</i> <b>47</b> (1983), 80  |  |
| Munirite        | $NaV^{5+}O_3 \cdot 1.9H_2O$  | A  | 1982-038  | Pakistan                         | <i>Mineralogical Magazine</i> <b>47</b> (1983), 391   | <i>Acta Chemica Scandinavica</i> <b>A31</b> (1979), 579        |
| Murakamiite     | $Ca_2LiSi_3O_8(OH)$  | A  | 2016-066  | Japan                            | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1045  |  |
| Murashkoite     | FeP  | A  | 2012-071  | Israel                           | CNMNC Newsletter 15 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 1                             |  |
| Murataite-(Y)   | $(Y,Na)_6Zn(Zn,Fe^{3+})_4(Ti,Nb,Na)_{12}O_{29}(O,F,OH)_{10}F_4$                | A  | 1972-007  | USA                              | <i>American Mineralogist</i> <b>59</b> (1974), 172  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1223            |
| Murchisite      | $Cr_5S_6$  | A  | 2010-003  | Australia (meteorite)            | <i>American Mineralogist</i> <b>96</b> (2011), 1905   |  |
| Murdochite      | $Cu_{12}Pb_2O_{15}Cl_2$  | G  | 1955      | USA                              | <i>American Mineralogist</i> <b>40</b> (1955), 905  | <i>Acta Crystallographica</i> <b>C39</b> (1983), 1143          |
| Murmanite       | $Na_2Ti_2Na_2Ti_2(Si_2O_7)_2O_4(H_2O)_4$                                       | Rd | 2016 s.p. | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>52</b> (1930), 731   | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1207           |



|                     |  |    |           |                     |  |  |
|---------------------|--|----|-----------|---------------------|--|--|
| Murunskite          | $K_2(Cu,Fe)_4S_4$                                      | A  | 1980-064  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 468                | <i>Doklady Akademii Nauk, Earth Science Section</i> <b>424</b> (2009), 139 |
| Muscovite           | $KAl_2(Si_3Al)O_{10}(OH)_2$                            | A  | 1998 s.p. | unknown             | A System of Mineralogy, 3rd ed. Putnam, New York (1859), 356                                     | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1017                        |
| Museumite           | $[Pb_2(Pb,Sb)_2S_8][(Te,Au)_2]$                        | A  | 2003-039  | Romania             | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 835                                      |  |
| Mushistonite        | $Cu^{2+}Sn^{4+}(OH)_6$                                 | A  | 1982-068  | Tajikistan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 612                | <i>Journal of Solid State Chemistry</i> <b>17</b> (1976), 399              |
| Muskoxite           | $Mg_7Fe^{3+}_4(OH)_{26}\cdot H_2O$ (?)                 | Q  | 1967-043  | Canada              | <i>American Mineralogist</i> <b>54</b> (1969), 684   |  |
| Muthmannite         | $AuAgTe_2$   | G  | 1911      | Romania             | <i>Zeitschrift für Kristallographie</i> <b>49</b> (1911), 246                                    | <i>American Mineralogist</i> <b>89</b> (2004), 1505                        |
| Mutinaite           | $Na_3Ca_4Al_{11}Si_{85}O_{192}\cdot 60H_2O$            | A  | 1996-025  | Antarctica          | <i>Zeolites</i> <b>19</b> (1997), 318  | <i>Zeolites</i> <b>19</b> (1997), 323                                      |
| Mutnovskite         | $Pb_2AsS_3(I,Cl,Br)$                                   | A  | 2004-032  | Russia              | <i>American Mineralogist</i> <b>91</b> (2006), 21  | <i>Journal of Solid State Chemistry</i> <b>18</b> (2008), 306              |
| Nabalamprophyllite  | $(BaNa)Ti_2Na_3Ti(Si_2O_7)_2O_2(OH)_2$                 | Rd | 2001-060  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(1)</b> (2004), 59            | <i>Doklady Chemistry</i> <b>368</b> (228), 228                             |
| Nabaphite           | $NaBa(PO_4)\cdot 9H_2O$                                | A  | 1981-058  | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>266</b> (1982), 707   | <i>Doklady Akademii Nauk SSSR</i> <b>266</b> (1982), 624                   |
| Nabesite            | $Na_2BeSi_4O_{10}\cdot 4H_2O$                          | A  | 2000-024  | Denmark (Greenland) | <i>Canadian Mineralogist</i> <b>40</b> (2002), 173   | <i>American Mineralogist</i> <b>95</b> (2010), 519                         |
| Nabiasite           | $BaMn_9(VO_4)_6(OH)_2$                                 | A  | 1997-050  | France              | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 879                                      |  |
| Nabimusaite         | $KCa_{12}(SiO_4)_4(SO_4)_2O_2F$                        | A  | 2012-057  | Israel              | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1061   |  |
| Nabokoite           | $Cu_7Te^{4+}O_4(SO_4)_5\cdot KCl$                      | A  | 1985-013a | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 358                | <i>Mineralogy and Petrology</i> <b>38</b> (1998), 291                      |
| Nacaphite           | $Na_2Ca(PO_4)F$  | A  | 1979-026  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 50                 | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1275                        |
| Nacareniobsite-(Ce) | $(Ca_3REE)Na_3Nb(Si_2O_7)_2(OF)F_2$                    | Rd | 1987-040  | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 84                                     | <i>Canadian Mineralogist</i> <b>51</b> (2013), 313                         |
| Nacrite             | $Al_2Si_2O_5(OH)_4$                                    | G  | 1807      | Germany             | Traité Élémentaire de Minéralogie. Crapelet, Paris (1807), 505                                   | <i>Crystallography Reports</i> <b>53</b> (2008), 76                        |
| Nadorite            | $PbSb^{3+}O_2Cl$                                       | G  | 1870      | Algeria             | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>71</b> (1870), 237 | <i>Periodico di Mineralogia</i> <b>42</b> (1973), 335                      |
| Nafertisite         | $Na_3Fe^{2+}_{10}Ti_2(Si_6O_{17})_2O_2(OH)_6F(H_2O)_2$ | A  | 1994-007  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(6)</b> (1995), 101           | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 667                |
| Nagashimalite       | $Ba_4(V^{3+},Ti)_4(O,OH)_2[B_2Si_8O_{27}]Cl$           | A  | 1977-045  | Japan               | <i>Mineralogical Journal</i> <b>10</b> (1980), 122   | <i>Mineralogical Journal</i> <b>10</b> (1980), 131                         |
| Nagelschmidite      | $Ca_7(SiO_4)_2(PO_4)_2$                                | A  | 1987 s.p. | Israel              | <i>Geological Survey of Israel, Bulletin</i> <b>70</b> (1977), 1                                 |  |
| Nagyágite           | $[Pb_3(Pb,Sb)_3S_6](Au,Te)_3$                          | G  | 1845      | Romania             | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 563                   | <i>American Mineralogist</i> <b>84</b> (1999), 669                         |

|                  |   |   |            |                     |  |   |
|------------------|---|---|------------|---------------------|--|---|
| Nahcolite        | NaH(CO <sub>3</sub> )   | G | 1929       | Italy               | <i>Atti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Serie III</i> <b>3</b> (1929), 223                            | <i>Acta Crystallographica</i> <b>15</b> (1962), 77                              |
| Nahpoite         | Na <sub>2</sub> (PO <sub>3</sub> OH)  | A | 1981-002   | Canada              | <i>Canadian Mineralogist</i> <b>19</b> (1981), 373   | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>501</b> (1983), 95 |
| Nakauriite       | Cu <sub>8</sub> (SO <sub>4</sub> ) <sub>4</sub> (CO <sub>3</sub> )(OH) <sub>6</sub> ·48H <sub>2</sub> O   | A | 1976-016   | Japan               | <i>Journal of the Japanese Association of Mineralogists, Petrologists, and Economic Geologists</i> <b>71</b> (1976), 183                   |   |
| Naldrettite      | Pd <sub>2</sub> Sb  | A | 2004-007   | Canada              | <i>Mineralogical Magazine</i> <b>69</b> (2005), 89   | <i>Journal of the Less-Common Metals</i> <b>19</b> (1969), 300                  |
| Nalipoite        | NaLi <sub>2</sub> (PO <sub>4</sub> )  | A | 1990-030   | Canada              | <i>Canadian Mineralogist</i> <b>29</b> (1991), 565   | <i>Canadian Mineralogist</i> <b>29</b> (1991), 569                              |
| Nalivkinite      | Li <sub>2</sub> NaFe <sup>2+</sup> <sub>7</sub> Ti <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>2</sub> O <sub>2</sub> (OH) <sub>4</sub> F(H <sub>2</sub> O) <sub>2</sub> | A | 2006-038   | Tajikistan          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 651   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 33                               |
| Namansilite      | NaMn <sup>3+</sup> Si <sub>2</sub> O <sub>6</sub>   | A | 1989-026   | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 89  | <i>Mineralogical Magazine</i> <b>57</b> (1993), 533                             |
| Nambulite        | LiMn <sup>2+</sup> <sub>4</sub> Si <sub>5</sub> O <sub>14</sub> (OH)  | A | 1971-032   | Japan               | <i>Mineralogical Journal</i> <b>7</b> (1972), 29   | <i>American Mineralogist</i> <b>99</b> (2014), 1462                             |
| Namibite         | Cu(BiO) <sub>2</sub> (VO <sub>4</sub> )(OH)   | A | 1981-024   | Namibia             | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>61</b> (1981), 7  | <i>American Mineralogist</i> <b>85</b> (2000), 1298                             |
| Namuwite         | Zn <sub>4</sub> (SO <sub>4</sub> )(OH) <sub>6</sub> ·4H <sub>2</sub> O  | A | 1981-020   | United Kingdom      | <i>Mineralogical Magazine</i> <b>46</b> (1982), 51   | <i>American Mineralogist</i> <b>81</b> (1996), 238                              |
| Nanlingite       | Na(Ca <sub>5</sub> Li)Mg <sub>12</sub> (AsO <sub>3</sub> ) <sub>2</sub> [Fe <sup>2+</sup> (AsO <sub>3</sub> ) <sub>6</sub> ]F <sub>14</sub>                                       | A | 1985-xxx ? | China               | <i>Geochimica</i> <b>2</b> (1976), 107   | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 63                      |
| Nanpingite       | CsAl <sub>2</sub> (Si <sub>3</sub> Al)O <sub>10</sub> (OH) <sub>2</sub>   | A | 1987-006   | China               | <i>Acta Petrologica et Mineralogica</i> <b>7</b> (1988), 49  | <i>American Mineralogist</i> <b>81</b> (1996), 105                              |
| Nantokite        | CuCl  | G | 1868       | Chile               | <i>Berg- und Hüttenmännische Zeitung</i> <b>27</b> (1868), 3   | <i>Physical Review B</i> <b>50</b> (1994), 5868                                 |
| Naquite          | FeSi  | A | 2010-010   | China               | <i>Acta Geologica Sinica</i> <b>86</b> (2012), 553   |   |
| Narsarsukite     | Na <sub>2</sub> (Ti,Fe <sup>3+</sup> )Si <sub>4</sub> (O,F) <sub>11</sub>   | A | 1967 s.p.  | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 154   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 143                     |
| Nashite          | Na <sub>3</sub> Ca <sub>2</sub> [(V <sup>4+</sup> V <sup>5+</sup> ) <sub>9</sub> O <sub>28</sub> ]·24H <sub>2</sub> O   | A | 2011-105   | USA                 | <i>Canadian Mineralogist</i> <b>51</b> (2013), 27  |   |
| Nasinite         | Na <sub>2</sub> B <sub>5</sub> O <sub>8</sub> (OH)·2H <sub>2</sub> O  | A | 1967 s.p.  | Italy               | <i>Accademia Nazionale dei Lincei, Rendiconti della Classe di Scienze Fisiche, Matematiche e Naturali, Serie VIII</i> <b>30</b> (1962), 74 | <i>Acta Crystallographica</i> <b>B31</b> (1975), 2405                           |
| Nasledovite      | PbMn <sup>2+</sup> <sub>3</sub> Al <sub>4</sub> O <sub>5</sub> (SO <sub>4</sub> )(CO <sub>3</sub> ) <sub>4</sub> ·5H <sub>2</sub> O   | Q | 1958       | Tajikistan          | <i>Doklady Akademii Nauk Uzbekistan SSR</i> <b>5</b> (1958), 13  |   |
| Nasonite         | Ca <sub>4</sub> Pb <sub>6</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>3</sub> Cl <sub>2</sub>  | G | 1899       | USA                 | <i>American Journal of Science</i> <b>8</b> (1899), 339  | <i>American Mineralogist</i> <b>56</b> (1971), 1174                             |
| Nastrophite      | NaSr(PO <sub>4</sub> )·9H <sub>2</sub> O  | A | 1980-051   | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 604  | <i>Soviet Physics Doklady</i> <b>26</b> (1981), 1023                            |
| Nataliakulikite  | Ca <sub>4</sub> Ti <sub>2</sub> (Fe <sup>3+</sup> ,Fe <sup>2+</sup> )(Si,Fe <sup>3+</sup> ,Al)O <sub>11</sub>   | A | 2018-061   | Israel              | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037   |   |
| Nataliyamalikite | TlI   | A | 2016-022   | Russia              | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  |   |
| Natalyite        | NaV <sup>3+</sup> Si <sub>2</sub> O <sub>6</sub>  | A | 1984-053   | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 630  | <i>American Mineralogist</i> <b>87</b> (2002), 709                              |

|                       |   |    |           |            |   |  |
|-----------------------|---|----|-----------|------------|---|--|
| Natanite              | $\text{Fe}^{2+}\text{Sn}^{4+}(\text{OH})_6$   | A  | 1980-028  | Tajikistan | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 492           | <i>Acta Crystallographica</i> <b>13</b> (1960), 601                  |
| Natisite              | $\text{Na}_2\text{TiO}(\text{SiO}_4)$   | A  | 1974-035  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 314           | <i>Acta Crystallographica</i> <b>B34</b> (1978), 905                 |
| Natrite               | $\text{Na}_2(\text{CO}_3)$  | A  | 1981-005  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 220           | <i>American Mineralogist</i> <b>95</b> (2010), 574                   |
| Natroalunite          | $\text{NaAl}_3(\text{SO}_4)_2(\text{OH})_6$   | Rd | 1987 s.p. | USA        | <i>American Journal of Science</i> <b>164</b> (1902), 211                                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 534        |
| Natroboltwoodite      | $\text{Na}(\text{UO}_2)(\text{SiO}_3\text{OH})\cdot\text{H}_2\text{O}$  | Rn | 2007 s.p. | Kazakhstan | <i>Doklady Akademii Nauk SSSR</i> <b>221</b> (1975), 195                                    | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1069                  |
| Natrochalcite         | $\text{NaCu}_2(\text{SO}_4)_2(\text{OH})\cdot\text{H}_2\text{O}$  | G  | 1908      | Chile      | <i>American Journal of Science</i> <b>176</b> (1908), 342                                   | <i>Zeitschrift für Kristallographie</i> <b>206</b> (1993), 7         |
| Natrodufrénite        | $\text{NaFe}^{2+}\text{Fe}^{3+}_5(\text{PO}_4)_4(\text{OH})_6\cdot 2\text{H}_2\text{O}$                           | A  | 1981-033  | France     | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 321                                       |  |
| Natroglaucocerinite   | $\text{Zn}_6\text{Al}_3(\text{OH})_{18}[\text{Na}(\text{H}_2\text{O})_6](\text{SO}_4)_2\cdot 6\text{H}_2\text{O}$ | Q  | 1995-025  | Greece     | nyp   | <i>Zeitschrift für Kristallographie, suppl.</i> <b>9</b> (1995), 252 |
| Natrojarosite         | $\text{NaFe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | USA        | <i>American Journal of Science</i> <b>14</b> (1902), 211                                    | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2775                 |
| Natrolemonite         | $\text{Na}_4\text{Zr}_2\text{Si}_{10}\text{O}_{26}\cdot 9\text{H}_2\text{O}$                                      | A  | 1996-063  | Canada     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1295   |  |
| Natrolite             | $\text{Na}_2(\text{Si}_3\text{Al}_2)\text{O}_{10}\cdot 2\text{H}_2\text{O}$                                       | A  | 1997 s.p. | Germany    | <i>Gesellschaft Naturforschender Freunde zu Berlin, Neue Schriften</i> <b>4</b> (1803), 957 | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 305          |
| Natron                | $\text{Na}_2(\text{CO}_3)\cdot 10\text{H}_2\text{O}$  | A  | 1967 s.p. | unknown    | <i>Mineralogia, eller Mineralriktet. Salvius, Stockholm</i> (1747), 174                     | <i>Acta Crystallographica</i> <b>B25</b> (1969), 2656                |
| Natronambulite        | $\text{NaMn}^{2+}_4\text{Si}_5\text{O}_{14}(\text{OH})$   | A  | 1981-034  | Japan      | <i>Mineralogical Journal</i> <b>12</b> (1985), 332  | <i>American Mineralogist</i> <b>99</b> (2014), 1462                  |
| Natroniobite          | $\text{NaNbO}_3$  | Q  | 1960      | Russia     | <i>Vses. Nauchno-Issled. Geol. Inst.</i> (1960) 114   |  |
| Natropalermoite       | $\text{Na}_2\text{SrAl}_4(\text{PO}_4)_4(\text{OH})_4$  | A  | 2013-118  | USA        | <i>Mineralogical Magazine</i> <b>81</b> (2017), 833   |  |
| Natropharmacalumite   | $\text{NaAl}_4(\text{AsO}_4)_3(\text{OH})_4\cdot 4\text{H}_2\text{O}$   | A  | 2010-009  | Spain      | <i>Mineralogical Magazine</i> <b>74</b> (2010), 929   |  |
| Natropharmacosiderite | $\text{Na}_2\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_5\cdot 7\text{H}_2\text{O}$                               | Rn | 1983-025  | Australia  | <i>Mineralogical Record</i> <b>16</b> (1985), 121   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1477                  |
| Natrophilite          | $\text{NaMn}^{2+}(\text{PO}_4)$   | G  | 1890      | USA        | <i>American Journal of Science</i> <b>39</b> (1890), 205                                    | <i>American Mineralogist</i> <b>57</b> (1972), 1333                  |
| Natrophosphate        | $\text{Na}_7(\text{PO}_4)_2\text{F}\cdot 19\text{H}_2\text{O}$  | A  | 1971-041  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>101</b> (1972), 80            | <i>Kristallografiya</i> <b>37</b> (1992), 1559                       |
| Natrosilite           | $\text{Na}_2\text{Si}_2\text{O}_5$  | A  | 1974-043  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 317           | <i>Acta Crystallographica</i> <b>B24</b> (1968), 1077                |
| Natrotantite          | $\text{Na}_2\text{Ta}_4\text{O}_{11}$   | A  | 1980-026  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 338           | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 541                |
| Natotitanite          | $(\text{Na}_{0.5}\text{Y}_{0.5})\text{TiO}(\text{SiO}_4)$   | A  | 2011-033  | Kazakhstan | <i>Mineralogical Magazine</i> <b>76</b> (2012), 37  |  |
| Natrourosospinite     | $\text{Na}_2(\text{UO}_2)_2(\text{AsO}_4)_2\cdot 5\text{H}_2\text{O}$   | Rn | 2007 s.p. | Kazakhstan | <i>Doklady Akademii Nauk SSSR</i> <b>114</b> (1957), 634                                    |  |
| Natroxalate           | $\text{Na}_2(\text{C}_2\text{O}_4)$   | A  | 1994-053  | Russia     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(1)</b> (1996), 126      | <i>Acta Crystallographica</i> <b>B37</b> (1981), 938                 |
| Natrozippeite         | $\text{Na}_5(\text{UO}_2)_8(\text{SO}_4)_4\text{O}_5(\text{OH})_3\cdot 12\text{H}_2\text{O}$                      | A  | 1971-004  | USA        | <i>Canadian Mineralogist</i> <b>14</b> (1976), 429  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 687                   |

|                  |   |    |           |                        |   |   |
|------------------|---|----|-----------|------------------------|---|---|
| Naujakasite      | $\text{Na}_6\text{Fe}^{2+}\text{Al}_4\text{Si}_8\text{O}_{26}$  | G  | 1933      | Denmark (Greenland)    | <i>Meddelelser om Grønland</i> <b>92(9)</b> (1933), 1                                 | <i>Gronlands Geologiske Undersogelse Bulletin</i> <b>116</b> (1975), 11                 |
| Naumannite       | $\text{Ag}_2\text{Se}$  | G  | 1828      | Germany                | <i>Annalen der Physik und Chemie</i> <b>14</b> (1828), 471                            | <i>Acta Crystallographica</i> <b>E67</b> (2011), i45                                    |
| Navajoite        | $(\text{V}^{5+}, \text{Fe}^{3+})_{10}\text{O}_{24} \cdot 12\text{H}_2\text{O}$  | G  | 1955      | USA                    | <i>American Mineralogist</i> <b>40</b> (1955), 207                                    | <i>American Mineralogist</i> <b>75</b> (1990), 508                                      |
| Nchwaningite     | $\text{Mn}_2\text{SiO}_3(\text{OH})_2 \cdot \text{H}_2\text{O}$   | A  | 1994-002  | South Africa           | <i>American Mineralogist</i> <b>80</b> (1995), 377                                    |   |
| Nealite          | $\text{Pb}_4\text{Fe}(\text{AsO}_3)_2\text{Cl}_4 \cdot 2\text{H}_2\text{O}$   | A  | 1979-050  | Greece                 | <i>Mineralogical Record</i> <b>11</b> (1980), 299                                     | <i>Mineralogy and Petrology</i> <b>48</b> (1993), 193                                   |
| Nechelyustovite  | $(\text{Na}\square)\square_2\text{Ba}_4\text{Ti}_4\text{Nb}_4(\text{Na}_{11}\square)\text{Ti}_4(\text{Si}_2\text{O}_7)_8\text{O}_8(\text{OH})_8(\text{H}_2\text{O})_{12}$ | Rd | 2006-021  | Russia                 | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 251                           | <i>Mineralogical Magazine</i> <b>73</b> (2009), 753                                     |
| Nefedovite       | $\text{Na}_5\text{Ca}_4(\text{PO}_4)_4\text{F}$   | A  | 1982-048  | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 479     | <i>Doklady Akademii Nauk SSSR</i> <b>278</b> (1984), 353                                |
| Negevite         | $\text{NiP}_2$  | A  | 2013-104  | Israel                 | CNMNC Newsletter 19 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 165             |   |
| Neighborite      | $\text{NaMgF}_3$  | A  | 1967 s.p. | USA                    | <i>American Mineralogist</i> <b>46</b> (1961), 379                                    | <i>Physics and Chemistry of Minerals</i> <b>34</b> (2007), 705                          |
| Nekoite          | $\text{Ca}_3\text{Si}_6\text{O}_{15} \cdot 7\text{H}_2\text{O}$   | G  | 1956      | USA                    | <i>Mineralogical Magazine</i> <b>31</b> (1956), 5                                     | <i>American Mineralogist</i> <b>65</b> (1980), 1270                                     |
| Nekrasovite      | $\text{Cu}_{13}\text{VSn}_3\text{S}_{16}$   | A  | 1983-051  | Uzbekistan             | <i>Mineralogicheskii Zhurnal</i> <b>6(2)</b> (1984), 88                               |   |
| Nelenite         | $\text{Mn}^{2+}_{16}\text{As}^{3+}_3\text{Si}_{12}\text{O}_{36}(\text{OH})_{17}$  | A  | 1982-011  | USA                    | <i>Mineralogical Magazine</i> <b>48</b> (1984), 271                                   |   |
| Neltnerite       | $\text{CaMn}^{3+}_6\text{O}_8(\text{SiO}_4)$  | A  | 1979-059  | Morocco                | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 161                                 | <i>European Journal of Mineralogy</i> <b>3</b> (1991), 567                              |
| Nenadkevichite   | $(\text{Na}, \square)_8\text{Nb}_4(\text{Si}_4\text{O}_{12})_2(\text{O}, \text{OH})_4 \cdot 8\text{H}_2\text{O}$  | G  | 1955      | Russia                 | <i>Doklady Akademii Nauk SSSR</i> <b>100</b> (1955), 1159                             | <i>Acta Crystallographica</i> <b>B29</b> (1973), 1432                                   |
| Neotocite        | $(\text{Mn}, \text{Fe})\text{SiO}_3 \cdot \text{H}_2\text{O}$ (?)   | G  | 1849      | Sweden                 | Über das Atomistisch-Chemische Mineral System. Gröndahl, Helsingfors (1849), 110      | <i>Mineralogical Magazine</i> <b>42</b> (1978), 279                                     |
| Nepheline        | $\text{Na}_3\text{K}(\text{Al}_4\text{Si}_4\text{O}_{16})$  | Rd | 2018 s.p. | Italy                  | Traité de Minéralogie, Vol. 3. Louis, Paris (1801), 186                               | <i>Canadian Mineralogist</i> <b>48</b> (2010), 69                                       |
| Népouite         | $\text{Ni}_3\text{Si}_2\text{O}_5(\text{OH})_4$   | G  | 1907      | France (New Caledonia) | <i>Bulletin de la Société Française de Minéralogie</i> <b>30</b> (1907), 17           | <i>American Mineralogist</i> <b>60</b> (1975), 863                                      |
| Nepskoeite       | $\text{Mg}_4\text{Cl}(\text{OH})_7 \cdot 6\text{H}_2\text{O}$   | A  | 1996-016  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(1)</b> (1998), 41 |   |
| Neptunite        | $\text{KNa}_2\text{LiFe}^{2+}_2\text{Ti}_2\text{Si}_8\text{O}_{24}$   | G  | 1893      | Denmark (Greenland)    | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>15</b> (1893), 195         | <i>Acta Crystallographica</i> <b>21</b> (1966), 200                                     |
| Neskevaaraite-Fe | $\text{NaK}_3\text{Fe}(\text{Ti}, \text{Nb})_4(\text{Si}_4\text{O}_{12})_2(\text{O}, \text{OH})_4 \cdot 6\text{H}_2\text{O}$  | A  | 2002-007  | Russia                 | <i>New Data on Minerals</i> <b>38</b> (2003), 9                                       |   |
| Nesquehonite     | $\text{Mg}(\text{CO}_3) \cdot 3\text{H}_2\text{O}$  | G  | 1890      | USA                    | <i>American Journal of Science</i> <b>39</b> (1890), 121                              | <i>Mineralogy and Petrology</i> <b>70</b> (2000), 153                                   |
| Nestolaite       | $\text{CaSeO}_3 \cdot \text{H}_2\text{O}$   | A  | 2013-074  | USA                    | <i>Mineralogical Magazine</i> <b>78</b> (2014), 497                                   |   |
| Neustädtelite    | $\text{Bi}_2\text{Fe}^{3+}(\text{Fe}^{3+}, \text{Co})_2(\text{O}, \text{OH})_4(\text{AsO}_4)_2$   | A  | 1998-016  | Germany                | <i>American Mineralogist</i> <b>87</b> (2002), 726                                    |   |
| Nevadaite        | $(\text{Cu}^{2+}, \square, \text{Al}, \text{V}^{3+})_6\text{Al}_8(\text{PO}_4)_8\text{F}_8(\text{OH})_2 \cdot 22\text{H}_2\text{O}$                                       | A  | 2002-035  | USA                    | <i>Canadian Mineralogist</i> <b>42</b> (2004), 741                                    |   |
| Nevskite         | $\text{Bi}(\text{Se}, \text{S})$  | A  | 1983-026  | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 351     |   |
| Newberyite       | $\text{Mg}(\text{PO}_3\text{OH}) \cdot 3\text{H}_2\text{O}$   | G  | 1879      | Australia              | <i>Bulletin de la Société Minéralogique de France</i> <b>2</b> (1879), 79             | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>32</b> (1983), 187 |

|                       |   |    |           |                        |   |   |
|-----------------------|---|----|-----------|------------------------|---|---|
| Neyite                | $\text{Ag}_2\text{Cu}_6\text{Pb}_{25}\text{Bi}_{26}\text{S}_{68}$                               | A  | 1968-017  | Canada                 | <i>Canadian Mineralogist</i> <b>10</b> (1969), 90                                     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1365                     |
| Nežilovite            | $\text{PbZn}_2\text{Mn}^{4+}_2\text{Fe}^{3+}_8\text{O}_{19}$                                    | A  | 1994-020  | Macedonia              | <i>Canadian Mineralogist</i> <b>34</b> (1996), 1287                                   |   |
| Niahite               | $(\text{NH}_4)\text{Mn}^{2+}(\text{PO}_4)\cdot\text{H}_2\text{O}$                               | A  | 1977-022  | Malaysia               | <i>Mineralogical Magazine</i> <b>47</b> (1983), 79                                    | <i>Inorganic Chemistry</i> <b>34</b> (1995), 3917                       |
| Nickel                | Ni  | A  | 1966-039  | France (New Caledonia) | <i>Geologiya Rudnykh Mestorozhdenii</i> <b>2</b> (1968), 32                           | <i>Economic Geology</i> <b>76</b> (1981), 1686                          |
| Nickelaustinite       | $\text{CaNi}(\text{AsO}_4)(\text{OH})$  | A  | 1985-002  | Morocco                | <i>Canadian Mineralogist</i> <b>25</b> (1987), 401                                    |   |
| Nickelbischofite      | $\text{NiCl}_2\cdot 6\text{H}_2\text{O}$  | A  | 1978-056  | Canada                 | <i>Canadian Mineralogist</i> <b>17</b> (1979), 107                                    | <i>Journal of Chemical Physics</i> <b>50</b> (1969), 4690               |
| Nickelblödite         | $\text{Na}_2\text{Ni}(\text{SO}_4)_2\cdot 4\text{H}_2\text{O}$                                  | A  | 1976-014  | Australia              | <i>Mineralogical Magazine</i> <b>41</b> (1977), 37                                    |   |
| Nickelboussingaultite | $(\text{NH}_4)_2\text{Ni}(\text{SO}_4)_2\cdot 6\text{H}_2\text{O}$                              | A  | 1975-037  | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 710     |   |
| Nickelhexahydrate     | $\text{Ni}(\text{SO}_4)\cdot 6\text{H}_2\text{O}$   | A  | 1968 s.p. | Russia                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>93</b> (1965), 534      | <i>Acta Crystallographica</i> <b>C44</b> (1988), 1869                   |
| Nickeline             | NiAs  | A  | 1967 s.p. | unknown                | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 586                | <i>Journal of Physics C: Solid State Physics</i> <b>21</b> (1988), 4007 |
| Nickellotharmeyerite  | $\text{CaNi}_2(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$  | A  | 1999-008  | Germany                | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2001), 558                         |   |
| Nickelphosphide       | $\text{Ni}_3\text{P}$   | A  | 1998-023  | USA (meteorite)        | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(3)</b> (1999), 64 | <i>Mineralogical Magazine</i> <b>67</b> (2003), 783                     |
| Nickelpicromerite     | $\text{K}_2\text{Ni}(\text{SO}_4)_2\cdot 6\text{H}_2\text{O}$                                   | A  | 2012-053  | Russia                 | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 143                                |   |
| Nickelschneebergite   | $\text{BiNi}_2(\text{AsO}_4)_2(\text{OH})\cdot \text{H}_2\text{O}$                              | A  | 1999-028  | Germany                | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 115                           |   |
| Nickelskutterudite    | $(\text{Ni},\text{Co},\text{Fe})\text{As}_3$  | Rn | 2007 s.p. | Germany                | <i>Annalen der Physik und Chemie</i> <b>64</b> (1845), 184                            | <i>American Mineralogist</i> <b>102</b> (2017), 205                     |
| Nickeltalmessite      | $\text{Ca}_2\text{Ni}(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$                                 | A  | 2008-051  | Morocco                | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(4)</b> (2009), 32    |   |
| Nickeltsumcorite      | $\text{Pb}(\text{Ni},\text{Fe}^{3+})_2(\text{AsO}_4)_2(\text{H}_2\text{O},\text{OH})_2$         | A  | 2013-117  | Greece                 | <i>Mineralogical Magazine</i> <b>80</b> (2016), 337                                   |   |
| Nickelzippeite        | $\text{Ni}_2(\text{UO}_2)_6(\text{SO}_4)_3(\text{OH})_{10}\cdot 16\text{H}_2\text{O}$           | A  | 1971-005  | Czech Republic         | <i>Canadian Mineralogist</i> <b>14</b> (1976), 429                                    |   |
| Nickenichite          | $(\text{Na},\text{Ca},\text{Cu})_{1.6}(\text{Mg},\text{Fe}^{3+},\text{Al})_3(\text{AsO}_4)_3$   | A  | 1992-014  | Germany                | <i>Mineralogy and Petrology</i> <b>48</b> (1993), 153                                 |   |
| Nicksobolevite        | $\text{Cu}_7(\text{SeO}_3)_2\text{O}_2\text{Cl}_6$  | A  | 2012-097  | Russia                 | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 439                           |   |
| Niedermayrite         | $\text{Cu}_4\text{Cd}(\text{SO}_4)_2(\text{OH})_6\cdot 4\text{H}_2\text{O}$                     | A  | 1997-024  | Greece                 | <i>Mineralogy and Petrology</i> <b>63</b> (1998), 19                                  |   |
| Nielsbohrite          | $(\text{K},\text{U},\square)(\text{UO}_2)_3(\text{AsO}_4)(\text{OH})_4\cdot \text{H}_2\text{O}$ | A  | 2002-045b | Germany                | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 515                           |   |
| Nielsenite            | $\text{PdCu}_3$   | A  | 2004-046  | Denmark (Greenland)    | <i>Canadian Mineralogist</i> <b>46</b> (2008), 709                                    | <i>Journal of the Physical Society of Japan</i> <b>28</b> (1970), 1005  |
| Nierite               | $\text{Si}_3\text{N}_4$   | A  | 1994-032  | Azerbaijan (meteorite) | <i>Meteoritics</i> <b>30</b> (1995), 387  | <i>Materials Research Bulletin</i> <b>9</b> (1974), 917                 |
| Nifontovite           | $\text{Ca}_3[\text{BO}(\text{OH})_2]_6\cdot 2\text{H}_2\text{O}$                                | A  | 1967 s.p. | Russia                 | <i>Doklady Akademii Nauk SSSR</i> <b>139</b> (1961), 188                              | <i>Soviet Physics Doklady</i> <b>23</b> (1978), 159                     |
| Niggliite             | PtSn  | G  | 1936      | South Africa           | <i>Transactions of the Geological Society of South Africa</i> <b>39</b> (1936), 81    | <i>Mineralogical Magazine</i> <b>38</b> (1972), 794                     |
| Niigataite            | $\text{CaSrAl}_3[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                       | Rn | 2001-055  | Japan                  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>98</b> (2003), 118       |   |

|                     |   |    |           |                        |  |   |
|---------------------|---|----|-----------|------------------------|--|---|
| Nikischerite        | $\text{Fe}^{2+}_6\text{Al}_3(\text{OH})_{18}[\text{Na}(\text{H}_2\text{O})_6](\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$ | A  | 2001-039  | Bolivia                | <i>Mineralogical Record</i> <b>34</b> (2003), 155  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 79                                       |
| Niksergievite       | $\text{Ba}_2\text{Al}_3(\text{Si},\text{Al})_4\text{O}_{10}(\text{CO}_3)(\text{OH})_6 \cdot n\text{H}_2\text{O}$        | A  | 2002-036  | Kazakhstan             | <i>American Mineralogist</i> <b>90</b> (2005), 1163  |   |
| Nimite              | $(\text{Ni},\text{Mg},\text{Al})_6(\text{Si},\text{Al})_4\text{O}_{10}(\text{OH})_8$                                    | A  | 1971 s.p. | South Africa           | <i>American Mineralogist</i> <b>55</b> (1970), 18  |   |
| Ningyoite           | $(\text{U},\text{Ca},\text{Ce})_2(\text{PO}_4)_2 \cdot 1-2\text{H}_2\text{O}$   | A  | 1962 s.p. | Japan                  | <i>American Mineralogist</i> <b>44</b> (1959), 633   | <i>Canadian Mineralogist</i> <b>19</b> (1981), 325                                      |
| Niningerite         | MgS   | A  | 1966-036  | Azerbaijan (meteorite) | <i>Science</i> <b>155</b> (1967), 451  | <i>Geochimica et Cosmochimica Acta</i> <b>52</b> (1988), 877                            |
| Niobaeschynite-(Ce) | $(\text{Ce},\text{Ca})(\text{Nb},\text{Ti})_2(\text{O},\text{OH})_6$  | Rn | 1987 s.p. | Russia                 | <i>Trudy Institut Mineralogii, Geokhimii, Kristalloghimii Redkikh Elementov, Akademiia Nauk SSSR</i> <b>4</b> (1960), 51               | <i>American Mineralogist</i> <b>60</b> (1975), 309                                      |
| Niobaeschynite-(Y)  | $(\text{Y},\text{REE},\text{Ca},\text{Th},\text{Fe})(\text{Nb},\text{Ti},\text{Ta})_2(\text{O},\text{OH})_6$            | A  | 2003-038a | Canada                 | <i>Canadian Mineralogist</i> <b>46</b> (2008), 395   |   |
| Niobocarbide        | NbC   | A  | 1995-035  | Russia                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(1)</b> (1997), 76  |   |
| Nioboholtite        | $(\text{Nb}_{0.6}\square_{0.4})\text{Al}_6\text{BSi}_3\text{O}_{18}$  | A  | 2012-068  | Poland                 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2841   |   |
| Niobokupletskite    | $\text{K}_2\text{NaMn}_7(\text{Nb},\text{Zr},\text{Ti})_2\text{Si}_8\text{O}_{26}(\text{OH},\text{O},\text{F})_5$       | A  | 1999-032  | Canada                 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 627   |   |
| Niobophyllite       | $\text{K}_2\text{NaFe}^{2+}_7(\text{Nb},\text{Ti})_2\text{Si}_8\text{O}_{26}(\text{OH})_4(\text{F},\text{O})$           | A  | 1964-001  | Canada                 | <i>Canadian Mineralogist</i> <b>8</b> (1964), 40   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1  |
| Niocalite           | $\text{Ca}_7\text{Nb}(\text{Si}_2\text{O}_7)_2\text{O}_3\text{F}$   | G  | 1956      | Canada                 | <i>American Mineralogist</i> <b>41</b> (1956), 785   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 249 |
| Nisbite             | $\text{NiSb}_2$   | A  | 1969-017  | Canada                 | <i>Canadian Mineralogist</i> <b>10</b> (1970), 232   | <i>Acta Chemica Scandinavica</i> <b>A33</b> (1979), 469                                 |
| Nisnite             | $\text{Ni}_3\text{Sn}$  | A  | 2009-083  | Canada                 | <i>Canadian Mineralogist</i> <b>49</b> (2011), 651   |   |
| Nissonite           | $\text{Cu}_2\text{Mg}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 5\text{H}_2\text{O}$  | A  | 1966-026  | USA                    | Geological Society of America, Annual Meetings, Abstracts (1966), 145  | <i>American Mineralogist</i> <b>75</b> (1990), 1170                                     |
| Niter               | $\text{K}(\text{NO}_3)$   | G  | ?         | unknown                | original paper?  | <i>Acta Crystallographica</i> <b>C59</b> (2003), i139                                   |
| Nitratine           | $\text{Na}(\text{NO}_3)$  | A  | 1980 s.p. | Chile                  | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 488   | <i>Zeitschrift für Kristallographie</i> <b>148</b> (1978), 101                          |
| Nitrobarite         | $\text{Ba}(\text{NO}_3)_2$  | G  | 1882      | Chile                  | <i>American Naturalist</i> <b>16</b> (1882), 78  | <i>Acta Crystallographica</i> <b>C39</b> (1983), 952                                    |
| Nitrocalcite        | $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$  | G  | 1835      | USA                    | Treatise on Mineralogy Vol. 2, 1st ed. Howe and Herrick & Noyes, New Haven (1835), 84  | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1861                                   |
| Nitromagnesite      | $\text{Mg}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$  | G  | 1835      | USA                    | Treatise on Mineralogy Vol. 2, 1st ed. Howe and Herrick & Noyes, New Haven (1835), 85  | <i>Acta Crystallographica</i> <b>B35</b> (1979), 354                                    |
| Niveolanite         | $\text{NaBe}(\text{CO}_3)(\text{OH}) \cdot 2\text{H}_2\text{O}$   | A  | 2007-032  | Canada                 | <i>Canadian Mineralogist</i> <b>46</b> (2008), 1343  |   |
| Nizamoffite         | $\text{Mn}^{2+}\text{Zn}_2(\text{PO}_4)_2(\text{H}_2\text{O})_4$  | A  | 2012-076  | USA                    | <i>American Mineralogist</i> <b>98</b> (2013), 1893  |   |
| Nobleite            | $\text{CaB}_6\text{O}_9(\text{OH})_2 \cdot 3\text{H}_2\text{O}$   | A  | 1967 s.p. | USA                    | <i>American Mineralogist</i> <b>46</b> (1961), 560   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 825                             |
| Noelbensonite       | $\text{BaMn}^{3+}_2\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$   | Rd | 1994-058  | Australia              | <i>Mineralogical Magazine</i> <b>60</b> (1996), 369  | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 185                             |
| Nöggerathite-(Ce)   | $(\text{Ce},\text{Ca})_2\text{Zr}_2(\text{Nb},\text{Ti})(\text{Ti},\text{Nb})_2\text{Fe}^{2+}\text{O}_{14}$             | A  | 2017-107  | Germany                | <i>Minerals</i> <b>8</b> (2018), 449   |   |
| Nolanite            | $(\text{V}^{3+},\text{Fe}^{3+},\text{Fe}^{2+})_{10}\text{O}_{14}(\text{OH})_2$  | G  | 1957      | Canada                 | <i>American Mineralogist</i> <b>42</b> (1957), 619   | <i>American Mineralogist</i> <b>68</b> (1983), 833                                      |
| Nollmotzite         | $\text{Mg}[\text{U}^{5+}(\text{U}^{6+}\text{O}_2)_2\text{O}_4\text{F}_3] \cdot 4\text{H}_2\text{O}$                     | A  | 2017-100  | Germany                | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |   |
| Nolzeite            | $\text{Na}(\text{Mn},\square)_2[\text{Si}_3(\text{B},\text{Si})\text{O}_9](\text{OH})_2 \cdot 2\text{H}_2\text{O}$      | A  | 2014-086  | Canada                 | <i>Mineralogical Magazine</i> <b>81</b> (2017), 183  |   |

|                 |  |    |           |                |   |   |
|-----------------|--|----|-----------|----------------|---|---|
| Nontronite      | $\text{Na}_{0.3}\text{Fe}^{3+}_2(\text{Si,Al})_4\text{O}_{10}(\text{OH})_2 \cdot n\text{H}_2\text{O}$    | A  | 1962 s.p. | France         | <i>Annales de Chimie et de Physique</i> <b>36</b> (1827), 22  | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 753                             |
| Noonkanbahite   | $\text{NaKBaTi}_2(\text{Si}_4\text{O}_{12})\text{O}_2$   | A  | 2009-059  | Germany        | <i>Mineralogical Magazine</i> <b>74</b> (2010), 441   |   |
| Norbergite      | $\text{Mg}_3(\text{SiO}_4)\text{F}_2$  | G  | 1926      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>48</b> (1926), 84  | <i>Physics and Chemistry of Minerals</i> <b>35</b> (2008), 559                          |
| Nordenskiöldine | $\text{CaSn}(\text{BO}_3)_2$   | G  | 1887      | Norway         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>9</b> (1887), 255  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 111                           |
| Nordgauite      | $\text{MnAl}_2(\text{PO}_4)_2(\text{F,OH})_2 \cdot 5.5\text{H}_2\text{O}$                                | A  | 2010-040  | Germany        | <i>Mineralogical Magazine</i> <b>75</b> (2011), 269   |   |
| Nordite-(Ce)    | $\text{Na}_3\text{SrCeZnSi}_6\text{O}_{17}$  | Rn | 1966 s.p. | Russia         | <i>Geokhimiya</i> <b>4</b> (1958), 398  | <i>American Mineralogist</i> <b>55</b> (1970), 1167                                     |
| Nordite-(La)    | $\text{Na}_3\text{SrLaZnSi}_6\text{O}_{17}$  | Rn | 1987 s.p. | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>32</b> (1941), 496   | <i>American Mineralogist</i> <b>55</b> (1970), 1167                                     |
| Nordstrandite   | $\text{Al}(\text{OH})_3$   | A  | 1967 s.p. | Malaysia       | <i>Nature</i> <b>196</b> (1962), 264  | <i>Acta Crystallographica</i> <b>B26</b> (1970), 649                                    |
| Nordströmite    | $\text{Pb}_3\text{CuBi}_7(\text{S,Se})_{14}$   | A  | 1978-073  | Sweden         | <i>American Mineralogist</i> <b>65</b> (1980), 789  | <i>Canadian Mineralogist</i> <b>18</b> (1980), 343                                      |
| Norilskite      | $(\text{Pd,Ag})_7\text{Pb}_4$  | A  | 2015-008  | Russia         | <i>Mineralogical Magazine</i> <b>81</b> (2017), 531   |   |
| Normandite      | $\text{Na}_2\text{Ca}_2(\text{Mn,Fe})_2(\text{Ti,Nb,Zr})_2(\text{Si}_2\text{O}_7)_2\text{O}_2\text{F}_2$ | A  | 1990-021  | Canada         | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1035   | <i>Canadian Mineralogist</i> <b>38</b> (2000), 641                                      |
| Norrishite      | $\text{KLiMn}^{3+}_2\text{Si}_4\text{O}_{10}\text{O}_2$  | A  | 1989-019  | Australia      | <i>American Mineralogist</i> <b>74</b> (1989), 1360   | <i>American Mineralogist</i> <b>76</b> (1991), 266                                      |
| Norsethite      | $\text{BaMg}(\text{CO}_3)_2$   | A  | 1962 s.p. | USA            | <i>American Mineralogist</i> <b>46</b> (1961), 420  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1589                                    |
| Northupite      | $\text{Na}_3\text{Mg}(\text{CO}_3)_2\text{Cl}$   | G  | 1895      | USA            | <i>American Journal of Science</i> <b>50</b> (1895), 480  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 158 |
| Nosean          | $\text{Na}_8(\text{Si}_6\text{Al}_6)\text{O}_{24}(\text{SO}_4) \cdot \text{H}_2\text{O}$                 | G  | 1815      | Germany        | <i>Beiträge zur Chemischen Kenntniss der Mineralkörper</i> , Vol. 6. Nicolaischen, Berlin (1815), 371                                   | <i>Canadian Mineralogist</i> <b>27</b> (1989), 165                                      |
| Nováčekite-I    | $\text{Mg}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 12\text{H}_2\text{O}$                                    | Rn | 2007 s.p. | Germany        | <i>American Mineralogist</i> <b>36</b> (1951), 680  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1699                                     |
| Nováčekite-II   | $\text{Mg}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 10\text{H}_2\text{O}$                                    | Rn | 2007 s.p. | Germany        | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>9</b> (1964), 111  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1699                                     |
| Novákite        | $(\text{Cu,Ag})_{21}\text{As}_{10}$  | A  | 1967 s.p. | Czech Republic | <i>American Mineralogist</i> <b>46</b> (1961), 885  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>34</b> (1985), 167 |
| Novgorodovaite  | $\text{Ca}_2(\text{C}_2\text{O}_4)\text{Cl}_2 \cdot 2\text{H}_2\text{O}$                                 | A  | 2000-039  | Kazakhstan     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(4)</b> (2001), 32   | <i>Doklady Akademii Nauk</i> <b>381</b> (2001) 353                                      |
| Novodneprite    | $\text{AuPb}_3$  | A  | 2002-032a | Kazakhstan     | <i>Doklady Natsional'noy Akademii Nauk Respubliki Kazakhstan</i> <b>5</b> (2006), 46  |   |
| Novograbenovite | $(\text{NH}_4,\text{K})\text{MgCl}_3 \cdot 6\text{H}_2\text{O}$  | A  | 2017-060  | Russia         | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/mgm.2018.88">https://doi.org/10.1180/mgm.2018.88</a>   |
| Nowackiite      | $\text{Cu}_6\text{Zn}_3\text{As}_4\text{S}_{12}$   | A  | 1971 s.p. | Switzerland    | <i>Chimia</i> <b>19</b> (1965), 500   | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 352                          |
| Nsutite         | $\text{Mn}^{2+}_x\text{Mn}^{4+}_{1-x}\text{O}_{2-2x}(\text{OH})_{2x}$                                    | A  | 1967 s.p. | Ghana          | <i>American Mineralogist</i> <b>47</b> (1962), 246  | <i>Nature</i> <b>304</b> (1983), 143  |
| Nuffieldite     | $\text{Cu}_{1.4}\text{Pb}_{2.4}\text{Bi}_{2.4}\text{Sb}_{0.2}\text{S}_7$                                 | A  | 1967-003  | Canada         | <i>Canadian Mineralogist</i> <b>9</b> (1968), 439   | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1497                                     |
| Nukundamite     | $\text{Cu}_{3.4}\text{Fe}_{0.6}\text{S}_4$   | A  | 1978-037  | Fiji           | <i>Mineralogical Magazine</i> <b>43</b> (1979), 193   | <i>American Mineralogist</i> <b>66</b> (1981), 398                                      |
| Nullaginite     | $\text{Ni}_2(\text{CO}_3)(\text{OH})_2$  | A  | 1978-011  | Australia      | <i>Canadian Mineralogist</i> <b>19</b> (1981), 315  |   |
| Numanoite       | $\text{Ca}_4\text{CuB}_4\text{O}_6(\text{OH})_6(\text{CO}_3)_2$  | A  | 2005-050  | Japan          | <i>Canadian Mineralogist</i> <b>45</b> (2007), 307  |   |
| Nuragheite      | $\text{Th}(\text{MoO}_4)_2 \cdot \text{H}_2\text{O}$   | A  | 2013-088  | Italy          | <i>American Mineralogist</i> <b>100</b> (2015), 267   |   |



|                    |  |    |           |                     |  |   |
|--------------------|--|----|-----------|---------------------|--|---|
| Nuwaite            | $\text{Ni}_6\text{GeS}_2$  | A  | 2013-018  | Mexico (meteorite)  | CNMNC Newsletter 16 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 2695   | <a href="https://doi.org/10.2138/am-2018-6599">https://doi.org/10.2138/am-2018-6599</a> |
| Nybøite            | $\text{NaNa}_2(\text{Mg}_3\text{Al}_2)(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Norway              | <i>Mineralogical Magazine</i> <b>67</b> (2003), 769  |   |
| Nyerereite         | $\text{Na}_2\text{Ca}(\text{CO}_3)_2$  | A  | 1963-014  | Tanzania            | <i>Zeitschrift für Kristallographie</i> <b>145</b> (1977), 73  |   |
| Nyholmite          | $\text{Cd}_3\text{Zn}_2(\text{AsO}_3\text{OH})_2(\text{AsO}_4)_2 \cdot 4\text{H}_2\text{O}$  | A  | 2008-047  | Australia           | <i>Mineralogical Magazine</i> <b>73</b> (2009), 723  |   |
| Oberthürite        | $\text{Rh}_3\text{Ni}_{32}\text{S}_{32}$   | A  | 2017-072  | Canada              | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |   |
| Oboyerite          | $\text{H}_6\text{Pb}_6(\text{Te}^{4+}\text{O}_3)_3(\text{Te}^{6+}\text{O}_6)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1979-009  | USA                 | <i>Mineralogical Magazine</i> <b>43</b> (1979), 453  |   |
| Obradovcicite-KCu  | $[\text{K}_2(\text{H}_2\text{O})_{17}\text{Cu}(\text{H}_2\text{O})_6][\text{Mo}_8\text{As}_2\text{Fe}^{3+}_3\text{O}_{34}(\text{OH})_3]$                             | Rn | 1978-061  | Chile               | <i>Mineralogical Magazine</i> <b>50</b> (1986), 283  |   |
| Obradovcicite-NaCu | $[\text{Na}_2(\text{H}_2\text{O})_{17}\text{Cu}(\text{H}_2\text{O})_6][\text{Mo}_8\text{As}_2\text{Fe}^{3+}_3\text{O}_{34}(\text{OH})_3]$                            | A  | 2011-079  | Chile               | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175   |   |
| Obradovcicite-NaNa | $[\text{Na}_2(\text{H}_2\text{O})_{16}\text{Na}(\text{H}_2\text{O})_6][\text{Mo}_8\text{As}_2\text{Fe}^{3+}_3\text{O}_{33}(\text{OH})_4]$                            | A  | 2011-046  | Chile               | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1175   |   |
| O'danielite        | $\text{H}_2\text{NaZn}_3(\text{AsO}_4)_3$  | A  | 1979-040  | Namibia             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 155  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 395                           |
| Odigitriaitite     | $\text{CsNa}_5\text{Ca}_5[\text{Si}_{14}\text{B}_2\text{O}_{38}]\text{F}_2$  | A  | 2015-028  | Tajikistan          | <i>Mineralogical Magazine</i> <b>81</b> (2017), 113  |   |
| Odinite            | $(\text{Fe}^{3+}, \text{Mg}, \text{Al}, \text{Fe}^{2+})_{2.5}(\text{Si}, \text{Al})_2\text{O}_5(\text{OH})_4$  | A  | 1988-015  | Guinea              | <i>Clay Minerals</i> <b>23</b> (1988), 237   |   |
| Odintsovite        | $\text{K}_2\text{Na}_4\text{Ca}_3\text{Ti}_2\text{Be}_4\text{Si}_{12}\text{O}_{38}$  | A  | 1994-052  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(5)</b> (1995), 92  | <i>Doklady Chemistry</i> <b>340</b> (1995), 49  |
| Oenite             | $\text{CoSbAs}$  | A  | 1995-007  | Sweden              | <i>Canadian Mineralogist</i> <b>36</b> (1998), 855   |   |
| Offretite          | $\text{KCaMg}(\text{Si}_{13}\text{Al}_5)\text{O}_{36} \cdot 15\text{H}_2\text{O}$  | A  | 1997 s.p. | France              | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>111</b> (1890), 1002  | <i>American Mineralogist</i> <b>83</b> (1998), 590                                      |
| Oftedalite         | $\text{KSc}_2\text{Be}_3\text{Si}_{12}\text{O}_{30}$   | A  | 2003-045a | Norway              | <i>Canadian Mineralogist</i> <b>44</b> (2006), 943   |   |
| Ogdensburgite      | $\text{Ca}_2\text{Fe}^{3+}_4\text{Zn}(\text{AsO}_4)_4(\text{OH})_6 \cdot 6\text{H}_2\text{O}$  | A  | 1980-054  | USA                 | <i>Mineralogical Record</i> <b>12</b> (1981), 369  | <i>American Mineralogist</i> <b>72</b> (1987), 409                                      |
| Ohmilite           | $\text{Sr}_3(\text{Ti}, \text{Fe}^{3+})(\text{Si}_2\text{O}_6)_2(\text{O}, \text{OH}) \cdot 2\text{H}_2\text{O}$   | A  | 1974-031  | Japan               | <i>Mineralogical Journal</i> <b>7</b> (1973), 298  | <i>American Mineralogist</i> <b>68</b> (1983), 811                                      |
| Ojuelaite          | $\text{ZnFe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$  | A  | 1979-035  | Mexico              | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 582  | <i>Mineralogical Magazine</i> <b>60</b> (1996), 519                                     |
| Okanoganite-(Y)    | $(\text{Y}, \text{REE}, \text{Ca}, \text{Na}, \text{Th})_{16}(\text{Fe}^{3+}, \text{Ti})(\text{Si}, \text{B}, \text{P})_{10}(\text{O}, \text{OH})_{38}\text{F}_{10}$ | A  | 1979-048  | USA                 | <i>American Mineralogist</i> <b>65</b> (1980), 1138  | <i>American Mineralogist</i> <b>89</b> (2004), 1540                                     |
| Okayamalite        | $\text{Ca}_2\text{B}_2\text{SiO}_7$  | A  | 1997-002  | Japan               | <i>Mineralogical Magazine</i> <b>62</b> (1998), 703  | <i>American Mineralogist</i> <b>85</b> (2000), 1512                                     |
| Okenite            | $\text{Ca}_{10}\text{Si}_{18}\text{O}_{46} \cdot 18\text{H}_2\text{O}$   | G  | 1828      | Denmark (Greenland) | <i>Archiv für die Gesamte Naturlehre</i> <b>14</b> (1828), 333   | <i>American Mineralogist</i> <b>68</b> (1983), 614                                      |
| Okhotskite         | $\text{Ca}_2(\text{Mn}, \text{Mg})(\text{Mn}^{3+}, \text{Al}, \text{Fe}^{3+})_2(\text{Si}_2\text{O}_7)(\text{SiO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$          | A  | 1985-010a | Japan               | <i>Mineralogical Magazine</i> <b>71</b> (1987), 611  | <i>Mineralogy and Petrology</i> <b>77</b> (2003), 25                                    |
| Okruschite         | $\text{Ca}_2\text{Mn}^{2+}_5\text{Be}_4(\text{AsO}_4)_6(\text{OH})_4 \cdot 6\text{H}_2\text{O}$  | A  | 2013-097  | Germany             | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 589  |   |
| Oldhamite          | $\text{CaS}$   | G  | 1870      | India               | <i>Philosophical Transactions of the Royal Society</i> <b>160</b> (1870), 195  | <i>Zeitschrift für Physikalische Chemie</i> <b>128</b> (1927), 135                      |
| Olekminkite        | $\text{Sr}_2(\text{CO}_3)_2$   | A  | 1989-047  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>120(3)</b> (1991), 89  |   |
| Olenite            | $\text{NaAl}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3\text{O}_3(\text{OH})$   | A  | 1985-006  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>115</b> (1986), 119  | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 935                             |

|                |   |   |            |                                  |  |   |
|----------------|---|---|------------|----------------------------------|--|---|
| Olgite         | (Ba,Sr)(Na,Sr,REE) <sub>2</sub> Na(PO <sub>4</sub> ) <sub>2</sub>   | A | 1979-027   | Russia                           | Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva <b>110</b> (1980), 347                   | Canadian Mineralogist <b>43</b> (2005), 1521            |
| Olivenite      | Cu <sub>2</sub> (AsO <sub>4</sub> )(OH)   | G | 1820       | United Kingdom                   | A System of Mineralogy, Vol. 2. Archibald Constable, Edinburgh (1820), 331                   | Mineralogical Magazine <b>82</b> (2018), 347            |
| Olkhonskite    | Cr <sub>2</sub> Ti <sub>3</sub> O <sub>9</sub>  | A | 1993-035   | Russia                           | Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva <b>123(4)</b> (1994), 98               |   |
| Olmite         | CaMn[SiO <sub>3</sub> (OH)](OH)   | A | 2006-026   | South Africa                     | Mineralogical Magazine <b>71</b> (2007), 193   |   |
| Olmsteadite    | KFe <sup>2+</sup> <sub>2</sub> NbO <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O  | A | 1974-034   | USA                              | American Mineralogist <b>61</b> (1976), 5  |   |
| Olsacherite    | Pb <sub>2</sub> (Se <sup>6+</sup> O <sub>4</sub> )(SO <sub>4</sub> )  | A | 1969-009   | Bolivia                          | American Mineralogist <b>54</b> (1969), 1519   |   |
| Olshanskyite   | Ca <sub>2</sub> [B <sub>3</sub> O <sub>3</sub> (OH) <sub>6</sub> ]OH·3H <sub>2</sub> O  | A | 1968-025   | Russia                           | Doklady Akademii Nauk SSSR <b>184</b> (1969), 1398   | Canadian Mineralogist <b>39</b> (2001), 137             |
| Olympite       | LiNa <sub>5</sub> (PO <sub>4</sub> ) <sub>2</sub>   | A | 1979-065   | Russia                           | Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva <b>109</b> (1980), 476                   | Crystallography Reports <b>39</b> (1994), 35            |
| Omariniite     | Cu <sub>8</sub> Fe <sub>2</sub> ZnGe <sub>2</sub> S <sub>12</sub>   | A | 2016-050   | Argentina                        | Mineralogical Magazine <b>81</b> (2017), 1151  |   |
| Omeiite        | OsAs <sub>2</sub>   | A | 1985-xxx ? | China                            | Acta Geologica Sinica <b>52</b> (1978), 163  | Acta Chemica Scandinavica <b>A31</b> (1977), 253        |
| Ominelite      | Fe <sup>2+</sup> Al <sub>3</sub> O <sub>2</sub> (BO <sub>3</sub> )(SiO <sub>4</sub> )   | A | 1999-025   | Japan                            | American Mineralogist <b>87</b> (2002), 160  | American Mineralogist <b>92</b> (2007), 863             |
| Omongwaite     | Na <sub>2</sub> Ca <sub>5</sub> (SO <sub>4</sub> ) <sub>6</sub> ·3H <sub>2</sub> O  | A | 2003-054b  | Namibia                          | Mineralogical Magazine <b>72</b> (2008), 1307  |   |
| Omphacite      | (Ca,Na)(Mg,Fe,Al)Si <sub>2</sub> O <sub>6</sub>   | A | 1988 s.p.  | Germany                          | Handbuch Der Mineralogie, Vol. 2. Craz und Gerlach, Freiberg (1815), 302                     | American Mineralogist <b>97</b> (2012), 407             |
| Omsite         | Ni <sub>2</sub> Fe <sup>3+</sup> (OH) <sub>6</sub> [Sb(OH) <sub>6</sub> ]   | A | 2012-025   | France                           | Mineralogical Magazine <b>76</b> (2012), 1347  |   |
| Ondrušite      | CaCu <sub>4</sub> (AsO <sub>4</sub> ) <sub>2</sub> (AsO <sub>3</sub> OH) <sub>2</sub> ·10H <sub>2</sub> O   | A | 2008-010   | Czech Republic                   | Canadian Mineralogist <b>49</b> (2011), 885  |   |
| Oneillite      | Na <sub>15</sub> Ca <sub>3</sub> Mn <sub>3</sub> Fe <sub>3</sub> Zr <sub>3</sub> Nb(Si <sub>25</sub> O <sub>73</sub> )(O,OH,H <sub>2</sub> O) <sub>3</sub> (OH,Cl) <sub>2</sub>                     | A | 1998-064   | Canada                           | Canadian Mineralogist <b>37</b> (1999), 1295   | Canadian Mineralogist <b>37</b> (1999), 865             |
| Onoratoite     | Sb <sub>8</sub> O <sub>11</sub> Cl <sub>2</sub>   | A | 1967-032   | Italy                            | Mineralogical Magazine <b>36</b> (1968), 1037  | Solid State Sciences <b>8</b> (2006), 849               |
| Oosterboschite | (Pd,Cu) <sub>7</sub> Se <sub>5</sub>  | A | 1970-016   | Democratic Republic of the Congo | Bulletin de la Société Française de Minéralogie et de Cristallographie <b>93</b> (1970), 476 |   |
| Opal           | SiO <sub>2</sub> ·nH <sub>2</sub> O   | G | ?          | unknown                          | original paper?  | American Mineralogist <b>92</b> (2007), 1325            |
| Ophirite       | Ca <sub>2</sub> Mg <sub>4</sub> [Zn <sub>2</sub> Mn <sup>3+</sup> <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> (Fe <sup>3+</sup> W <sub>9</sub> O <sub>34</sub> ) <sub>2</sub> ]·46H <sub>2</sub> O | A | 2013-017   | USA                              | American Mineralogist <b>99</b> (2014), 1045   |   |
| Oppenheimerite | Na <sub>2</sub> (UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> ·3H <sub>2</sub> O  | A | 2014-073   | USA                              | Mineralogical Magazine <b>79</b> (2015), 1123  |   |
| Orcelite       | Ni <sub>5-x</sub> As <sub>2</sub> (x = 0.23)  | A | 1962 s.p.  | France (New Caledonia)           | Comptes Rendus de l'Académie des Sciences de Paris <b>249</b> (1959), 1771                   | Journal of the Less-Common Metals <b>22</b> (1970), 445 |
| Ordoñezite     | ZnSb <sup>5+</sup> <sub>2</sub> O <sub>6</sub>  | G | 1955       | Mexico                           | American Mineralogist <b>40</b> (1955), 64   | Canadian Mineralogist <b>40</b> (2002), 1207            |
| Örebroite      | Mn <sup>2+</sup> <sub>6</sub> (Sb <sup>5+</sup> Fe <sup>3+</sup> ) <sub>2</sub> (SiO <sub>4</sub> ) <sub>2</sub> O <sub>6</sub>   | A | 1985-039   | Sweden                           | American Mineralogist <b>71</b> (1986), 1522   |   |
| Oregonite      | FeNi <sub>2</sub> As <sub>2</sub>   | A | 1962 s.p.  | USA                              | Neues Jahrbuch für Mineralogie Monatshefte (1959), 239                                       |   |
| Organovaite-Mn | K <sub>2</sub> MnNb <sub>4</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>2</sub> O <sub>4</sub> ·5-7H <sub>2</sub> O  | A | 2000-031   | Russia                           | Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva <b>130(2)</b> (2001), 46               |   |
| Organovaite-Zn | K <sub>2</sub> Zn(Nb,Ti) <sub>4</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>2</sub> (O,OH) <sub>4</sub> ·6H <sub>2</sub> O  | A | 2001-006   | Russia                           | Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva <b>131(1)</b> (2002), 29               |   |

|                      |   |    |           |                     |   |  |
|----------------------|---|----|-----------|---------------------|---|--|
| Orickite             | $\text{CuFeS}_2 \cdot n\text{H}_2\text{O}$  | A  | 1978-059  | USA                 | <i>American Mineralogist</i> <b>68</b> (1983), 245  |  |
| Orientite            | $\text{Ca}_8\text{Mn}^{3+}_{10}(\text{SiO}_4)_3(\text{Si}_3\text{O}_{10})_3(\text{OH})_{10} \cdot 4\text{H}_2\text{O}$              | G  | 1921      | Cuba                | <i>American Journal of Science</i> <b>1</b> (1921), 491                                   | <i>American Mineralogist</i> <b>71</b> (1986), 176   |
| Orlandite            | $\text{Pb}_3\text{Cl}_4(\text{Se}^{4+}\text{O}_3) \cdot \text{H}_2\text{O}$   | A  | 1998-038  | Italy               | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1493                                       | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1147  |
| Orlovite             | $\text{KLi}_2\text{Ti}(\text{Si}_4\text{O}_{10})(\text{OF})$  | A  | 2009-006  | Tajikistan          | <i>New Data on Minerals</i> <b>46</b> (2011), 13  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 399  |
| Orlymanite           | $\text{Ca}_4\text{Mn}^{2+}_3\text{Si}_8\text{O}_{20}(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | A  | 1988-029  | South Africa        | <i>American Mineralogist</i> <b>75</b> (1990), 923  |  |
| Orpiment             | $\text{As}_2\text{S}_3$   | G  | ?         | unknown             | original paper?   | <i>Zeitschrift für Kristallographie</i> <b>136</b> (1972), 48                                      |
| Orschallite          | $\text{Ca}_3(\text{S}^{4+}\text{O}_3)_2(\text{SO}_4) \cdot 12\text{H}_2\text{O}$  | A  | 1990-041  | Germany             | <i>Mineralogy and Petrology</i> <b>48</b> (1993), 167                                     |  |
| Orthobrannerite      | $\text{U}^{4+}\text{U}^{6+}\text{Ti}_4\text{O}_{12}(\text{OH})_2$   | A  | 1982 s.p. | China               | <i>Acta Geologica Sinica</i> <b>52</b> (1978), 241  |  |
| Orthoclase           | $\text{K}(\text{AlSi}_3\text{O}_8)$   | A  | 1962 s.p. | unknown             | Vollständige Charakteristik des Mineral-Systems. Arnoldische, Dresden (1823), 271         | <i>American Mineralogist</i> <b>58</b> (1973), 500   |
| Orthojoaquinite-(Ce) | $\text{NaBa}_2\text{Fe}^{2+}\text{Ce}_2\text{Ti}_2(\text{SiO}_3)_8\text{O}_2(\text{O},\text{OH}) \cdot \text{H}_2\text{O}$          | A  | 1979-081b | USA                 | <i>American Mineralogist</i> <b>67</b> (1982), 809  |  |
| Orthojoaquinite-(La) | $\text{NaBa}_2\text{Fe}^{2+}\text{La}_2\text{Ti}_2(\text{SiO}_3)_8\text{O}_2(\text{OH},\text{O},\text{F}) \cdot \text{H}_2\text{O}$ | Rd | 2000 s.p. | Denmark (Greenland) | <i>Canadian Mineralogist</i> <b>39</b> (2001), 757  |  |
| Orthominasragrite    | $\text{V}^{4+}\text{O}(\text{SO}_4) \cdot 5\text{H}_2\text{O}$  | A  | 2000-018  | USA                 | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1325                                       |  |
| Orthopinakiolite     | $\text{Mg}_2\text{Mn}^{3+}\text{O}_2(\text{BO}_3)$  | A  | 1962 s.p. | Sweden              | <i>Arkiv för Mineralogi och Geologi</i> <b>2</b> (1960), 551                              | <i>Canadian Mineralogist</i> <b>16</b> (1978), 475   |
| Orthoserpierite      | $\text{CaCu}_4(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$   | A  | 1983-022a | France              | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>65</b> (1985), 1 |  |
| Orthowalpurkite      | $(\text{UO}_2)\text{Bi}_4\text{O}_4(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1994-024  | Germany             | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 1313                               |  |
| Osakaite             | $\text{Zn}_4(\text{SO}_4)(\text{OH})_6 \cdot 5\text{H}_2\text{O}$   | A  | 2006-049  | Japan               | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1511                                       | <i>Acta Crystallographica</i> <b>B42</b> (1986), 32  |
| Osarizawaite         | $\text{Pb}(\text{Al}_2\text{Cu}^{2+})(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | Japan               | <i>Mineralogical Journal</i> <b>3</b> (1961), 181   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 401                                      |
| Osarsite             | $\text{OsAsS}$  | A  | 1971-025  | USA                 | <i>American Mineralogist</i> <b>57</b> (1972), 1029                                       |  |
| Osbornite            | $\text{TiN}$  | G  | 1870      | India (meteorite)   | <i>Philosophical Transactions of the Royal Society of London</i> <b>160</b> (1870), 189   | <i>Acta Chemica Scandinavica</i> <b>32</b> (1978), 89  |
| Oscarkempffite       | $\text{Ag}_{10}\text{Pb}_4(\text{Sb}_{17}\text{Bi}_3)\text{S}_{48}$   | A  | 2011-029  | Bolivia             | <i>Mineralogical Magazine</i> <b>80</b> (2016), 809                                       |  |
| Oskarssonite         | $\text{AlF}_3$  | A  | 2012-088  | Iceland             | <i>Mineralogical Magazine</i> <b>78</b> (2014), 215                                       |  |
| Osmium               | Os  | Rd | 1991 s.p. | Indonesia           | <i>Philosophical Transactions of the Royal Society of London</i> <b>329</b> (1804), 411   | <i>Bulletin de la Societe Française de Minéralogie et de Cristallographie</i> <b>84</b> (1961) 312 |
| Osumilite            | $\text{KFe}_2(\text{Al}_5\text{Si}_{10})\text{O}_{30}$  | G  | 1956      | Japan               | <i>American Mineralogist</i> <b>41</b> (1956), 104  | <i>American Mineralogist</i> <b>73</b> (1988), 585   |
| Osumilite-(Mg)       | $\text{KMg}_2\text{Al}_3(\text{Al}_2\text{Si}_{10})\text{O}_{30}$   | A  | 2011-083  | Germany             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(4)</b> (2012), 27        | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 713  |
| Oswaldpeetersite     | $(\text{UO}_2)_2(\text{CO}_3)(\text{OH})_2 \cdot 4\text{H}_2\text{O}$   | A  | 2000-034  | USA                 | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1685                                       |  |
| Otavite              | $\text{Cd}(\text{CO}_3)$  | G  | 1906      | Namibia             | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1906), 388               | <i>American Mineralogist</i> <b>92</b> (2007), 829   |
| Otjissimeite         | $\text{PbGe}_4\text{O}_9$   | A  | 1978-080  | Namibia             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 49                              |  |
| Ottemannite          | $\text{Sn}_2\text{S}_3$   | A  | 1968 s.p. | Bolivia             | <i>Fortschritte der Mineralogie</i> <b>42</b> (1966), 211                                 | <i>Acta Crystallographica</i> <b>B38</b> (1982), 3022  |

|                           |   |    |           |                                  |  |   |
|---------------------------|---|----|-----------|----------------------------------|--|---|
| Ottensite                 | $\text{Na}_3(\text{Sb}_2\text{O}_3)_3(\text{SbS}_3) \cdot 3\text{H}_2\text{O}$  | A  | 2006-014  | China                            | <i>Mineralogical Record</i> <b>38</b> (2007), 77   | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 431                    |
| Ottohahnite               | $\text{Na}_6(\text{UO}_2)_2(\text{SO}_4)_5(\text{H}_2\text{O})_7 \cdot 1.5\text{H}_2\text{O}$                         | A  | 2015-098  | USA                              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 753  |   |
| Ottoite                   | $\text{Pb}_2\text{TeO}_5$   | A  | 2009-063  | USA                              | <i>American Mineralogist</i> <b>95</b> (2010), 1329  |   |
| Ottrélite                 | $\text{Mn}^{2+}\text{Al}_2\text{O}(\text{SiO}_4)(\text{OH})_2$  | G  | 1842      | Belgium                          | <i>Annales des Mines</i> <b>2</b> (1842), 357  | <i>Bulletin de Minéralogie</i> <b>101</b> (1978), 548                     |
| Otwayite                  | $\text{Ni}_2(\text{CO}_3)(\text{OH})_2 \cdot \text{H}_2\text{O}$  | A  | 1976-028  | Australia                        | <i>American Mineralogist</i> <b>62</b> (1977), 999   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>183</b> (2006), 107 |
| Oulankaite                | $\text{Pd}_5\text{Cu}_4\text{SnTe}_2\text{S}_2$   | A  | 1990-055  | Russia                           | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 311   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 439                        |
| Ourayite                  | $\text{Ag}_3\text{Pb}_4\text{Bi}_5\text{S}_{13}$  | A  | 1976-007  | USA                              | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>131</b> (1977), 56   | <i>Canadian Mineralogist</i> <b>22</b> (1984), 565                        |
| Oursinite                 | $\text{Co}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2 \cdot 6\text{H}_2\text{O}$   | A  | 1982-051  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>106</b> (1983), 305  | <i>American Mineralogist</i> <b>91</b> (2006), 333                        |
| Ovamboite                 | $\text{Cu}_{10}\text{Fe}_3\text{WGe}_3\text{S}_{16}$  | A  | 1992-039  | Namibia                          | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>393A</b> (2003), 1329 |   |
| Overite                   | $\text{CaMgAl}(\text{PO}_4)_2(\text{OH}) \cdot 4\text{H}_2\text{O}$   | G  | 1940      | USA                              | <i>American Mineralogist</i> <b>25</b> (1940), 315   | <i>American Mineralogist</i> <b>62</b> (1977), 692                        |
| Owensite                  | $(\text{Ba},\text{Pb})_6(\text{Cu}^{1+},\text{Fe},\text{Ni})_{25}\text{S}_{27}$                                       | A  | 1993-061  | Canada                           | <i>Canadian Mineralogist</i> <b>33</b> (1995), 665   | <i>Canadian Mineralogist</i> <b>33</b> (1995), 671                        |
| Owyheeite                 | $\text{Ag}_3\text{Pb}_{10}\text{Sb}_{11}\text{S}_{28}$  | G  | 1921      | USA                              | <i>American Mineralogist</i> <b>6</b> (1921), 82   | <i>Canadian Mineralogist</i> <b>53</b> (2015), 879                        |
| Oxammite                  | $(\text{NH}_4)_2(\text{C}_2\text{O}_4) \cdot \text{H}_2\text{O}$  | G  | 1870      | Peru                             | <i>Rural Carolinian</i> <b>1</b> (1870), 469   | <i>Acta Crystallographica</i> <b>B28</b> (1972), 3340                     |
| Oxo-magnesian-hastingsite | $\text{NaCa}_2(\text{Mg}_2\text{Fe}^{3+})_3(\text{Si}_6\text{Al}_2)\text{O}_{22}\text{O}_2$                           | Rd | 2012 s.p. | Tanzania                         | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2773   |   |
| Oxo-mangani-leakeite      | $\text{NaNa}_2(\text{Mn}^{3+}_4\text{Li})\text{Si}_8\text{O}_{22}\text{O}_2$  | A  | 2015-035  | Australia                        | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1013   |   |
| Oxycalcipyrochlore        | $\text{Ca}_2\text{Nb}_2\text{O}_6\text{O}$  | Rd | 2010 s.p. | Czech Republic                   | <i>Canadian Mineralogist</i> <b>17</b> (1979), 583   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673                        |
| Oxycalcioroméite          | $\text{Ca}_2\text{Sb}^{5+}_2\text{O}_7$   | A  | 2012-022  | Italy                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3027   |   |
| Oxy-chromium-dravite      | $\text{NaCr}_3(\text{Cr}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$                 | A  | 2011-097  | Russia                           | <i>American Mineralogist</i> <b>97</b> (2012), 2024  |   |
| Oxy-dravite               | $\text{Na}(\text{Al}_2\text{Mg})(\text{Al}_5\text{Mg})(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$ | A  | 2012-004a | Kenya                            | <i>American Mineralogist</i> <b>98</b> (2013), 1442  | <i>Mineralogical Magazine</i> <b>82</b> (2018), 913                       |
| Oxy-foitite               | $\square(\text{Fe}^{2+}\text{Al}_2)\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$         | A  | 2016-069  | Australia                        | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 889  |   |
| Oxykinoshitalite          | $\text{BaMg}_2\text{Ti}^{4+}\text{O}_2(\text{Si}_2\text{Al}_2)\text{O}_{10}$  | A  | 2004-013  | Brazil                           | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1501  |   |
| Oxynatromicrolite         | $(\text{Na},\text{Ca},\text{U})_2(\text{Ta},\text{Nb})_2\text{O}_6(\text{O},\text{F})$                                | A  | 2013-063  | China                            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 743  |   |
| Oxyphlogopite             | $\text{K}(\text{Mg},\text{Ti},\text{Fe})_3[(\text{Si},\text{Al})_4\text{O}_{10}](\text{O},\text{F})_2$                | A  | 2009-069  | Germany                          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(3)</b> (2010), 31                               |   |
| Oxyplumboroméite          | $\text{Pb}_2\text{Sb}_2\text{O}_7$  | A  | 2013-042  | Sweden                           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2931   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1287                      |
| Oxy-schorl                | $\text{Na}(\text{Fe}^{2+}_2\text{Al})\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$       | A  | 2011-011  | Czech Republic / Slovakia        | <i>American Mineralogist</i> <b>98</b> (2013), 485   |   |
| Oxystannomicrolite        | $\text{Sn}_2\text{Ta}_2\text{O}_6\text{O}$  | Rd | 2010 s.p. | Finland                          | <i>Bulletin de la Commission Géologique de Finlande</i> <b>229</b> (1967), 173                                   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673                        |
| Oxystibiomicrolite        | $(\text{Sb}^{3+},\text{Ca})_2\text{Ta}_2\text{O}_6\text{O}$   | Rd | 2010 s.p. | Sweden                           | <i>Geologiska Foreningens i Stockholm Forhandlingar</i> <b>109</b> (1987), 105                                   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 673                        |
| Oxy-vanadium-dravite      | $\text{NaV}_3(\text{V}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$                   | Rd | 2012 s.p. | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(2)</b> (2001), 59                            | <i>American Mineralogist</i> <b>98</b> (2013), 501                        |

|                        |   |   |           |                     |  |   |
|------------------------|---|---|-----------|---------------------|--|---|
| Oxyvanite              | $V^{3+}_2V^{4+}O_5$   | A | 2008-044  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(3)</b> (2009), 70   | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 885   |
| Oyelite                | $Ca_{10}B_2Si_8O_{29} \cdot 12H_2O$                                 | A | 1980-103  | Japan               | <i>Journal of the Japanese Association of Mineralogists, Petrologists, and Economic Geologists</i> <b>79</b> (1984), 267               |   |
| Oyonite                | $Ag_3Mn_2Pb_4Sb_7As_4S_{24}$  | A | 2018-002  | Peru                | <i>Minerals</i> <b>8</b> (2018), 192   |   |
| Ozerovaitite           | $Na_2KAl_3(AsO_4)_4$  | A | 2016-019  | Russia              | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  | <a href="https://doi.org/10.1127/ejm/2019/0031-2808">https://doi.org/10.1127/ejm/2019/0031-2808</a> |
| Pääkkönenite           | $Sb_2AsS_2$   | A | 1980-063  | Finland             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 480  | <i>American Mineralogist</i> <b>80</b> (1995), 1054   |
| Paarite                | $Cu_{1.7}Pb_{1.7}Bi_{6.3}S_{12}$                                    | A | 2001-016  | Austria             | <i>Canadian Mineralogist</i> <b>43</b> (2005), 909   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1377   |
| Pabstite               | $BaSnSi_3O_9$   | A | 1964-022  | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 1164  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 16  |
| Paceite                | $CaCu(CH_3COO)_4 \cdot 6H_2O$                                       | A | 2001-030  | Australia           | <i>Mineralogical Magazine</i> <b>66</b> (2002), 459  | <i>Spectrochimica Acta</i> <b>A67</b> (2007), 649   |
| Pachnolite             | $NaCaAlF_6 \cdot H_2O$  | G | 1863      | Denmark (Greenland) | <i>Annalen der Chemie und Pharmacie</i> <b>127</b> (1863), 61  |   |
| Packratite             | $Ca_{11}(As^{3+}V^{5+}_{10}V^{4+}_2As^{5+}_6O_{51})_2 \cdot 83H_2O$ | A | 2014-059  | USA                 | <i>Canadian Mineralogist</i> <b>54</b> (2016), 145   |   |
| Paddlewheelite         | $MgCa_5Cu_2(UO_2)_4(CO_3)_{12}(H_2O)_{33}$                          | A | 2017-098  | Czech Republic      | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183 |   |
| Padëraite              | $Cu_7[(Cu,Ag)_{0.33}Pb_{1.33}Bi_{11.33}]S_{22}$                     | A | 1983-091  | Romania             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 557  | <i>Canadian Mineralogist</i> <b>24</b> (1986), 513  |
| Padmaite               | PdBiSe  | A | 1990-048  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>120(3)</b> (1991), 85  |   |
| Paganoite              | $NiBi^{3+}O(AsO_4)$   | A | 1999-043  | Germany             | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 167  |   |
| Pahasapaite            | $Li_8(Ca, Li, K)_{10}Be_{24}(PO_4)_{24} \cdot 38H_2O$               | A | 1983-060b | USA                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 433  | <i>American Mineralogist</i> <b>74</b> (1989), 1195   |
| Painite                | $CaZrAl_9O_{15}(BO_3)$  | G | 1957      | Burma               | <i>Mineralogical Magazine</i> <b>31</b> (1957), 420  | <i>American Mineralogist</i> <b>89</b> (2004), 610  |
| Pakhomovskiyite        | $Co_3(PO_4)_2 \cdot 8H_2O$  | A | 2004-021  | Russia              | <i>Canadian Mineralogist</i> <b>44</b> (2006), 117   |   |
| Palarstanide           | $Pd_5(Sn, As)_2$  | A | 1976-058  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 487  |   |
| Palenzonaite           | $(NaCa_2)Mn^{2+}_2(VO_4)_3$   | A | 1986-011  | Italy               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 136  | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1081  |
| Palermoite             | $Li_2SrAl_4(PO_4)_4(OH)_4$  | G | 1953      | USA                 | <i>American Mineralogist</i> <b>38</b> (1953), 354   | <i>American Mineralogist</i> <b>60</b> (1975), 460  |
| Palladinite            | PdO   | Q | 1837      | Brazil              | <i>Journal für Praktische Chemie</i> <b>11</b> (1837), 311   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 887  |
| Palladium              | Pd  | G | 1804      | Brazil              | <i>Philosophical Transactions of the Royal Society of London</i> <b>94</b> (1804), 419   |   |
| Palladoarsenide        | $Pd_2As$  | A | 1973-005  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 104  | <i>Journal of the Less-Common Metals</i> <b>19</b> (1969), 300                                      |
| Palladobismutharsenide | $Pd_2(As, Bi)$  | A | 1975-017  | USA                 | <i>Canadian Mineralogist</i> <b>14</b> (1976), 410   |   |

|                        |   |   |           |                         |   |   |
|------------------------|---|---|-----------|-------------------------|---|---|
| Palladodymite          | Pd <sub>2</sub> As  | A | 1997-028  | Russia                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(2)</b> (1999), 39   |   |
| Palladogermanide       | Pd <sub>2</sub> Ge  | A | 2016-086  | Canada                  | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149  |   |
| Palladosilicide        | Pd <sub>2</sub> Si  | A | 2014-080  | Tanzania / South Africa | <i>Mineralogical Magazine</i> <b>79</b> (2015), 295   |   |
| Palladseite            | Pd <sub>17</sub> Se <sub>15</sub>   | A | 1975-026  | Brazil                  | <i>Mineralogical Magazine</i> <b>41</b> (1977), 123   | <i>Acta Crystallographica</i> <b>15</b> (1962), 713   |
| Palmierite             | K <sub>2</sub> Pb(SO <sub>4</sub> ) <sub>2</sub>  | G | 1907      | Italy                   | <i>Bulletin de la Société Mineralogique de France</i> <b>30</b> (1907), 219   | <i>Powder Diffraction</i> <b>16</b> (2001), 92  |
| Palygorskite           | (Mg,Al) <sub>2</sub> Si <sub>4</sub> O <sub>10</sub> (OH)·4H <sub>2</sub> O                         | G | 1862      | Russia                  | <i>Russisch-kaiserlichen Gesellschaft für die Gesamte Mineralogie</i> (1862), 102   | <i>American Mineralogist</i> <b>93</b> (2008), 667  |
| Pampaloite             | AuSbTe  | A | 2017-096  | Finland                 | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183  | <a href="https://doi.org/10.1180/mgm.2018.129">https://doi.org/10.1180/mgm.2018.129</a>             |
| Panasqueiraite         | CaMg(PO <sub>4</sub> )(OH)  | A | 1978-063  | Portugal                | <i>Canadian Mineralogist</i> <b>19</b> (1981), 389  |   |
| Pandoraite-Ba          | BaV <sup>4+</sup> <sub>5</sub> V <sup>5+</sup> <sub>2</sub> O <sub>16</sub> ·3H <sub>2</sub> O      | A | 2018-024  | USA                     | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Pandoraite-Ca          | CaV <sup>4+</sup> <sub>5</sub> V <sup>5+</sup> <sub>2</sub> O <sub>16</sub> ·3H <sub>2</sub> O      | A | 2018-036  | USA                     | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Panethite              | (Na,Ca,K) <sub>1-x</sub> (Mg,Fe <sup>2+</sup> ,Mn)PO <sub>4</sub>                                   | A | 1966-035  | USA                     | <i>Geochimica et Cosmochimica Acta</i> <b>31</b> (1967), 1711   |   |
| Panguite               | (Ti,Al,Sc,Mg,Zr,Ca) <sub>1.8</sub> O <sub>3</sub>   | A | 2010-057  | Mexico (meteorite)      | <i>American Mineralogist</i> <b>97</b> (2012), 1219   |   |
| Panichiite             | (NH <sub>4</sub> ) <sub>2</sub> SnCl <sub>6</sub>   | A | 2008-005  | Italy                   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 367  |   |
| Pansnerite             | K <sub>3</sub> Na <sub>3</sub> (Fe <sup>3+</sup> ,Al) <sub>6</sub> (AsO <sub>4</sub> ) <sub>8</sub> | A | 2016-103  | Russia                  | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339  |   |
| Panunzite              | K <sub>3</sub> Na(AlSiO <sub>4</sub> ) <sub>4</sub>   | A | 1978-050  | Italy                   | <i>American Mineralogist</i> <b>73</b> (1988), 420  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 322                                       |
| Paolovite              | Pd <sub>2</sub> Sn  | A | 1972-025  | Russia                  | <i>Geologiya Rudnykh Mestorozhdeniy</i> <b>16</b> (1974), 98  |   |
| Papagoite              | CaCuAlSi <sub>2</sub> O <sub>6</sub> (OH) <sub>3</sub>  | A | 1962 s.p. | USA                     | <i>American Mineralogist</i> <b>45</b> (1960), 599  | <i>Mineralogy and Petrology</i> <b>37</b> (1987), 89  |
| Paqueite               | Ca <sub>3</sub> TiSi <sub>2</sub> (Al,Ti,Si) <sub>3</sub> O <sub>14</sub>                           | A | 2013-053  | Mexico (meteorite)      | CNMNC Newsletter 17 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 2997  |   |
| Para-alumohydrocalcite | CaAl <sub>2</sub> (CO <sub>3</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·6H <sub>2</sub> O              | A | 1976-027  | Russia                  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 336   |   |
| Paraberkeliite         | NaCa <sub>2</sub> Mg <sub>2</sub> (AsO <sub>4</sub> ) <sub>3</sub>                                  | A | 2018-001  | Russia                  | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647  |   |
| Parabrandtite          | Ca <sub>2</sub> Mn <sup>2+</sup> (AsO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O                | A | 1986-009  | USA                     | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>157</b> (1987), 113   |   |
| Parabutlerite          | Fe <sup>3+</sup> (SO <sub>4</sub> )(OH)·2H <sub>2</sub> O   | G | 1938      | Chile                   | <i>American Mineralogist</i> <b>23</b> (1938), 669  | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 185 |



|                     |  |   |           |             |  |   |
|---------------------|--|---|-----------|-------------|--|---|
| Paracelsian         | Ba(Al <sub>2</sub> Si <sub>2</sub> O <sub>8</sub> )  | G | 1905      | Italy       | <i>Rendiconti del Regio Istituto Lombardo di Scienze e Lettere, Serie II</i> <b>38</b> (1905), 636                                     | <i>American Mineralogist</i> <b>70</b> (1985), 969  |
| Paracoquimbite      | Fe <sup>3+</sup> <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·9H <sub>2</sub> O   | G | 1933      | Chile       | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>197</b> (1933), 1132  | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 849                                 |
| Paracostibite       | CoSbS  | A | 1969-023  | Canada      | <i>Canadian Mineralogist</i> <b>10</b> (1970), 232   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 188  |
| Paradamite          | Zn <sub>2</sub> (AsO <sub>4</sub> )(OH)  | G | 1956      | Mexico      | <i>Science</i> <b>123</b> (1956), 1039   | <i>American Mineralogist</i> <b>65</b> (1980), 353  |
| Paradocrasite       | Sb <sub>2</sub> (Sb,As) <sub>2</sub>   | A | 1969-011  | Australia   | <i>American Mineralogist</i> <b>56</b> (1971), 1127  |   |
| Parádsasvárite      | Zn <sub>2</sub> (CO <sub>3</sub> )(OH) <sub>2</sub>  | A | 2012-077  | Hungary     | <i>Mineralogy and Petrology</i> <b>109</b> (2015), 405   | <i>Canadian Mineralogist</i> <b>55</b> (2017), 1027   |
| Paraershovite       | Na <sub>3</sub> K <sub>3</sub> Fe <sup>3+</sup> <sub>2</sub> (Si <sub>4</sub> O <sub>10</sub> OH) <sub>2</sub> (OH) <sub>2</sub> (H <sub>2</sub> O) <sub>4</sub> | A | 2009-025  | Russia      | <i>Canadian Mineralogist</i> <b>48</b> (2010), 279   |   |
| Parafiniukite       | Ca <sub>2</sub> Mn <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub> Cl   | A | 2018-047  | Poland      | <i>Minerals</i> <b>8</b> (2018), 485   |   |
| Parafransoletite    | Ca <sub>3</sub> Be <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (PO <sub>3</sub> OH) <sub>2</sub> ·4H <sub>2</sub> O   | A | 1989-049  | USA         | <i>American Mineralogist</i> <b>77</b> (1992), 843   | <i>American Mineralogist</i> <b>77</b> (1992), 848  |
| Parageorgbokiite    | Cu <sub>5</sub> O <sub>2</sub> (SeO <sub>3</sub> ) <sub>2</sub> Cl <sub>2</sub>  | A | 2006-001  | Russia      | <i>Proceedings of the Russian Mineralogical Society</i> <b>135(4)</b> (2006), 24   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 929  |
| Paragonite          | NaAl <sub>2</sub> (Si <sub>3</sub> Al)O <sub>10</sub> (OH) <sub>2</sub>  | A | 1998 s.p. | Switzerland | <i>Annalen der Chemie und Pharmacie</i> <b>46</b> (1843), 325  | <i>Physics and Chemistry of Minerals</i> <b>27</b> (2000), 377                              |
| Paraguanajuatite    | Bi <sub>2</sub> Se <sub>3</sub>  | G | 1948      | Mexico      | <i>Bolletín de Mineralogia de Mexico</i> <b>20</b> (1948), 1   | <i>Journal of Physics and Chemistry of Solids</i> <b>24</b> (1963), 479                     |
| Parahopeite         | Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O   | G | 1908      | Zambia      | <i>Mineralogical Magazine</i> <b>15</b> (1908), 1  | <i>Zeitschrift für Kristallographie</i> <b>130</b> (1969), 261                              |
| Parakeldyshite      | Na <sub>2</sub> ZrSi <sub>2</sub> O <sub>7</sub>   | A | 1975-035  | Russia      | <i>Doklady Akademii Nauk SSSR</i> <b>237</b> (1977), 703   | <i>Crystallography Reports</i> <b>52</b> (2007), 1066                                       |
| Parakuzmenkoite-Fe  | (K,Ba) <sub>8</sub> Fe <sub>4</sub> Ti <sub>16</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>8</sub> (OH,O) <sub>16</sub> ·20-28H <sub>2</sub> O                 | A | 2001-007  | Russia      | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(6)</b> (2001), 63  |   |
| Paralabuntsovite-Mg | Na <sub>8</sub> K <sub>8</sub> Mg <sub>4</sub> Ti <sub>16</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>8</sub> (OH,O) <sub>16</sub> ·20-24H <sub>2</sub> O      | A | 2000 s.p. | USA         | <i>Bulletin of the Geological Society of America</i> <b>64</b> (1958), 1614  |   |
| Paralaurionite      | PbCl(OH)   | G | 1899      | Greece      | <i>Mineralogical Magazine</i> <b>12</b> (1899), 102  | <i>Mineralogical Magazine</i> <b>57</b> (1993), 323   |
| Paralstonite        | BaCa(CO <sub>3</sub> ) <sub>2</sub>  | A | 1979-015  | USA         | <i>Geological Survey of Canada Paper</i> <b>79-1C</b> (1979), 99   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 353                               |
| Paramelaconite      | Cu <sup>1+</sup> <sub>2</sub> Cu <sup>2+</sup> <sub>2</sub> O <sub>3</sub>   | G | 1891      | USA         | <i>Proceedings of the Academy of Natural Sciences of Philadelphia</i> (1891), 284  | <i>American Mineralogist</i> <b>63</b> (1978), 180  |
| Paramendozavilite   | NaAl <sub>4</sub> Fe <sub>7</sub> (PO <sub>4</sub> ) <sub>5</sub> (PMo <sub>12</sub> O <sub>40</sub> )(OH) <sub>16</sub> ·56H <sub>2</sub> O                     | A | 1982-010  | Mexico      | <i>Boletín de Mineralogía</i> <b>2(1)</b> (1986), 13   |   |
| Paramontroseite     | VO <sub>2</sub>  | G | 1955      | USA         | <i>American Mineralogist</i> <b>40</b> (1955), 861   |   |
| Paranatisite        | Na <sub>2</sub> TiO(SiO <sub>4</sub> )   | A | 1990-016  | Russia      | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(6)</b> (1992), 133   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 947  |
| Paranatrolite       | Na <sub>2</sub> (Si <sub>3</sub> Al <sub>2</sub> )O <sub>10</sub> ·3H <sub>2</sub> O   | A | 1978-017  | Canada      | <i>Canadian Mineralogist</i> <b>18</b> (1980), 85  | <i>American Mineralogist</i> <b>90</b> (2005), 252  |
| Paraniite-(Y)       | (Ca,Y,Dy) <sub>2</sub> Y(WO <sub>4</sub> ) <sub>2</sub> (AsO <sub>4</sub> )  | A | 1992-018  | Italy       | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>74</b> (1994), 155  | <i>Acta Crystallographica</i> <b>C48</b> (1992), 1357                                       |
| Paraotwayite        | Ni(OH) <sub>2-x</sub> (SO <sub>4</sub> ,CO <sub>3</sub> ) <sub>0.5x</sub>  | A | 1984-045a | Australia   | <i>Canadian Mineralogist</i> <b>25</b> (1987), 409   |   |
| Parapierrotite      | TiSb <sub>5</sub> S <sub>8</sub>   | A | 1974-059  | Macedonia   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 200  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>147(1)</b> (2018), 68          |
| Pararaisaite        | CuMg[Te <sup>6+</sup> O <sub>4</sub> (OH) <sub>2</sub> ]·6H <sub>2</sub> O   | A | 2017-110  | USA         | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 | <a href="https://doi.org/10.3749/canmin.1800044">https://doi.org/10.3749/canmin.1800044</a> |



|                    |   |    |           |                                  |   |   |
|--------------------|---|----|-----------|----------------------------------|---|---|
| Pararammelsbergite | NiAs <sub>2</sub>   | G  | 1940      | Canada                           | <i>American Mineralogist</i> <b>25</b> (1940), 561  | <i>American Mineralogist</i> <b>57</b> (1972), 1                                |
| Pararealgar        | As <sub>4</sub> S <sub>4</sub>  | A  | 1980-034  | Canada                           | <i>Canadian Mineralogist</i> <b>18</b> (1980), 525  | <i>American Mineralogist</i> <b>80</b> (1995), 400                              |
| Pararobertsite     | Ca <sub>2</sub> Mn <sup>3+</sup> <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub> O <sub>2</sub> ·3H <sub>2</sub> O   | A  | 1987-039  | USA                              | <i>Canadian Mineralogist</i> <b>27</b> (1989), 451  | <i>American Mineralogist</i> <b>85</b> (2000), 1302                             |
| Pararsenolamprite  | As  | A  | 1999-047  | Japan                            | <i>Mineralogical Magazine</i> <b>65</b> (2001), 807   |   |
| Parascandolaite    | KMgF <sub>3</sub>   | A  | 2013-092  | Italy                            | <i>Physics and Chemistry of Minerals</i> <b>41</b> (2014), 403  |   |
| Paraschachnerite   | Ag <sub>3</sub> Hg <sub>2</sub>   | A  | 1971-056  | Germany                          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>117</b> (1972), 1   | <i>Mineralogical Magazine</i> <b>51</b> (1987), 318                             |
| Paraschoepite      | UO <sub>3</sub> ·(2-x)H <sub>2</sub> O  | Q  | 1947      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>32</b> (1947), 344  |   |
| Parascholzite      | CaZn <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O  | A  | 1980-056  | Germany                          | <i>American Mineralogist</i> <b>66</b> (1981), 843  | <i>Zeitschrift für Kristallographie</i> <b>198</b> (1992), 239                  |
| Parascorodite      | Fe <sup>3+</sup> (AsO <sub>4</sub> )·2H <sub>2</sub> O  | A  | 1996-061  | Czech Republic                   | <i>American Mineralogist</i> <b>84</b> (1999), 1439   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 1003                    |
| Parasibirskite     | Ca <sub>2</sub> B <sub>2</sub> O <sub>5</sub> ·H <sub>2</sub> O   | A  | 1996-051  | Japan                            | <i>Mineralogical Magazine</i> <b>62</b> (1998), 521   | <i>Journal of Mineralogical and Petrological Sciences</i> <b>105</b> (2010), 70 |
| Parasterryite      | Ag <sub>4</sub> Pb <sub>20</sub> (Sb,As) <sub>24</sub> S <sub>58</sub>  | A  | 2010-033  | Italy                            | <i>Canadian Mineralogist</i> <b>49</b> (2011), 623  | <i>Acta Crystallographica</i> <b>B68</b> (2012), 480                            |
| Parasymplesite     | Fe <sup>2+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> ·8H <sub>2</sub> O   | G  | 1954      | Japan                            | <i>Proceedings of the Japan Academy</i> <b>30</b> (1954), 318   | <i>Bulletin de Minéralogie</i> <b>100</b> (1977), 310                           |
| Paratacamite       | Cu <sup>2+</sup> <sub>3</sub> (Cu,Zn)(OH) <sub>6</sub> Cl <sub>2</sub>  | G  | 1906      | Chile                            | <i>Mineralogical Magazine</i> <b>14</b> (1906), 170   | <i>Acta Crystallographica</i> <b>B31</b> (1975), 183                            |
| Paratacamite-(Mg)  | Cu <sub>3</sub> (Mg,Cu)Cl <sub>2</sub> (OH) <sub>6</sub>  | A  | 2013-014  | Chile                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3113  |   |
| Paratacamite-(Ni)  | Cu <sub>3</sub> (Ni,Cu)Cl <sub>2</sub> (OH) <sub>6</sub>  | A  | 2013-013  | Chile                            | <i>Australian Journal of Mineralogy</i> <b>17</b> (2013), 39  |   |
| Paratellurite      | TeO <sub>2</sub>  | A  | 1962 s.p. | Mexico                           | <i>American Mineralogist</i> <b>45</b> (1960), 1272   | <i>Kristallografiya</i> <b>32</b> (1987), 609                                   |
| Paratimroseite     | Pb <sub>2</sub> Cu <sub>4</sub> (TeO <sub>6</sub> ) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub>  | A  | 2009-065  | USA                              | <i>American Mineralogist</i> <b>95</b> (2010), 1560   |   |
| Paratooite-(La)    | (La,Ca,Na,Sr) <sub>6</sub> Cu(CO <sub>3</sub> ) <sub>8</sub>  | A  | 2005-020  | Australia                        | <i>Mineralogical Magazine</i> <b>70</b> (2006), 131   |   |
| Paratsepinite-Ba   | (Ba,Na,K) <sub>2-x</sub> (Ti,Nb) <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> )(OH,O) <sub>2</sub> ·4H <sub>2</sub> O  | A  | 2002-006  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(1)</b> (2003), 38                           |   |
| Paratsepinite-Na   | (Na,Sr,K,Ca) <sub>2</sub> (Ti,Nb) <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> )(O,OH) <sub>2</sub> ·4H <sub>2</sub> O   | A  | 2003-008  | Russia                           | <i>Crystallography Reports</i> <b>49</b> (2004), 946  |   |
| Paraumbite         | K <sub>3</sub> Zr <sub>2</sub> H(Si <sub>3</sub> O <sub>9</sub> ) <sub>2</sub> ·3H <sub>2</sub> O   | A  | 1982-007  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 461                               |   |
| Paravauxite        | Fe <sup>2+</sup> Al <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O   | G  | 1922      | Bolivia                          | <i>Science</i> <b>56</b> (1922), 50   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 841                             |
| Paravinogradovite  | (Na,□) <sub>2</sub> (Ti <sup>4+</sup> ,Fe <sup>3+</sup> ) <sub>4</sub> (Si <sub>2</sub> O <sub>6</sub> ) <sub>2</sub> (Si <sub>3</sub> AlO <sub>10</sub> )(OH) <sub>4</sub> ·H <sub>2</sub> O | A  | 2002-033  | Russia                           | <i>Canadian Mineralogist</i> <b>41</b> (2003), 989  |   |
| Parawulfite        | K <sub>5</sub> Na <sub>3</sub> Cu <sub>8</sub> O <sub>4</sub> (SO <sub>4</sub> ) <sub>8</sub>   | A  | 2013-036  | Russia                           | <i>Canadian Mineralogist</i> <b>52</b> (2014), 699  |   |
| Pargasite          | NaCa <sub>2</sub> (Mg <sub>4</sub> Al)(Si <sub>6</sub> Al <sub>2</sub> )O <sub>22</sub> (OH) <sub>2</sub>   | Rd | 2012 s.p. | Finland                          | <i>Taschenbuch für die gesammte Mineralogie mit Hinsicht auf die neuesten Entdeckungen</i> <b>9</b> (1815), 301 | <i>Canadian Mineralogist</i> <b>53</b> (2015), 497                              |
| Parisite-(Ce)      | CaCe <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub> F <sub>2</sub>  | A  | 1987 s.p. | Colombia                         | <i>Annalen der Chemie und Pharmacie</i> <b>53</b> (1845), 147   | <i>American Mineralogist</i> <b>85</b> (2000), 251                              |
| Parisite-(La)      | CaLa <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub> F <sub>2</sub>  | A  | 2016-031  | Brazil                           | <i>Mineralogical Magazine</i> <b>82</b> (2018), 133   |   |
| Parkerite          | Ni <sub>3</sub> (Bi,Pb) <sub>2</sub> S <sub>2</sub>   | G  | 1937      | South Africa                     | <i>Transactions of the Geological Society of South Africa</i> <b>39</b> (1937), 81                              | <i>American Mineralogist</i> <b>58</b> (1973), 435                              |
| Parkinsonite       | Pb <sub>7</sub> MoO <sub>9</sub> Cl <sub>2</sub>  | A  | 1991-030  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>58</b> (1994), 59  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 269                             |
| Parnauite          | Cu <sub>9</sub> (AsO <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> )(OH) <sub>10</sub> ·7H <sub>2</sub> O  | A  | 1978-014  | USA                              | <i>American Mineralogist</i> <b>63</b> (1978), 704  | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 693                     |

|               |   |    |           |                                  |   |  |
|---------------|---|----|-----------|----------------------------------|---|--|
| Parsettensite | $(K,Na,Ca)_{7.5}(Mn,Mg)_{49}Si_{72}O_{168}(OH)_{50} \cdot nH_2O$                | G  | 1923      | Switzerland                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>3</b> (1923), 227        | <i>American Mineralogist</i> <b>79</b> (1994), 426             |
| Parsonsite    | $Pb_2(UO_2)(PO_4)_2$  | G  | 1923      | Democratic Republic of the Congo | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>176</b> (1923), 171 | <i>American Mineralogist</i> <b>85</b> (2000), 801             |
| Parthéite     | $Ca_2(Si_4Al_4)O_{15}(OH)_2 \cdot 4H_2O$  | A  | 1978-026  | Turkey                           | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>59</b> (1979), 5         | <i>American Mineralogist</i> <b>97</b> (2012), 1866            |
| Parwanite     | $NaMg_4Al_8(PO_4)_8(CO_3)(OH)_7 \cdot 30H_2O$                                   | A  | 1986-036a | Australia                        | <i>Australian Journal of Mineralogy</i> <b>13</b> (2007), 23                                      | <i>Inorganic Chemistry</i> <b>18</b> (1979), 2331              |
| Parwelite     | $Mn^{2+}_{10}Sb^{5+}_2As^{5+}_2Si_2O_{24}$                                      | A  | 1966-023  | Sweden                           | <i>Arkiv för Mineralogi och Geologi</i> <b>4</b> (1968), 467                                      |  |
| Pašavaite     | $Pd_3Pb_2Te_2$  | A  | 2007-059  | Russia                           | <i>Canadian Mineralogist</i> <b>47</b> (2009), 53   |  |
| Pascoite      | $Ca_3V^{5+}_{10}O_{28} \cdot 17H_2O$  | G  | 1914      | Peru                             | <i>Proceedings of the American Philosophical Society</i> <b>53</b> (1914), 31                     | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1379            |
| Paseroite     | $Pb(Mn^{2+}, \square)(Fe^{3+}, \square)_2(V^{5+}, Ti^{4+}, \square)_{18}O_{38}$ | A  | 2011-069  | Italy                            | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 1061                                      |  |
| Patrónite     | $VS_4$  | Rn | 2007 s.p. | Peru                             | <i>Engineering and Mining Journal</i> <b>82</b> (1906), 385                                       | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1972), 339  |
| Pattersonite  | $PbFe_3(PO_4)_2(OH)_5 \cdot H_2O$   | A  | 2005-049  | Germany                          | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 281                                       |  |
| Paufferite    | $VO(SO_4)$  | A  | 2005-004  | Russia                           | <i>Canadian Mineralogist</i> <b>45</b> (2007), 921  |  |
| Pauladamsite  | $Cu_4(SeO_3)(SO_4)(OH)_4 \cdot 2H_2O$   | A  | 2015-005  | USA                              | <i>Mineralogical Magazine</i> <b>80</b> (2016), 949   |  |
| Paulingite-Ca | $(Ca,K,Na,Ba, \square)_{10}(Si,Al)_{42}O_{84} \cdot 34H_2O$                     | Rn | 1997 s.p. | USA                              | <i>American Mineralogist</i> <b>67</b> (1982), 799  | <i>Mineralogical Magazine</i> <b>61</b> (1997), 591            |
| Paulingite-K  | $(K,Ca,Na,Ba, \square)_{10}(Si,Al)_{42}O_{84} \cdot 34H_2O$                     | Rn | 1997 s.p. | USA                              | <i>American Mineralogist</i> <b>45</b> (1960), 79   | <i>Science</i> <b>154</b> (1966), 1004                         |
| Paulkellerite | $Bi^{3+}_2Fe^{3+}O_2(PO_4)(OH)_2$   | A  | 1987-031  | Germany                          | <i>American Mineralogist</i> <b>73</b> (1988), 870  | <i>American Mineralogist</i> <b>73</b> (1988), 873             |
| Paulkerrite   | $KMg_2TiFe^{3+}_2(PO_4)_4(OH)_3 \cdot 15H_2O$                                   | A  | 1983-014  | USA                              | <i>Mineralogical Record</i> <b>15</b> (1984), 303   |  |
| Paulmooreite  | $Pb_2As^{3+}_2O_5$  | A  | 1978-004  | Sweden                           | <i>American Mineralogist</i> <b>64</b> (1979), 352  | <i>American Mineralogist</i> <b>65</b> (1980), 340             |
| Pauloabibite  | $NaNbO_3$   | A  | 2012-090  | Brazil                           | <i>American Mineralogist</i> <b>100</b> (2015), 442   |  |
| Paulscherrite | $(UO_2)(OH)_2$  | A  | 2008-022  | Australia                        | <i>American Mineralogist</i> <b>96</b> (2011), 229  |  |
| Pautovite     | $CsFe_2S_3$   | A  | 2004-005  | Russia                           | <i>Canadian Mineralogist</i> <b>43</b> (2005), 965  |  |
| Pavlovskiyite | $Ca_8(SiO_4)_2(Si_3O_{10})$   | A  | 2010-063  | Russia                           | <i>American Mineralogist</i> <b>97</b> (2012), 503  |  |
| Pavonite      | $AgBi_3S_5$   | G  | 1954      | Bolivia                          | <i>American Mineralogist</i> <b>39</b> (1954), 409  | <i>Canadian Mineralogist</i> <b>15</b> (1977), 339             |
| Paxite        | $CuAs_2$  | A  | 1967 s.p. | Czech Republic                   | <i>Acta Universitatis Carolinae Geologica</i> (1962), 77  |  |
| Pearceite     | $[Ag_9CuS_4][(Ag,Cu)_6(As,Sb)_2S_7]$  | Rd | 2006 s.p. | USA                              | <i>American Journal of Science</i> <b>152</b> (1896), 17  | <i>Acta Crystallographica</i> <b>B62</b> (2006), 212           |
| Peatite-(Y)   | $Li_4Na_{12}(Y,Na,Ca,REE)_{12}(PO_4)_{12}(CO_3)_4(F,OH)_8$                      | A  | 2009-020  | Canada                           | <i>Canadian Mineralogist</i> <b>51</b> (2013), 569  |  |
| Pecoraite     | $Ni_3Si_2O_5(OH)_4$   | A  | 1969-005  | Australia                        | <i>Science</i> <b>165</b> (1969), 59  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 513  |
| Pectolite     | $NaCa_2Si_3O_8(OH)$   | G  | 1828      | Italy                            | <i>Archiv für die Gesamte Naturlehre</i> <b>13</b> (1828), 385                                    | <i>Zeitschrift für Kristallographie</i> <b>222</b> (2007), 696 |
| Peisleyite    | $Na_3Al_{16}(PO_4)_{10}(SO_4)_2(OH)_{17} \cdot 20H_2O$                          | A  | 1981-053  | Australia                        | <i>Mineralogical Magazine</i> <b>46</b> (1982), 449   |  |
| Pekoite       | $CuPbBi_{11}S_{18}$   | A  | 1975-014  | Australia                        | <i>Canadian Mineralogist</i> <b>14</b> (1976), 322  |  |
| Pekovite      | $SrB_2Si_2O_8$  | A  | 2003-035  | Tajikistan                       | <i>Canadian Mineralogist</i> <b>42</b> (2004), 107  |  |

|                   |  |    |           |                |   |  |
|-------------------|--|----|-----------|----------------|---|--|
| Péligotite        | $\text{Na}_6(\text{UO}_2)(\text{SO}_4)_4(\text{H}_2\text{O})_4$  | A  | 2015-088  | USA            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 753   |  |
| Pellouxite        | $(\text{Cu},\text{Ag})_2\text{Pb}_{21}\text{Sb}_{23}\text{S}_{55}\text{ClO}$                                 | A  | 2001-033  | Italy          | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 839   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 845  |
| Pellyite          | $\text{Ba}_2\text{CaFe}^{2+}_2\text{Si}_6\text{O}_{17}$  | A  | 1970-035  | Canada         | <i>Canadian Mineralogist</i> <b>11</b> (1972), 444  | <i>American Mineralogist</i> <b>61</b> (1976), 67            |
| Penberthycroftite | $[\text{Al}_6(\text{AsO}_4)_3(\text{OH})_9(\text{H}_2\text{O})_5] \cdot 8\text{H}_2\text{O}$                 | A  | 2015-025  | United Kingdom | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1149  |  |
| Penfieldite       | $\text{Pb}_2\text{Cl}_3(\text{OH})$  | G  | 1892      | Greece         | <i>American Journal of Science</i> <b>44</b> (1892), 260  | <i>Mineralogical Magazine</i> <b>59</b> (1995), 341          |
| Penikisite        | $\text{BaMg}_2\text{Al}_2(\text{PO}_4)_3(\text{OH})_3$   | A  | 1976-023  | Canada         | <i>Canadian Mineralogist</i> <b>15</b> (1977), 393  | <i>Acta Crystallographica</i> <b>E69</b> (2013), i4          |
| Penkvilksite      | $\text{Na}_2\text{TiSi}_4\text{O}_{11} \cdot 2\text{H}_2\text{O}$  | A  | 1973-016  | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>217</b> (1974), 1161   | <i>American Mineralogist</i> <b>79</b> (1994), 1185          |
| Pennantite        | $\text{Mn}^{2+}_5\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_8$                                  | G  | 1946      | United Kingdom | <i>Mineralogical Magazine</i> <b>27</b> (1946), 217   | <i>Canadian Mineralogist</i> <b>21</b> (1983), 545           |
| Penobsquisite     | $\text{Ca}_2\text{Fe}^{2+}[\text{B}_9\text{O}_{13}(\text{OH})_6]\text{Cl} \cdot 4\text{H}_2\text{O}$         | A  | 1995-014  | Canada         | <i>Canadian Mineralogist</i> <b>34</b> (1996), 657  |  |
| Penroseite        | $(\text{Ni},\text{Co},\text{Cu})\text{Se}_2$   | G  | 1926      | Bolivia        | <i>Proceedings of the Academy of Natural Sciences of Philadelphia</i> <b>77</b> (1926) 317          | <i>Acta Chemica Scandinavica</i> <b>23</b> (1969), 2325      |
| Pentagonite       | $\text{CaV}^{4+}\text{OSi}_4\text{O}_{10} \cdot 4\text{H}_2\text{O}$   | A  | 1971-039  | USA            | <i>American Mineralogist</i> <b>58</b> (1973), 405  | <i>American Mineralogist</i> <b>58</b> (1973), 412           |
| Pentahydrate      | $\text{Mg}(\text{SO}_4) \cdot 5\text{H}_2\text{O}$   | G  | 1951      | USA            | The System of Mineralogy, Vol. II, 7th ed. Wiley, New York (1951), 492                              | <i>Acta Crystallographica</i> <b>B28</b> (1972), 1448        |
| Pentahydroborite  | $\text{CaB}_2\text{O}(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | A  | 1967 s.p. | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>90</b> (1961), 673                    | <i>Soviet Physics - Crystallography</i> <b>22</b> (1977), 35 |
| Pentlandite       | $(\text{Ni},\text{Fe})_9\text{S}_8$  | G  | 1856      | United Kingdom | Traité de Minéralogie, Vol. 2. Dalmont, Paris (1856), 549   | <i>American Mineralogist</i> <b>91</b> (2006), 1442          |
| Penzhinite        | $(\text{Ag},\text{Cu})_4\text{Au}(\text{S},\text{Se})_4$   | A  | 1982-027  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 356                   |  |
| Perossiite-(Ce)   | $(\text{Ce},\text{La})(\text{Al}_3\text{O})_{2/3}\text{B}_4\text{O}_{10}$                                    | Rd | 1990-002  | Italy          | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 53   | <i>American Mineralogist</i> <b>85</b> (2000), 586           |
| Perbøeite-(Ce)    | $(\text{CaCe}_3)(\text{Al}_3\text{Fe}^{2+})(\text{Si}_2\text{O}_7)(\text{SiO}_4)_3\text{O}(\text{OH})_2$     | A  | 2011-055  | Norway         | <i>American Mineralogist</i> <b>99</b> (2014), 157  |  |
| Percleveite-(Ce)  | $\text{Ce}_2\text{Si}_2\text{O}_7$   | A  | 2002-023  | Sweden         | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 725   |  |
| Peretaite         | $\text{CaSb}^{3+}_4\text{O}_4(\text{SO}_4)_2(\text{OH})_2 \cdot 2\text{H}_2\text{O}$                         | A  | 1979-068  | Italy          | <i>American Mineralogist</i> <b>65</b> (1980), 936  | <i>American Mineralogist</i> <b>65</b> (1980), 940           |
| Perettiite-(Y)    | $\text{Y}_2\text{Mn}^{2+}_4\text{Fe}^{2+}\text{Si}_2\text{B}_8\text{O}_{24}$                                 | A  | 2014-109  | Myanmar        | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 793   |  |
| Perhamite         | $\text{Ca}_3\text{Al}_{7.7}\text{Si}_3\text{P}_4\text{O}_{23.5}(\text{OH})_{14.1} \cdot 8\text{H}_2\text{O}$ | A  | 1975-019  | USA            | <i>Mineralogical Magazine</i> <b>41</b> (1977), 437   | <i>Mineralogical Magazine</i> <b>70</b> (2006), 201          |
| Periclase         | $\text{MgO}$   | G  | 1841      | Italy          | Memorie mineralogiche e geologiche della Campania. Napoli (1841), 16                                | <i>Acta Crystallographica</i> <b>B54</b> (1998), 8           |
| Perite            | $\text{PbBiO}_2\text{Cl}$  | A  | 1962 s.p. | Sweden         | <i>Arkiv för Mineralogi och Geologi</i> <b>2</b> (1960), 565  | <i>Australian Journal of Mineralogy</i> <b>9</b> (2003), 87  |
| Perlialite        | $\text{K}_9\text{NaCa}(\text{Si}_{24}\text{Al}_{12})\text{O}_{72} \cdot 15\text{H}_2\text{O}$                | A  | 1982-032  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 607                   | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 749   |
| Perloffite        | $\text{BaMn}^{2+}_2\text{Fe}^{3+}_2(\text{PO}_4)_3(\text{OH})_3$   | A  | 1976-002  | USA            | <i>Mineralogical Record</i> <b>8</b> (1977), 112  | <i>Mineralogical Magazine</i> <b>75</b> (2011), 317          |
| Permingeatite     | $\text{Cu}_3\text{SbSe}_4$   | A  | 1971-003  | Czech Republic | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>94</b> (1971), 162 | <i>Canadian Mineralogist</i> <b>52</b> (2014), 501           |
| Perovskite        | $\text{CaTiO}_3$   | G  | 1839      | Russia         | <i>Annalen der Physik und Chemie</i> <b>48</b> (1839), 551  | <i>Acta Crystallographica</i> <b>E64</b> (2008), i65         |
| Perraultite       | $\text{BaNaMn}_4\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2\text{F}$                         | Rd | 1984-033  | Canada         | <i>Canadian Mineralogist</i> <b>29</b> (1991), 355  | <i>Crystallography Reports</i> <b>43</b> (1998), 401         |

|                  |  |    |           |                           |  |   |
|------------------|--|----|-----------|---------------------------|--|---|
| Perrierite-(Ce)  | $Ce_4MgFe^{3+}_2Ti_2O_8(Si_2O_7)_2$                                  | A  | 1987 s.p. | Italy                     | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie VIII</i> <b>9</b> (1950), 361   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1647                    |
| Perrierite-(La)  | $(La,Ce,Ca)_4(Fe^{2+},Mn)(Ti,Fe^{3+},Al)_4[(Si_2O_7)_4O_4]_2$        | A  | 2010-089  | Germany                   | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>140(6)</b> (2011), 34   |   |
| Perrouditite     | $Ag_4Hg_5S_5(I,Br)_2Cl_2$  | A  | 1986-035  | France                    | <i>American Mineralogist</i> <b>72</b> (1987), 1251  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>181</b> (2005), 1 |
| Perryite         | $(Ni,Fe)_8(Si,P)_3$  | A  | 1968 s.p. | Malawi / Oman (meteorite) | <i>Mineralogical Magazine</i> <b>36</b> (1968), 850  | <i>Acta Crystallographica</i> <b>C47</b> (1991), 1358                   |
| Pertlikite       | $K_2(Fe^{2+},Mg)_2(Mg,Fe^{3+})_4Fe^{3+}_2Al(SO_4)_{12} \cdot 18H_2O$ | A  | 2005-055  | Iran                      | <i>Canadian Mineralogist</i> <b>46</b> (2008), 661   |   |
| Pertsevite-(F)   | $Mg_2(BO_3)F$  | A  | 2002-030  | Russia                    | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1007   |   |
| Pertsevite-(OH)  | $Mg_2(BO_3)(OH)$   | A  | 2008-060  | Russia                    | <i>American Mineralogist</i> <b>95</b> (2010), 953   | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 951             |
| Petalite         | $LiAlSi_4O_{10}$   | G  | 1800      | Sweden                    | <i>Allgemeines Journal der Chemie</i> <b>4</b> (1800), 28  | <i>Zeitschrift für Kristallographie</i> <b>160</b> (1982), 159          |
| Petarasite       | $Na_5Zr_2Si_6O_{18}(Cl,OH) \cdot 2H_2O$                              | A  | 1979-063  | Canada                    | <i>Canadian Mineralogist</i> <b>18</b> (1980), 497   | <i>Canadian Mineralogist</i> <b>18</b> (1980), 503                      |
| Petedunnite      | $CaZnSi_2O_6$  | A  | 1983-073  | USA                       | <i>American Mineralogist</i> <b>72</b> (1987), 157   | <i>American Mineralogist</i> <b>97</b> (2012), 739                      |
| Peterandresenite | $Mn_4Nb_6O_{19} \cdot 14H_2O$  | A  | 2012-084  | Norway                    | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 567  |   |
| Peterbaylissite  | $Hg_3(CO_3)(OH) \cdot 2H_2O$   | A  | 1993-041  | USA                       | <i>Canadian Mineralogist</i> <b>33</b> (1995), 47  |   |
| Petersenite-(Ce) | $Na_4Ce_2(CO_3)_5$   | A  | 1992-048  | Canada                    | <i>Canadian Mineralogist</i> <b>32</b> (1994), 405   |   |
| Petersite-(Ce)   | $Cu_6Ce(PO_4)_3(OH)_6 \cdot 3H_2O$                                   | A  | 2014-002  | USA                       | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1505  |   |
| Petersite-(La)   | $Cu_6La(PO_4)_3(OH)_6 \cdot 3H_2O$                                   | A  | 2017-089  | Japan                     | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183 |   |
| Petersite-(Y)    | $Cu_6Y(PO_4)_3(OH)_6 \cdot 3H_2O$                                    | A  | 1981-064  | USA                       | <i>American Mineralogist</i> <b>67</b> (1982), 1039  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 487           |
| Petewilliamsite  | $(Ni,Co)_{30}(As_2O_7)_{15}$   | A  | 2002-059  | Germany                   | <i>Mineralogical Magazine</i> <b>68</b> (2004), 231  |   |
| Petitjeanite     | $Bi_3O(PO_4)_2(OH)$  | A  | 1992-013  | Germany                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1993), 487  |   |
| Petříčekite      | $CuSe_2$   | A  | 2015-111  | Czech Republic            | <i>Minerals</i> <b>6</b> (2016), 33  |   |
| Petrovicite      | $Cu_3HgPbBiSe_5$   | A  | 1975-010  | Czech Republic            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>99</b> (1976), 310                                    |   |
| Petrovskaitite   | $AuAgS$  | A  | 1983-079  | Kazakhstan                | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 602  |   |
| Petrukite        | $(Cu,Ag)_2(Fe,Zn)(Sn,In)S_4$   | A  | 1985-052  | Canada / Japan            | <i>Canadian Mineralogist</i> <b>27</b> (1989), 673   |   |
| Petscheckite     | $U^{4+}Fe^{2+}Nb_2O_8$   | A  | 1975-038  | Madagascar                | <i>American Mineralogist</i> <b>63</b> (1978), 941   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2004), 163           |
| Petterdite       | $PbCr_2(CO_3)_2(OH)_4 \cdot H_2O$                                    | A  | 1999-034  | Australia                 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 1467  |   |
| Petzite          | $Ag_3AuTe_2$   | G  | 1845      | Romania                   | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 556   | <i>American Mineralogist</i> <b>44</b> (1959), 693                      |
| Pezzottaite      | $CsLiBe_2Al_2Si_6O_{18}$   | A  | 2003-022  | Madagascar                | <i>Gems &amp; Gemology</i> <b>39</b> (2003), 284   | <i>Mineralogical Record</i> <b>35</b> (2004), 369                       |
| Pharmacoalumite  | $KAl_4(AsO_4)_3(OH)_4 \cdot 6.5H_2O$                                 | Rn | 1980-002  | Chile                     | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 97   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 929                     |

|                       |  |    |           |                |  |   |
|-----------------------|--|----|-----------|----------------|--|---|
| Pharmacolite          | $\text{Ca}(\text{AsO}_3\text{OH})\cdot 2\text{H}_2\text{O}$  | G  | 1800      | Germany        | Mineralogische Tabellen. Rottmann, Berlin (1800), 75   | <i>Acta Crystallographica</i> <b>B27</b> (1971), 349                                    |
| Pharmacosiderite      | $\text{KFe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4\cdot 6\text{-}7\text{H}_2\text{O}$   | G  | 1813      | United Kingdom | Handbuch der Mineralogie, Vol. 3. Vandenhoek und Ruprecht, Göttingen (1813), 1065                          | <i>Mineralogical Magazine</i> <b>74</b> (2010), 487                                     |
| Pharmazincite         | $\text{KZn}(\text{AsO}_4)$   | A  | 2014-015  | Russia         | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1001   |   |
| Phaunouxite           | $\text{Ca}_3(\text{AsO}_4)_2\cdot 11\text{H}_2\text{O}$  | A  | 1980-062  | France         | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 327  | <i>Acta Crystallographica</i> <b>B39</b> (1983), 4                                      |
| Phenakite             | $\text{Be}_2(\text{SiO}_4)$  | G  | 1833      | Russia         | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> (1833), 160                                       | <i>Physics and Chemistry of Minerals</i> <b>13</b> (1986), 69                           |
| Philipsbornite        | $\text{PbAl}_3(\text{AsO}_4)(\text{AsO}_3\text{OH})(\text{OH})_6$  | A  | 1981-029  | Australia      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1982), 1  |   |
| Philipsburgite        | $(\text{Cu,Zn})_6(\text{AsO}_4,\text{PO}_4)_2(\text{OH})_6\cdot \text{H}_2\text{O}$  | A  | 1984-029  | USA            | <i>Canadian Mineralogist</i> <b>23</b> (1985), 255   | <i>Mineralogical Magazine</i> <b>52</b> (1988), 529                                     |
| Phillipsite-Ca        | $\text{Ca}_3(\text{Si}_{10}\text{Al}_6)\text{O}_{32}\cdot 12\text{H}_2\text{O}$  | A  | 1997 s.p. | USA            | <i>American Mineralogist</i> <b>54</b> (1969), 182   | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 827                              |
| Phillipsite-K         | $\text{K}_6(\text{Si}_{10}\text{Al}_6)\text{O}_{32}\cdot 12\text{H}_2\text{O}$   | A  | 1997 s.p. | Italy          | Handbuch der Mineralogie. von Veit, Leipzig (1897)   | <i>Acta Crystallographica</i> <b>B30</b> (1974), 2426                                   |
| Phillipsite-Na        | $\text{Na}_6(\text{Si}_{10}\text{Al}_6)\text{O}_{32}\cdot 12\text{H}_2\text{O}$  | A  | 1997 s.p. | Italy          | <i>Annals of Philosophy</i> <b>10</b> (1825), 361  | <i>American Mineralogist</i> <b>57</b> (1972), 1125                                     |
| Philolithite          | $\text{Pb}_{12}\text{O}_6\text{Mn}_7(\text{SO}_4)(\text{CO}_3)_4\text{Cl}_4(\text{OH})_{12}$                               | A  | 1996-020  | Sweden         | <i>Mineralogical Record</i> <b>29</b> (1998), 201  | <i>American Mineralogist</i> <b>85</b> (2000), 810                                      |
| Philoxenite           | $(\text{K,Na,Pb})_4(\text{Na,Ca})_2(\text{Mg,Cu})_3(\text{Fe}^{3+}_{0.5}\text{Al}_{0.5})(\text{SO}_4)_8$                   | A  | 2015-108  | Russia         | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407                                  |   |
| Philrothite           | $\text{TiAs}_3\text{S}_5$  | A  | 2013-066  | Switzerland    | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1  |   |
| Phlogopite            | $\text{KMg}_3(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$  | G  | 1841      | unknown        | Vollständiges Handbuch der Mineralogie, Vol. 2. Arnoldische, Dresden-Leipzig (1841), 398                   | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1333                                     |
| Phoenicochroite       | $\text{Pb}_2\text{O}(\text{CrO}_4)$  | A  | 1980 s.p. | Russia         | Grundriss der Mineralogie, mit Einschluss der Geognosie und Petrefactenkunde. Schrag, Nurnberg (1839), 612 | <i>American Mineralogist</i> <b>55</b> (1970), 784                                      |
| Phosgenite            | $\text{Pb}_2(\text{CO}_3)\text{Cl}_2$  | G  | 1841      | unknown        | Vollständiges Handbuch der Mineralogie, Vol. 2. Arnoldische, Dresden-Leipzig (1841), 183                   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>21</b> (1974), 101 |
| Phosinaite-(Ce)       | $\text{Na}_{13}\text{Ca}_2\text{Ce}(\text{SiO}_3)_4(\text{PO}_4)_4$  | A  | 1973-058  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 567                          | <i>Canadian Mineralogist</i> <b>34</b> (1996), 107                                      |
| Phosphammite          | $(\text{NH}_4)_2(\text{PO}_3\text{OH})$  | G  | 1870      | Peru           | <i>The Rural Carolinian</i> <b>1</b> (1870), 469   | <i>Mineralogical Magazine</i> <b>39</b> (1973), 346                                     |
| Phosphoellenbergerite | $(\text{Mg},\square)_2\text{Mg}_{12}(\text{PO}_4,\text{PO}_3\text{OH})_6(\text{PO}_3\text{OH},\text{CO}_3)_2(\text{OH})_6$ | A  | 1994-006  | Italy          | <i>American Mineralogist</i> <b>81</b> (1996), 385   |   |
| Phosphoferrite        | $\text{Fe}^{2+}_3(\text{PO}_4)_2\cdot 3\text{H}_2\text{O}$   | Rd | 1980 s.p. | Germany        | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>55</b> (1920), 523                              | <i>Inorganic Chemistry</i> <b>15</b> (1976), 316  |
| Phosphofibrite        | $(\text{H}_2\text{O,K})_{3.5}\text{Fe}^{3+}_8(\text{PO}_4)_6(\text{OH})_7\cdot 5\text{H}_2\text{O}$                        | A  | 1982-082  | Germany        | <i>Chemie der Erde</i> <b>43</b> (1984), 11  | <i>American Mineralogist</i> <b>94</b> (2009), 720                                      |
| Phosphogartrellite    | $\text{PbCuFe}^{3+}(\text{PO}_4)_2(\text{OH},\text{H}_2\text{O})_2$  | A  | 1996-035  | Germany        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 111  |   |
| Phosphohedyphane      | $\text{Ca}_2\text{Pb}_3(\text{PO}_4)_3\text{Cl}$   | A  | 2005-026  | Chile          | <i>American Mineralogist</i> <b>91</b> (2006), 1909  |   |
| Phosphoinnelite       | $\text{Na}_3\text{Ba}_4\text{Ti}_3\text{Si}_4\text{O}_{14}(\text{PO}_4)_2\text{O}_2\text{F}$                               | A  | 2005-022  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(3)</b> (2006), 52                         |   |
| Phosphophyllite       | $\text{Zn}_2\text{Fe}^{2+}(\text{PO}_4)_2\cdot 4\text{H}_2\text{O}$  | G  | 1920      | Germany        | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>55</b> (1920), 523                              | <i>American Mineralogist</i> <b>62</b> (1977), 812                                      |
| Phosphorrösslerite    | $\text{Mg}(\text{PO}_3\text{OH})\cdot 7\text{H}_2\text{O}$   | G  | 1939      | Austria        | <i>Centralblatt für Mineralogie</i> (1939), 142  | <i>Zeitschrift für Kristallographie</i> <b>137</b> (1973), 246                          |

|                      |  |    |           |                                  |   |   |
|----------------------|--|----|-----------|----------------------------------|---|---|
| Phosphosiderite      | $\text{Fe}^{3+}(\text{PO}_4) \cdot 2\text{H}_2\text{O}$  | Rn | 1967 s.p. | Germany                          | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>17</b> (1890), 555   | <i>American Mineralogist</i> <b>51</b> (1966), 168                                    |
| Phosphovanadylite-Ba | $\text{Ba}[\text{V}^{4+}_4\text{P}_2\text{O}_{12}(\text{OH})_4] \cdot 12\text{H}_2\text{O}$          | Rn | 1996-037  | USA                              | <i>American Mineralogist</i> <b>83</b> (1998), 889  |   |
| Phosphovanadylite-Ca | $\text{Ca}[\text{V}^{4+}_4\text{P}_2\text{O}_{12}(\text{OH})_4] \cdot 12\text{H}_2\text{O}$          | A  | 2011-101  | USA                              | <i>American Mineralogist</i> <b>98</b> (2013), 439  |   |
| Phosphowalpurkite    | $(\text{UO}_2)\text{Bi}_4\text{O}_4(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$                        | A  | 2001-062  | Czech Republic                   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 963  |   |
| Phosphuranylite      | $\text{KCa}(\text{H}_3\text{O})_3(\text{UO}_2)_7(\text{PO}_4)_4\text{O}_4 \cdot 8\text{H}_2\text{O}$ | G  | 1879      | USA                              | <i>American Chemical Journal</i> <b>1</b> (1879), 87  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 439                                  |
| Phoxite              | $(\text{NH}_4)_2\text{Mg}_2(\text{C}_2\text{O}_4)(\text{PO}_3\text{OH})_2(\text{H}_2\text{O})_4$     | A  | 2018-009  | USA                              | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647  |   |
| Phuralumite          | $\text{Al}_2[(\text{UO}_2)_3(\text{PO}_4)_2\text{O}(\text{OH})](\text{OH})_3(\text{H}_2\text{O})_9$  | A  | 1978-044  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 333   | <i>Journal of Geosciences</i> <b>62</b> (2017), 87                                    |
| Phurcalite           | $\text{Ca}_2(\text{UO}_2)_3\text{O}_2(\text{PO}_4)_2 \cdot 7\text{H}_2\text{O}$                      | A  | 1977-040  | Germany                          | <i>Bulletin de Minéralogie</i> <b>101</b> (1978), 356   | <i>Canadian Mineralogist</i> <b>29</b> (1991), 95                                     |
| Phylloretine         | $\text{C}_{18}\text{H}_{18}$   | Q  | 1839      | Denmark ?                        | Kongelige Danske Videnskabernes Selskab Forhandling (1839)  | Mineralogische Tabellen, 5th ed. Akademische Verlagsgesellschaft, Leipzig (1970), 496 |
| Phyllotungstite      | $\text{H}\text{Ca}\text{Fe}^{3+}_3(\text{WO}_4)_6 \cdot 10\text{H}_2\text{O}$                        | A  | 1984-018  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 529   |   |
| Picaite              | $\text{NaCa}[\text{AsO}_3\text{OH}][\text{AsO}_2(\text{OH})_2]$                                      | A  | 2018-022  | Chile                            | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Piccoliite           | $\text{NaCaMn}^{3+}_2(\text{AsO}_4)_2\text{O}(\text{OH})$  | A  | 2017-016  | Italy                            | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529  |   |
| Pickeringite         | $\text{MgAl}_2(\text{SO}_4)_4 \cdot 22\text{H}_2\text{O}$  | G  | 1844      | Chile                            | <i>American Journal of Science and Arts</i> <b>46</b> (1844), 360   | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 1131                          |
| Picotpaulite         | $\text{TlFe}_2\text{S}_3$  | A  | 1970-031  | Macedonia                        | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 545                                     | <i>Acta Chimica Slovenica</i> <b>55</b> (2008), 801                                   |
| Picromerite          | $\text{K}_2\text{Mg}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$                                       | A  | 1982 s.p. | Italy                            | Memoria sullo incendio vesuviano del mese di Maggio 1855. Nobile, Napoli (1855), 192  | <i>Zeitschrift für Kristallographie</i> <b>122</b> (1965), 161                        |
| Picropharmacolite    | $\text{Ca}_4\text{Mg}(\text{AsO}_3\text{OH})_2(\text{AsO}_4)_2 \cdot 11\text{H}_2\text{O}$           | G  | 1819      | Germany                          | <i>Annalen der Physik</i> <b>61</b> (1819), 177   | <i>American Mineralogist</i> <b>66</b> (1981), 385                                    |
| Pieczkaite           | $\text{Mn}_5(\text{PO}_4)_3\text{Cl}$  | A  | 2014-005  | Canada                           | <i>American Mineralogist</i> <b>100</b> (2015), 1047  |   |
| Piemontite           | $\text{Ca}_2(\text{Al}_2\text{Mn}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$     | A  | 1962 s.p. | Italy                            | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 74  | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 23                             |
| Piemontite-(Pb)      | $\text{CaPb}(\text{Al}_2\text{Mn}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$     | A  | 2011-087  | Macedonia                        | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>189</b> (2012), 275   |   |
| Piemontite-(Sr)      | $\text{CaSr}(\text{Al}_2\text{Mn}^{3+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$     | Rn | 1989-031  | Italy                            | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 519  |   |
| Piergorite-(Ce)      | $\text{Ca}_8\text{Ce}_2\text{AlLiSi}_6\text{B}_8\text{O}_{36}(\text{OH})_2$                          | A  | 2005-008  | Italy                            | <i>American Mineralogist</i> <b>91</b> (2006), 1170   |   |
| Pierrotite           | $\text{Tl}_2(\text{Sb,As})_{10}\text{S}_{16}$  | A  | 1969-036  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 66                                      | <i>Zeitschrift für Kristallographie</i> <b>165</b> (1983), 209                        |
| Pigeonite            | $(\text{Mg,Fe,Ca})_2\text{Si}_2\text{O}_6$   | A  | 1988 s.p. | USA                              | <i>American Geologist</i> <b>26</b> (1900), 204   | <i>American Mineralogist</i> <b>88</b> (2003), 1115                                   |
| Pigotite             | $\text{Al}_4\text{C}_6\text{H}_5\text{O}_{10} \cdot 13\text{H}_2\text{O}$ (?)                        | Q  | 1840      | United Kingdom                   | <i>Philosophical Magazine</i> <b>17</b> (1840), 382   |   |
| Pilawite-(Y)         | $\text{Ca}_2\text{Y}_2\text{Al}_4(\text{SiO}_4)_4\text{O}_2(\text{OH})_2$                            | A  | 2013-125  | Poland                           | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1143  |   |

|               |  |    |           |                                  |  |  |
|---------------|--|----|-----------|----------------------------------|--|--|
| Pillaite      | $Pb_9Sb_{10}S_{23}ClO_{0.5}$                       | A  | 1997-042  | Italy                            | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 605                              | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 779          |
| Pilsenite     | $Bi_4Te_3$   | Rd | 1982 s.p. | Hungary                          | Das Mohs'sche Mineralsystem. Gerold, Wien (1853), 121                                    | <i>Acta Crystallographica</i> <b>B35</b> (1979), 147                 |
| Pinakiolite   | $(Mg,Mn)_2(Mn^{3+},Sb^{5+})O_2(BO_3)$              | G  | 1890      | Sweden                           | <i>Zeitschrift für Kristallographie</i> <b>18</b> (1890), 361                            | <i>American Mineralogist</i> <b>59</b> (1974), 985                   |
| Pinalite      | $Pb_3(WO_4)OCl_2$                                  | A  | 1988-025  | USA                              | <i>American Mineralogist</i> <b>74</b> (1989), 934                                       | <i>American Mineralogist</i> <b>85</b> (2000), 806                   |
| Pinchite      | $Hg_5O_4Cl_2$                                      | A  | 1973-052  | USA                              | <i>Canadian Mineralogist</i> <b>12</b> (1974), 417                                       | <i>American Mineralogist</i> <b>79</b> (1994), 1199                  |
| Pingguite     | $Bi_6Te^{4+}_2O_{13}$                              | A  | 1993-019  | China                            | <i>Acta Mineralogica Sinica</i> <b>14</b> (1994), 315                                    |  |
| Pinnoite      | $MgB_2O(OH)_6$                                     | G  | 1884      | Germany                          | <i>Berichte der Deutschen Chemischen Gesellschaft</i> <b>17</b> (1884), 1584             | <i>Soviet Physics - Crystallography</i> <b>28</b> (1983), 475        |
| Pintadoite    | $Ca_2V^{5+}_2O_7 \cdot 9H_2O$                      | Q  | 1914      | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>4</b> (1914), 576                |  |
| Piretite      | $Ca(UO_2)_3(Se^{4+}O_3)_2(OH)_4 \cdot 4H_2O$       | A  | 1996-002  | Democratic Republic of the Congo | <i>Canadian Mineralogist</i> <b>34</b> (1996), 1317                                      |  |
| Pirquitasite  | $Ag_2ZnSnS_4$                                      | A  | 1980-091  | Argentina                        | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 229                                    | <i>Acta Crystallographica</i> <b>E69</b> (2013), i8                  |
| Pirssonite    | $Na_2Ca(CO_3)_2 \cdot 2H_2O$                       | A  | 1896      | USA                              | <i>American Journal of Science</i> <b>152</b> (1896), 123                                | <i>Journal of Mineralogy and Geochemistry</i> <b>190</b> (2013), 221 |
| Pisekite-(Y)  | $(Y,As,Ca,Fe,U)(Nb,Ti,Ta)O_4$                      | Q  | 1923      | Czech Republic                   | <i>Časopis pro Mineralogii a Geologii</i> <b>1</b> (1923), 2                             | <i>Lithos</i> <b>5</b> (1972), 93                                    |
| Pitiglianoite | $K_2Na_6(Si_6Al_6)O_{24}(SO_4) \cdot 2H_2O$        | A  | 1990-012  | Italy                            | <i>American Mineralogist</i> <b>76</b> (1991), 2003                                      | <i>Microporous and Mesoporous Materials</i> <b>99</b> (2007), 225    |
| Pitticite     | $[Fe,AsO_4,SO_4,H_2O] (?)$                         | Q  | 1813      | Germany                          | Handbuch der Mineralogie, Vol. 1. Vandenhoeck und Ruprecht, Göttingen (1813), 285        | <i>Mineralogical Magazine</i> <b>46</b> (1982), 261                  |
| Pittongite    | $(Na,H_2O)_{0.7}(W,Fe^{3+})(O,OH)_3$               | A  | 2005-034a | Australia                        | <i>Canadian Mineralogist</i> <b>45</b> (2007), 857                                       | <i>Journal of Solid State Chemistry</i> <b>179</b> (2006), 3860      |
| Piypite       | $K_4Cu_4O_2(SO_4)_4 \cdot (Na,Cu)Cl$               | A  | 1982-097  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>275</b> (1984), 714                                 | <i>Mineralogical Magazine</i> <b>64</b> (2000), 1099                 |
| Pizgrischite  | $(Cu,Fe)Cu_{14}PbBi_{17}S_{34}$                    | A  | 2001-002  | Switzerland                      | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1229                                      |  |
| Plagionite    | $Pb_5Sb_8S_{17}$                                   | G  | 1833      | Germany                          | <i>Annalen der Physik</i> <b>2</b> (1833), 421   | <i>Zeitschrift für Kristallographie</i> <b>139</b> (1974), 351       |
| Plancheite    | $Cu_8(Si_4O_{11})_2(OH)_4 \cdot H_2O$              | Rd | 1967 s.p. | Republic of the Congo            | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>146</b> (1908), 722         | <i>American Mineralogist</i> <b>62</b> (1977), 491                   |
| Planerite     | $Al_6(PO_4)_2(PO_3OH)_2(OH)_8 \cdot 4H_2O$         | Rd | 1998 s.p. | Russia                           | <i>Bulletin de la Société Impériale des Naturalistes de Moscou</i> <b>35</b> (1862), 240 | <i>Mineralogical Magazine</i> <b>62</b> (1998), 63                   |
| Plášilite     | $Na(UO_2)(SO_4)(OH) \cdot 2H_2O$                   | A  | 2014-021  | USA                              | <i>Journal of Geosciences</i> <b>60</b> (2015), 1  |  |
| Platarsite    | $PtAsS$  | A  | 1976-050  | South Africa                     | <i>Canadian Mineralogist</i> <b>15</b> (1977), 385                                       | <i>Canadian Mineralogist</i> <b>17</b> (1979), 117                   |
| Platinum      | Pt   | G  | 1750      | Colombia                         | <i>Philosophical Transactions of the Royal Society of London</i> <b>46</b> (1750), 584   | <i>Canadian Mineralogist</i> <b>30</b> (1992), 955                   |
| Plattnerite   | $PbO_2$  | G  | 1845      | United Kingdom                   | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 499           | <i>Acta Crystallographica</i> <b>B36</b> (1980), 2394                |
| Plavnoite     | $K_{0.8}Mn_{0.6}[(UO_2)_2O_2(SO_4)] \cdot 3.5H_2O$ | A  | 2015-059  | Czech Republic                   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 117                              |  |
| Playfairite   | $Pb_{16}(Sb,As)_{19}S_{44}Cl$                      | A  | 1966-019  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191  |  |
| Plimerite     | $ZnFe^{3+}_4(PO_4)_3(OH)_5$                        | A  | 2008-013  | Australia                        | <i>Mineralogical Magazine</i> <b>73</b> (2009), 131                                      |  |



|                        |  |    |           |                  |   |  |
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| Pliniusite             | $\text{Ca}_5(\text{VO}_4)_3\text{F}$   | A  | 2018-031  | Russia / Israel  | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Plombièreite           | $\text{Ca}_4\text{Si}_6\text{O}_{16}(\text{OH})_2(\text{H}_2\text{O})_2 \cdot (\text{Ca} \cdot 5\text{H}_2\text{O})$ | Rd | 2014 s.p. | France           | <i>Annales des Mines</i> <b>13</b> (1858), 227  | <i>Journal of the American Ceramic Society</i> <b>88</b> (2005), 505 |
| Plumboagardite         | $(\text{Pb}, \text{REE}, \text{Ca})\text{Cu}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$               | A  | 2003-031a | Germany          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>181</b> (2005), 219   |  |
| Plumboferrite          | $\text{Pb}_2(\text{Fe}^{3+}, \text{Mn}^{2+}, \text{Mg})_{11}\text{O}_{19}$   | G  | 1881      | Sweden           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>38</b> (1881), 27   | <i>American Mineralogist</i> <b>80</b> (1995), 1065                  |
| Plumbogummite          | $\text{PbAl}_3(\text{PO}_4)(\text{PO}_3\text{OH})(\text{OH})_6$  | Rd | 1999 s.p. | France           | Nouveau Système de Minéralogie. Méquignon-Marvis, Paris (1819), 282   | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 513          |
| Plumbojarosite         | $\text{Pb}_{0.5}\text{Fe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$  | Rd | 1987 s.p. | USA              | <i>American Journal of Science</i> <b>14</b> (1902), 211  | <i>Canadian Mineralogist</i> <b>48</b> (2010), 651                   |
| Plumbonacrite          | $\text{Pb}_5(\text{CO}_3)_3\text{O}(\text{OH})_2$  | Rd | 1889      | United Kingdom   | <i>Mineralogical Magazine</i> <b>8</b> (1889), 200  | <i>Mineralogical Magazine</i> <b>64</b> (2000), 1069                 |
| Plumbopalladinite      | $\text{Pd}_3\text{Pb}_2$   | A  | 1970-020  | Russia           | <i>Geologiya Rudnykh Mestorozhdeniy</i> <b>5</b> (1970), 63   |  |
| Plumbopharmacosiderite | $\text{Pb}_{0.5}\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 5\text{H}_2\text{O}$                             | A  | 2016-109  | Italy            | <i>Canadian Mineralogist</i> <b>56</b> (2018), 143  |  |
| Plumbophyllite         | $\text{Pb}_2\text{Si}_4\text{O}_{10} \cdot \text{H}_2\text{O}$   | A  | 2008-025  | USA              | <i>American Mineralogist</i> <b>94</b> (2009), 1198   |  |
| Plumboselite           | $\text{Pb}_3\text{O}_2(\text{SeO}_3)$  | A  | 2010-028  | Namibia          | <i>Mineralogy and Petrology</i> <b>101</b> (2011), 75   |  |
| Plumbotellurite        | $\text{Pb}(\text{Te}^{4+}\text{O}_3)$  | A  | 1980-102  | Kazakhstan       | <i>Doklady Akademii Nauk SSSR</i> <b>262</b> (1982), 1231   |  |
| Plumbotsumite          | $\text{Pb}_5\text{Si}_4\text{O}_8(\text{OH})_{10}$   | A  | 1979-049  | Namibia          | <i>Chemie der Erde</i> <b>41</b> (1982), 1  |  |
| Plumosite              | $\text{Pb}_2\text{Sb}_2\text{S}_5$   | Q  | 1845      | Germany          | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845)   | <i>Geologia Carpathica</i> <b>48</b> (1997), 387                     |
| Podlesnoite            | $\text{Ca}_2\text{Ba}(\text{CO}_3)_2\text{F}_2$  | A  | 2006-033  | Russia           | <i>Mineralogical Record</i> <b>39</b> (2008), 137   | <i>Zeitschrift für Kristallographie</i> <b>222</b> (2007), 474       |
| Poitevinite            | $\text{Cu}(\text{SO}_4) \cdot \text{H}_2\text{O}$  | A  | 1963-010  | Canada           | <i>Canadian Mineralogist</i> <b>8</b> (1964), 109   | <i>Canadian Mineralogist</i> <b>32</b> (1994), 873                   |
| Pokrovskite            | $\text{Mg}_2(\text{CO}_3)(\text{OH})_2$  | A  | 1982-054  | Kazakhstan       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 90  | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 787          |
| Polarite               | $\text{Pd}(\text{Bi}, \text{Pb})$  | A  | 1969-032  | Russia           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>98</b> (1969), 708  | <i>Journal of the Less-Common Metals</i> <b>66</b> (1979), 1         |
| Poldervaartite         | $\text{Ca}(\text{Ca}, \text{Mn})(\text{SiO}_3\text{OH})(\text{OH})$  | A  | 1992-012  | South Africa     | <i>American Mineralogist</i> <b>78</b> (1993), 1082   | <i>Acta Crystallographica</i> <b>C50</b> (1994), 996                 |
| Polezhaevaite-(Ce)     | $\text{NaSrCeF}_6$   | A  | 2009-015  | Russia           | <i>American Mineralogist</i> <b>95</b> (2010), 1080   |  |
| Polhemusite            | $(\text{Zn}, \text{Hg})\text{S}$   | A  | 1972-017  | USA              | <i>American Mineralogist</i> <b>63</b> (1978), 1153   |  |
| Polkanovite            | $\text{Rh}_{12}\text{As}_7$  | A  | 1997-030  | Russia           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(2)</b> (1998), 60   | <i>Journal of the Less-Common Metals</i> <b>108</b> (1985), 353      |
| Polkovicite            | $(\text{Fe}, \text{Pb})_3(\text{Ge}, \text{Fe})_{1-x}\text{S}_4$   | A  | 1974-037  | Poland           | <i>Rudy i Metale Niezlezazne</i> <b>20</b> (1975), 288  |  |
| Polloneite             | $\text{AgPb}_{46}\text{As}_{26}\text{Sb}_{23}\text{S}_{120}$   | A  | 2014-093  | Italy            | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1303  |  |
| Pollucite              | $\text{Cs}(\text{Si}_2\text{Al})\text{O}_6 \cdot n\text{H}_2\text{O}$  | A  | 1997 s.p. | Italy            | <i>Annalen der Physik und Chemie</i> <b>69</b> (1846), 436  | <i>Zeitschrift für Kristallographie</i> <b>223</b> (2008), 584       |
| Polyakovite-(Ce)       | $(\text{Ce}, \text{Ca})_4\text{MgCr}_2(\text{Ti}, \text{Nb})_2\text{Si}_4\text{O}_{22}$                              | A  | 1998-029  | Russia           | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1095   |  |
| Polybasite             | $[\text{Ag}_9\text{CuS}_4][(\text{Ag}, \text{Cu})_6(\text{Sb}, \text{As})_2\text{S}_7]$                              | Rd | 2006 s.p. | Mexico / Germany | <i>Annalen der Physik und Chemie</i> <b>15</b> (1829), 573  | <i>American Mineralogist</i> <b>94</b> (2009), 151                   |

|                                  |   |    |           |                              |  |  |
|----------------------------------|---|----|-----------|------------------------------|--|--|
| Polycrase-(Y)                    | $Y(Ti,Nb)_2(O,OH)_6$  | A  | 1987 s.p. | Norway                       | <i>Annales der Physik und Chemie</i> <b>62</b> (1844), 480                             | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1847            |
| Polydymite                       | $Ni^{2+}Ni^{3+}_2S_4$                                       | G  | 1876      | Germany                      | <i>Journal für Praktische Chemie</i> <b>122</b> (1876), 397                            | <i>American Mineralogist</i> <b>70</b> (1985), 1036            |
| Polyhalite                       | $K_2Ca_2Mg(SO_4)_4 \cdot 2H_2O$                             | G  | 1817      | United Kingdom               | Exotic Mineralogy, Vol. 2. Arding and Merrett, London (1817), 101                      | <i>Acta Crystallographica</i> <b>E61</b> (2005), i135          |
| Polyolithionite                  | $KLi_2AlSi_4O_{10}F_2$                                      | A  | 1998 s.p. | Denmark (Greenland)          | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>9</b> (1884), 243           | <i>American Mineralogist</i> <b>92</b> (2007), 1395            |
| Polyphite                        | $Na_6(Na_4Ca_2)_2Na_2Ti_2Na_2Ti_2(Si_2O_7)_2(PO_4)_6O_4F_4$ | Rd | 1990-025  | Russia                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 105 | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1527            |
| Ponomarevite                     | $K_4Cu_4OCl_{10}$   | A  | 1986-040  | Russia                       | <i>Doklady Akademii Nauk SSSR</i> <b>300</b> (1988), 1197                              | <i>Doklady Akademii Nauk SSSR</i> <b>304</b> (1989), 427       |
| Popovite                         | $Cu_5O_2(AsO_4)_2$  | A  | 2013-060  | Russia                       | <i>Mineralogical Magazine</i> <b>79</b> (2015), 133                                    |  |
| Poppiite                         | $Ca_2(V^{3+},Fe^{3+},Mg)V^{3+}_2(Si,Al)_3(O,OH)_{14}$       | A  | 2005-018  | Italy                        | <i>American Mineralogist</i> <b>91</b> (2006), 584                                     |  |
| Portlandite                      | $Ca(OH)_2$  | G  | 1933      | United Kingdom               | <i>Mineralogical Magazine</i> <b>23</b> (1933), 419                                    | <i>Acta Crystallographica</i> <b>B49</b> (1993), 812           |
| Posnjakite                       | $Cu_4(SO_4)(OH)_6 \cdot H_2O$                               | A  | 1967-001  | Kazakhstan                   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>96</b> (1967), 58        | <i>Zeitschrift für Kristallographie</i> <b>149</b> (1979), 249 |
| Postite                          | $Mg(H_2O)_6Al_2(OH)_2(H_2O)_8(V_{10}O_{28}) \cdot 13H_2O$   | A  | 2011-060  | USA                          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 45                                      |  |
| Potarite                         | $PdHg$  | G  | 1928      | Guyana                       | <i>Mineralogical Magazine</i> <b>21</b> (1928), 397                                    | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751             |
| Potassic-arfvedsonite            | $KNa_2(Fe^{2+}_4Fe^{3+})Si_8O_{22}(OH)_2$                   | Rd | 2012 s.p. | Denmark (Greenland) / Russia | Neues Jahrbuch für Mineralogie Monatshefte (2004), 555                                 | <i>Canadian Mineralogist</i> <b>14</b> (1976), 346             |
| Potassiccarpholite               | $K(Mn^{2+},Li)_2Al_4Si_4O_{12}(OH,F)_8$                     | A  | 2002-064  | USA                          | <i>Canadian Mineralogist</i> <b>42</b> (2004), 121                                     |  |
| Potassic-chloro-hastingsite      | $KCa_2(Fe^{2+}_4Fe^{3+})(Si_6Al_2)O_{22}Cl_2$               | Rd | 2012 s.p. | Azerbaijan                   | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(6)</b> (2005), 31     |  |
| Potassic-chloro-pargasite        | $KCa_2(Mg_4Al)(Si_6Al_2)O_{22}Cl_2$                         | Rd | 2012 s.p. | Russia                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(2)</b> (2002), 58  |  |
| Potassic-ferri-leakeite          | $KNa_2(Mg_2Fe^{3+}_2Li)Si_8O_{22}(OH)_2$                    | Rd | 2012 s.p. | Japan                        | <i>Journal of Mineralogical and Petrological Sciences</i> <b>97</b> (2002), 177        |  |
| Potassic-ferro-ferri-sadanagaite | $KCa_2(Fe^{2+}_3Fe^{3+}_2)(Si_5Al_3)O_{22}(OH)_2$           | Rd | 2012 s.p. | Russia                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>128(4)</b> (1999), 50  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 669             |
| Potassic-ferro-ferri-taramite    | $K(NaCa)(Fe^{2+}_3Fe^{3+}_2)(Si_6Al_2)O_{22}(OH)_2$         | Rd | 2012 s.p. | Tanzania                     | <i>Mineralogical Magazine</i> <b>33</b> (1964), 1057                                   |  |
| Potassic-ferro-pargasite         | $KCa_2(Fe^{2+}_4Al)(Si_6Al_2)O_{22}(OH)_2$                  | Rd | 2012 s.p. | Japan                        | <i>Journal of Mineralogical and Petrological Sciences</i> <b>104</b> (2009), 374       |  |
| Potassic-ferro-sadanagaite       | $KCa_2(Fe^{2+}_3Al_2)(Si_5Al_3)O_{22}(OH)_2$                | Rd | 2012 s.p. | Japan                        | <i>American Mineralogist</i> <b>69</b> (1984), 465                                     |  |
| Potassic-ferro-taramite          | $K(NaCa)(Fe^{2+}_3Al_2)(Si_6Al_2)O_{22}(OH)_2$              | Rd | 2012 s.p. | Spain                        | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 1005                           |  |
| Potassic-fluoro-hastingsite      | $KCa_2(Fe^{2+}_4Fe^{3+})(Si_6Al_2)O_{22}F_2$                | Rd | 2012 s.p. | USA                          | <i>Canadian Mineralogist</i> <b>47</b> (2009), 909                                     |  |
| Potassic-fluoro-pargasite        | $KCa_2(Mg_4Al)Si_6Al_2O_{22}F_2$                            | Rd | 2012 s.p. | Madagascar                   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 961                                    |  |
| Potassic-fluoro-richterite       | $K(NaCa)Mg_5Si_8O_{22}F_2$                                  | Rd | 2012 s.p. | Italy                        | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Serie IX</i> <b>3</b> (1992), 239   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 181             |

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| Potassic-jeanlouisite                 | $K(\text{NaCa})(\text{Mg}_4\text{Ti})\text{Si}_8\text{O}_{22}\text{O}_2$  | A  | 2018-050  | USA            | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Potassic-magnesio-arfvedsonite        | $\text{KNa}_2(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$                                  | A  | 2016-083  | Bulgaria       | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149   |   |
| Potassic-magnesio-fluoro-arfvedsonite | $\text{KNa}_2(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}\text{F}_2$                                     | Rd | 2012 s.p. | Canada         | <i>Canadian Mineralogist</i> <b>25</b> (1987), 739   | <i>Mineralogical Magazine</i> <b>74</b> (2010), 951                     |
| Potassic-magnesio-hastingsite         | $\text{KCa}_2(\text{Mg}_4\text{Fe}^{3+})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$                     | Rd | 2012 s.p. | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(2)</b> (2006), 49   |   |
| Potassic-mangani-leakeite             | $\text{KNa}_2(\text{Mg}_2\text{Mn}^{3+}_2\text{Li})\text{Si}_8\text{O}_{22}(\text{OH})_2$                       | Rd | 2012 s.p. | South Africa   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>73</b> (1993), 349  | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 143             |
| Potassic-pargasite                    | $\text{KCa}_2(\text{Mg}_4\text{Al})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$                          | Rd | 2012 s.p. | Finland        | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1535  |   |
| Potassic-richterite                   | $\text{K}(\text{NaCa})\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | A  | 2017-102  | Sweden         | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405   |   |
| Potassic-sadanagaite                  | $\text{KCa}_2(\text{Mg}_3\text{Al}_2)(\text{Si}_5\text{Al}_3)\text{O}_{22}(\text{OH})_2$                        | Rd | 2012 s.p. | Japan          | <i>American Mineralogist</i> <b>69</b> (1984), 465   | <i>Canadian Mineralogist</i> <b>46</b> (2008), 151                      |
| Pottsite                              | $(\text{Pb}_3\text{Bi})\text{Bi}(\text{VO}_4)_4 \cdot \text{H}_2\text{O}$                                       | A  | 1986-045  | USA            | <i>Mineralogical Magazine</i> <b>52</b> (1988), 389  | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 137             |
| Poubaite                              | $\text{PbBi}_2(\text{Se}, \text{Te}, \text{S})_4$   | A  | 1975-015  | Czech Republic | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1978), 9  | <i>Kristallografiya</i> <b>13</b> (1968), 258                           |
| Poudretteite                          | $\text{KNa}_2(\text{B}_3\text{Si}_{12})\text{O}_{30}$   | A  | 1986-028  | Canada         | <i>Canadian Mineralogist</i> <b>25</b> (1987), 763   |   |
| Poughite                              | $\text{Fe}^{3+}_2(\text{Te}^{4+}\text{O}_3)_2(\text{SO}_4) \cdot 3\text{H}_2\text{O}$                           | A  | 1966-048  | Mexico         | <i>American Mineralogist</i> <b>53</b> (1968), 1075  | <i>Journal of Geosciences</i> <b>56</b> (2011), 235                     |
| Povondraite                           | $\text{NaFe}^{3+}_3(\text{Fe}^{3+}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$ | Rn | 1990 s.p. | Bolivia        | <i>American Mineralogist</i> <b>64</b> (1979), 945   | <i>American Mineralogist</i> <b>78</b> (1993), 433                      |
| Powellite                             | $\text{Ca}(\text{MoO}_4)$   | G  | 1891      | USA            | <i>American Journal of Science</i> <b>41</b> (1891), 138   | <i>Journal of Physics and Chemistry of Solids</i> <b>46</b> (1985), 253 |
| Poyarkovite                           | $\text{Hg}_3\text{OCl}$   | A  | 1980-099  | Kyrgyzstan     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 501  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 119                      |
| Pradetite                             | $\text{CoCu}_4(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 9\text{H}_2\text{O}$                              | Rd | 1991-046  | France         | <i>Archives de Sciences de Genève</i> <b>48</b> (1995), 239  | <i>Archives de Sciences de Genève</i> <b>60</b> (2007), 51              |
| Prehnite                              | $\text{Ca}_2\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_2$  | G  | 1789      | South Africa   | <i>Bergmannisches Journal</i> <b>1</b> (1789), 369   | <i>European Journal of Mineralogy</i> <b>21</b> (2009), 561             |
| Preisingerite                         | $\text{Bi}_3\text{O}(\text{AsO}_4)_2(\text{OH})$  | A  | 1981-016  | Argentina      | <i>American Mineralogist</i> <b>67</b> (1982), 833   |   |
| Preiswerkite                          | $\text{NaAlMg}_2(\text{Si}_2\text{Al}_2)\text{O}_{10}(\text{OH})_2$   | A  | 1979-008  | Switzerland    | <i>American Mineralogist</i> <b>65</b> (1980), 1134  | <i>American Mineralogist</i> <b>78</b> (1993), 1290                     |
| Preobrazhenskite                      | $\text{Mg}_3\text{B}_{11}\text{O}_{15}(\text{OH})_9$  | G  | 1956      | Kazakhstan     | <i>Doklady Akademii Nauk SSSR</i> <b>111</b> (1956), 1087  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 387                      |
| Pretulite                             | $\text{Sc}(\text{PO}_4)$  | A  | 1996-024  | Austria        | <i>American Mineralogist</i> <b>83</b> (1998), 625   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1657                     |
| Prewittite                            | $\text{KPb}_{1.5}\text{ZnCu}_6\text{O}_2(\text{SeO}_3)_2\text{Cl}_{10}$   | A  | 2002-041  | Russia         | <i>American Mineralogist</i> <b>98</b> (2013), 463   |   |
| Přibramite                            | $\text{CuSbSe}_2$   | A  | 2015-127  | Czech Republic | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 653  |   |
| Priceite                              | $\text{Ca}_2\text{B}_5\text{O}_7(\text{OH})_5 \cdot \text{H}_2\text{O}$   | G  | 1873      | USA            | <i>American Journal of Science</i> <b>6</b> (1873), 126  | <i>Canadian Mineralogist</i> <b>49</b> (2011), 823                      |
| Priderite                             | $\text{K}(\text{Ti}_7\text{Fe}^{3+})\text{O}_{16}$  | G  | 1951      | Australia      | <i>Mineralogical Magazine</i> <b>29</b> (1951), 496  | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1056                   |

|                           |  |    |           |                                  |  |   |
|---------------------------|--|----|-----------|----------------------------------|--|---|
| Pringleite                | $\text{Ca}_9\text{B}_{26}\text{O}_{34}(\text{OH})_{24}\text{Cl}_4 \cdot 13\text{H}_2\text{O}$  | A  | 1992-010  | Canada                           | <i>Canadian Mineralogist</i> <b>31</b> (1993), 795   | <i>Canadian Mineralogist</i> <b>32</b> (1994), 1                                |
| Prismatine                | $(\text{Mg}, \text{Al}, \text{Fe})_6\text{Al}_4(\text{Si}, \text{Al})_4(\text{B}, \text{Si}, \text{Al})(\text{O}, \text{OH}, \text{F})_{22}$             | Rd | 1996 s.p. | Germany                          | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>38</b> (1886), 704                                 | <i>Mineralogical Magazine</i> <b>60</b> (1996), 483                             |
| Probertite                | $\text{NaCaB}_5\text{O}_7(\text{OH})_4 \cdot 3\text{H}_2\text{O}$  | G  | 1929      | USA                              | <i>American Mineralogist</i> <b>14</b> (1929), 427   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 3072                           |
| Proshchenkoite-(Y)        | $(\text{Y}, \text{REE}, \text{Ca}, \text{Na}, \text{Mn})_{15}\text{Fe}^{2+}\text{Ca}(\text{P}, \text{Si})\text{Si}_6\text{B}_3(\text{O}, \text{F})_{48}$ | A  | 2008-007  | Russia                           | <i>Mineralogical Magazine</i> <b>72</b> (2008), 1071   |   |
| Prosopite                 | $\text{CaAl}_2(\text{F}, \text{OH})_8$   | G  | 1853      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>90</b> (1853), 315   | <i>Journal of Structural Chemistry</i> <b>14</b> (1973), 345                    |
| Prosperite                | $\text{Ca}_2\text{Zn}_4(\text{AsO}_4)_4 \cdot \text{H}_2\text{O}$  | A  | 1978-028  | Namibia                          | <i>Canadian Mineralogist</i> <b>17</b> (1979), 87  | <i>Zeitschrift für Kristallographie</i> <b>158</b> (1982), 33                   |
| Protasite                 | $\text{Ba}(\text{UO}_2)_3\text{O}_3(\text{OH})_2 \cdot 3\text{H}_2\text{O}$  | A  | 1984-001  | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>50</b> (1986), 125  | <i>American Mineralogist</i> <b>72</b> (1987), 1230                             |
| Proto-anthophyllite       | $\square\text{Mg}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Japan                            | <i>American Mineralogist</i> <b>88</b> (2003), 1718  |   |
| Protochabournéite         | $\text{Ti}_2\text{Pb}(\text{Sb}, \text{As})_{10}\text{S}_{17}$   | A  | 2011-054  | Italy                            | <i>Canadian Mineralogist</i> <b>51</b> (2013), 475   |   |
| Protoenstatite            | $\text{Mg}_2\text{Si}_2\text{O}_6$   | A  | 2016-117  | USA                              | <i>American Mineralogist</i> <b>102</b> (2017), 2146   |   |
| Proto-ferro-anthophyllite | $\square\text{Fe}^{2+}_2\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | USA                              | <i>Physics and Chemistry of Minerals</i> <b>25</b> (1988), 366   | <i>Journal of Mineralogical and Petrological Sciences</i> <b>97</b> (2002), 127 |
| Proto-ferro-suenoite      | $\square\text{Mn}^{2+}_2\text{Fe}^{2+}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Japan                            | <i>Physics and Chemistry of Minerals</i> <b>25</b> (1998), 366   | <i>Journal of Mineralogical and Petrological Sciences</i> <b>97</b> (2002), 127 |
| Proudite                  | $\text{Cu}_2\text{Pb}_{16}\text{Bi}_{20}(\text{S}, \text{Se})_{47}$  | A  | 1975-028  | Australia                        | <i>American Mineralogist</i> <b>61</b> (1976), 839   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 25                               |
| Proustite                 | $\text{Ag}_3\text{AsS}_3$  | G  | 1832      | unknown                          | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 445   | <i>Phase Transition</i> <b>6</b> (1985), 1                                      |
| Proxidecagonite           | $\text{Al}_{34}\text{Ni}_9\text{Fe}_2$   | A  | 2018-038  | Russia (meteorite)               | <i>Scientific Reports</i> <b>8</b> (2018), 16271   |   |
| Przhevalskite             | $\text{Pb}(\text{UO}_2)_2(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$  | Q  | 1946      | Tajikistan                       | original paper?  |   |
| Pseudoboleite             | $\text{Pb}_{31}\text{Cu}_{24}\text{Cl}_{62}(\text{OH})_{48}$   | Rn | 2007 s.p. | Mexico                           | <i>Bulletin du Muséum d'Histoire Naturelle</i> <b>1</b> (1895), 39   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 113                   |
| Pseudobrookite            | $(\text{Fe}^{3+}_2\text{Ti})\text{O}_5$  | Rd | 1988 s.p. | Romania                          | <i>Mineralogische und Petrographische Mitteilungen</i> <b>1</b> (1878), 77                                       | <i>American Mineralogist</i> <b>84</b> (1999), 130                              |
| Pseudocotunnite           | $\text{K}_2\text{PbCl}_4$ (?)  | Q  | 1873      | Italy                            | <i>Rendiconti della Reale Accademia delle Scienze Fisiche e Matematiche di Napoli, Ser. I</i> <b>6</b> (1873), 1 | <i>Rendiconti della Società Mineralogica Italiana</i> <b>8</b> (1952), 58       |
| Pseudograndreefite        | $\text{Pb}_6(\text{SO}_4)\text{F}_{10}$  | A  | 1988-017  | USA                              | <i>American Mineralogist</i> <b>74</b> (1989), 927   |   |
| Pseudojohannite           | $\text{Cu}_3(\text{OH})_2[(\text{UO}_2)_4\text{O}_4(\text{SO}_4)_2] \cdot 12\text{H}_2\text{O}$  | A  | 2000-019  | Czech Republic                   | <i>American Mineralogist</i> <b>91</b> (2006), 929   | <i>American Mineralogist</i> <b>97</b> (2012), 1796                             |
| Pseudolaueite             | $\text{Mn}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$   | G  | 1956      | Germany                          | <i>Naturwissenschaften</i> <b>43</b> (1956), 128   | <i>American Mineralogist</i> <b>54</b> (1969), 1312                             |
| Pseudolyonsite            | $\text{Cu}_3(\text{VO}_4)_2$   | A  | 2009-062  | Russia                           | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 475  |   |
| Pseudomalachite           | $\text{Cu}_5(\text{PO}_4)_2(\text{OH})_4$  | G  | 1813      | Germany                          | Handbuch der Mineralogie, Vol. 3. Vandenhoek und Ruprecht, Göttingen (1813), 1036                                | <i>American Mineralogist</i> <b>62</b> (1977), 1042                             |
| Pseudorutile              | $\text{Fe}^{3+}_2\text{Ti}^{4+}_3\text{O}_9$   | Rd | 1994 s.p. | Australia                        | <i>Nature</i> <b>211</b> (1966), 179   | <i>Mineralogical Magazine</i> <b>58</b> (1994), 597                             |

|                                 |   |    |           |                |  |  |
|---------------------------------|---|----|-----------|----------------|--|--|
| Pseudosinhalite                 | $Mg_2Al_3B_2O_9(OH)$  | A  | 1997-014  | Russia         | <i>Contributions to Mineralogy and Petrology</i> <b>133</b> (1998), 382                    | <i>Contributions to Mineralogy and Petrology</i> <b>128</b> (1997), 261      |
| Pseudowollastonite              | $CaSiO_3$   | A  | 1962 s.p. | unknown        | original paper?  | <i>American Mineralogist</i> <b>84</b> (1999), 929                           |
| Pucherite                       | $Bi(VO_4)$  | G  | 1871      | Germany        | <i>Journal für Praktische Chemie</i> <b>117</b> (1871), 227                                | <i>Zeitschrift für Kristallographie</i> <b>169</b> (1984), 289               |
| Pumpellyite-(Al)                | $Ca_2Al_3(Si_2O_7)(SiO_4)(OH, O)_2 \cdot H_2O$                                | A  | 2005-016  | Belgium        | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 247                                |  |
| Pumpellyite-(Fe <sup>2+</sup> ) | $Ca_2Fe^{2+}Al_2(Si_2O_7)(SiO_4)(OH, O)_2 \cdot H_2O$                         | Rn | 1973 s.p. | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>165</b> (1965), 136                                   |  |
| Pumpellyite-(Fe <sup>3+</sup> ) | $Ca_2(Fe^{3+}, Mg)Al_2(Si_2O_7)(SiO_4)(OH, O)_2 \cdot H_2O$                   | Rn | 1973 s.p. | Italy          | <i>Periodico di Mineralogia</i> <b>41</b> (1972), 273                                      |  |
| Pumpellyite-(Mg)                | $Ca_2MgAl_2(Si_2O_7)(SiO_4)(OH)_2 \cdot H_2O$                                 | Rn | 1973 s.p. | USA            | <i>American Mineralogist</i> <b>10</b> (1925), 412   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 333                  |
| Pumpellyite-(Mn <sup>2+</sup> ) | $Ca_2Mn^{2+}Al_2(Si_2O_7)(SiO_4)(OH)_2 \cdot H_2O$                            | Rn | 1980-006  | Japan          | <i>Bulletin de Minéralogie</i> <b>104</b> (1981), 396                                      |  |
| Puninite                        | $Na_2Cu_3O(SO_4)_3$   | A  | 2015-012  | Russia         | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 499                                |  |
| Punkaruavite                    | $Li\{Ti_2(OH)_2[Si_4O_{11}(OH)]\} \cdot H_2O$                                 | A  | 2008-018  | Russia         | <i>Canadian Mineralogist</i> <b>48</b> (2010), 41  |  |
| Purpurite                       | $(Mn^{3+}, Fe^{3+})(PO_4)$  | G  | 1905      | USA            | <i>American Journal of Science</i> <b>20</b> (1905), 146                                   | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>60</b> (1938), 67 |
| Pushcharovskite                 | $K_{0.6}Cu_{18}[AsO_2(OH)_2]_4[AsO_3OH]_{10}(AsO_4)(OH)_{9.6} \cdot 18.6H_2O$ | A  | 1995-048  | France         | <i>Archives de Sciences de Genève</i> <b>50</b> (1997), 177                                | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 95                   |
| Putnisite                       | $SrCa_4Cr^{3+}_8(CO_3)_8(SO_4)(OH)_{16} \cdot 25H_2O$                         | A  | 2011-106  | Australia      | <i>Mineralogical Magazine</i> <b>78</b> (2014), 131  |  |
| Putoranite                      | $Cu_{1.1}Fe_{1.2}S_2$   | A  | 1979-054  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 335          |  |
| Putzite                         | $(Cu, Ag)_8GeS_6$   | A  | 2002-024  | Argentina      | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1757  |  |
| Pyatenkoite-(Y)                 | $Na_5YTiSi_6O_{18} \cdot 6H_2O$   | A  | 1995-034  | Russia         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(4)</b> (1996), 72      | <i>Doklady Chemistry</i> <b>351</b> (1996), 283                              |
| Pyracmonite                     | $(NH_4)_3Fe(SO_4)_3$  | A  | 2008-029  | Italy          | <i>Canadian Mineralogist</i> <b>48</b> (2010), 307   |  |
| Pyrargyrite                     | $Ag_3SbS_3$   | G  | 1831      | unknown        | Handbuch der Mineralogie. Schrag, Nürnberg (1831), 388                                     | <i>Journal of Geosciences</i> <b>55</b> (2010), 161                          |
| Pyrite                          | $FeS_2$   | G  | ?         | unknown        | original paper?  | <i>American Mineralogist</i> <b>62</b> (1977), 1168                          |
| Pyroaurite                      | $Mg_6Fe^{3+}_2(CO_3)(OH)_{16} \cdot 4H_2O$                                    | Rd | 1865      | Sweden         | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> (1865), 605               | <i>Mineralogical Magazine</i> <b>36</b> (1967), 465                          |
| Pyrobelonite                    | $PbMn^{2+}VO_4(OH)$   | G  | 1919      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>41</b> (1919), 433              | <i>Acta Crystallographica</i> <b>E57</b> (2001), i119                        |
| Pyrochroite                     | $Mn^{2+}(OH)_2$   | G  | 1864      | Sweden         | <i>Annalen der Physik und Chemie</i> <b>122</b> (1864), 181                                | <i>Physics and Chemistry of Minerals</i> <b>25</b> (1998), 130               |
| Pyrolusite                      | $MnO_2$   | A  | 1982 s.p. | Czech Republic | <i>Edinburgh Journal of Science</i> <b>9</b> (1827), 304                                   | <i>Izvestiya Akademii Nauk SSSR</i> <b>15</b> (1951), 179                    |
| Pyromorphite                    | $Pb_5(PO_4)_3Cl$  | G  | 1813      | Germany        | Handbuch der Mineralogie, Vol. 3. Vandenhoek und Ruprecht, Göttingen (1813), 1090          | <i>American Mineralogist</i> <b>97</b> (2012), 415                           |
| Pyrope                          | $Mg_3Al_2(SiO_4)_3$   | G  | 1803      | Czech Republic | Handbuch der Mineralogie nach A. G. Werner. Siegfried Lebrécht Crusius, Leipzig (1803), 62 | <i>American Mineralogist</i> <b>56</b> (1971), 791                           |
| Pyrophanite                     | $Mn^{2+}TiO_3$  | G  | 1890      | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>12</b> (1890), 567              | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1099                          |

|                                |   |    |           |                     |  |   |
|--------------------------------|---|----|-----------|---------------------|--|---|
| Pyrophyllite                   | $\text{Al}_2\text{Si}_4\text{O}_{10}(\text{OH})_2$  | G  | 1829      | Russia              | <i>Annalen der Physik und Chemie</i> <b>15</b> (1829), 592   | <i>American Mineralogist</i> <b>66</b> (1981), 350                            |
| Pyrosmalite-(Fe)               | $\text{Fe}^{2+}_8\text{Si}_6\text{O}_{15}(\text{OH})_{10}$  | Rn | 1987 s.p. | Sweden              | <i>Mineralogical Magazine</i> <b>51</b> (1987), 174  |   |
| Pyrosmalite-(Mn)               | $\text{Mn}^{2+}_8\text{Si}_6\text{O}_{15}(\text{OH},\text{Cl})_{10}$  | Rn | 2007 s.p. | USA                 | <i>American Mineralogist</i> <b>38</b> (1953), 755   | <i>Canadian Mineralogist</i> <b>21</b> (1983), 1                              |
| Pyrostilpnite                  | $\text{Ag}_3\text{SbS}_3$   | G  | 1868      | Germany             | A System of Mineralogy, 5th ed. Wiley, New York (1868)   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1968), 145                 |
| Pyroxferroite                  | $\text{Fe}^{2+}\text{SiO}_3$  | A  | 1970-001  | Moon                | <i>Geochimica et Cosmochimica Acta, Suppl. - Proceedings of the Apollo XI Lunar Science Conference</i> <b>1</b> (1970), 65 | <i>Proceedings of the Second Lunar Science Conference</i> <b>1</b> (1971), 47 |
| Pyroxmangite                   | $\text{Mn}^{2+}\text{SiO}_3$  | G  | 1913      | USA                 | <i>American Journal of Science</i> <b>36</b> (1913), 169   | <i>American Mineralogist</i> <b>93</b> (2008), 1921                           |
| Pyrrhotite                     | $\text{Fe}_7\text{S}_8$   | G  | 1835      | Japan               | <i>Journal für Praktische Chemie</i> <b>4</b> (1835), 249  | <i>American Mineralogist</i> <b>95</b> (2010), 148                            |
| Qandilite                      | $(\text{Mg},\text{Fe}^{3+})_2(\text{Ti},\text{Fe}^{3+},\text{Al})\text{O}_4$  | A  | 1980-046  | Iraq                | <i>Mineralogical Magazine</i> <b>49</b> (1985), 739  | <i>Acta Crystallographica</i> <b>B45</b> (1989), 542                          |
| Qaqarsukite-(Ce)               | $\text{BaCe}(\text{CO}_3)_2\text{F}$  | A  | 2004-019  | Denmark (Greenland) | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1137  |   |
| Qatranaitite                   | $\text{CaZn}_2(\text{OH})_6(\text{H}_2\text{O})_2$  | A  | 2016-024  | Jordan              | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915  |   |
| Qilianshanite                  | $\text{NaH}_4(\text{CO}_3)(\text{BO}_3)\cdot 2\text{H}_2\text{O}$   | A  | 1992-008  | China               | <i>Acta Mineralogica Sinica</i> <b>13</b> (1993), 97   | <i>Geological Review</i> <b>40</b> (1994), 347                                |
| Qingheiite                     | $\text{Na}_2\text{MnMgAl}(\text{PO}_4)_3$   | A  | 1981-051  | China               | <i>Acta Mineralogica Sinica</i> <b>3</b> (1983), 161   | <i>Scientia Sinica</i> <b>B26</b> (1983), 876                                 |
| Qingheiite-(Fe <sup>2+</sup> ) | $\text{Na}_2\text{Fe}^{2+}\text{MgAl}(\text{PO}_4)_3$   | A  | 2009-076  | Brazil              | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 459  |   |
| Qingsongite                    | BN  | A  | 2013-030  | China               | <i>American Mineralogist</i> <b>99</b> (2014), 764   |   |
| Qitianlingite                  | $\text{Fe}^{2+}_2\text{Nb}_2\text{W}^{6+}\text{O}_{10}$   | A  | 1983-075  | China               | <i>Acta Mineralogica Sinica</i> <b>5</b> (1985), 193   | <i>Kexue Tongbao</i> <b>33</b> (1988), 856                                    |
| Quadratite                     | $\text{AgCdAsS}_3$  | A  | 1994-038  | Switzerland         | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>78</b> (1998), 489                                | <i>American Mineralogist</i> <b>98</b> (2013), 236                            |
| Quadridavynite                 | $[(\text{Na},\text{K})_6\text{Cl}_2][\text{Ca}_2\text{Cl}_2][(\text{Si}_6\text{Al}_6\text{O}_{24})]$  | A  | 1990-054  | Italy               | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 481   |   |
| Quadruphite                    | $\text{Na}_6\text{Na}_2(\text{CaNa})_2\text{Na}_2\text{Ti}_2\text{Na}_2\text{Ti}_2(\text{Si}_2\text{O}_7)_2(\text{PO}_4)_4\text{O}_4\text{F}_2$ | Rd | 1990-026  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 105                                     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1275                           |
| Quartz                         | $\text{SiO}_2$  | A  | 1967 s.p. | unknown             | original paper?  | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 63                     |
| Queitite                       | $\text{Zn}_2\text{Pb}_4(\text{Si}_2\text{O}_7)(\text{SiO}_4)(\text{SO}_4)$  | A  | 1978-029  | Namibia             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 203  | <i>Zeitschrift für Kristallographie</i> <b>151</b> (1980), 287                |
| Quenselite                     | $\text{PbMn}^{3+}\text{O}_2(\text{OH})$   | G  | 1925      | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>47</b> (1925), 377  | <i>Zeitschrift für Kristallographie</i> <b>134</b> (1971), 321                |
| Quenstedtite                   | $\text{Fe}^{3+}_2(\text{SO}_4)_3\cdot 11\text{H}_2\text{O}$   | G  | 1889      | Chile               | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>15</b> (1889), 11                                 | <i>American Mineralogist</i> <b>59</b> (1974), 582                            |
| Quetzalcoatlite                | $\text{Cu}^{2+}_3\text{Zn}_6\text{Te}^{6+}_2\text{O}_{12}(\text{OH})_6\cdot (\text{Ag},\text{Pb},\square)\text{Cl}$                             | A  | 1973-010  | Mexico              | <i>Mineralogical Magazine</i> <b>39</b> (1973), 261  | <i>American Mineralogist</i> <b>85</b> (2000), 604                            |
| Quijarroite                    | $\text{Cu}_6\text{HgPb}_2\text{Bi}_4\text{Se}_{12}$   | A  | 2016-052  | Bolivia             | <i>Minerals</i> <b>6</b> (2016), 123   |   |
| Quintinite                     | $\text{Mg}_4\text{Al}_2(\text{OH})_{12}(\text{CO}_3)\cdot 3\text{H}_2\text{O}$  | A  | 1992-028  | Canada              | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1541  | <i>Mineralogical Magazine</i> <b>82</b> (2018), 329                           |
| Qusongite                      | WC  | A  | 2007-034  | China               | <i>American Mineralogist</i> <b>94</b> (2009), 387   | <i>Acta Crystallographica</i> <b>14</b> (1961), 200                           |
| Raadeite                       | $\text{Mg}_7(\text{PO}_4)_2(\text{OH})_8$   | A  | 1996-034  | Norway              | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 319  |   |
| Rabbittite                     | $\text{Ca}_3\text{Mg}_3(\text{UO}_2)_2(\text{CO}_3)_6(\text{OH})_4\cdot 18\text{H}_2\text{O}$   | G  | 1955      | USA                 | <i>American Mineralogist</i> <b>40</b> (1955), 201   |   |

|                 |   |   |          |                                  |  |   |
|-----------------|---|---|----------|----------------------------------|--|---|
| Rabejacite      | $\text{Ca}_2[(\text{UO}_2)_4\text{O}_4(\text{SO}_4)_2](\text{H}_2\text{O})_8$   | A | 1992-043 | France                           | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 873   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 1249                    |
| Raberite        | $\text{Ti}_5\text{Ag}_4\text{As}_6\text{SbS}_{15}$  | A | 2012-017 | Switzerland                      | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1153   |   |
| Radhakrishnaite | $\text{PbTe}_3(\text{Cl,S})_2$  | A | 1983-082 | India                            | <i>Canadian Mineralogist</i> <b>23</b> (1985), 501   |   |
| Radovanite      | $\text{Cu}_2\text{Fe}^{3+}[\text{As}^{5+}\text{O}_4][\text{As}^{3+}\text{O}_2(\text{OH})]_2 \cdot \text{H}_2\text{O}$                                       | A | 2000-001 | France                           | <i>Archives de Sciences de Genève</i> <b>55</b> (2002), 47   |   |
| Radtkeite       | $\text{Hg}_3\text{S}_2\text{Cl}$  | A | 1989-030 | USA                              | <i>American Mineralogist</i> <b>76</b> (1991), 1715  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 87                       |
| Raguinite       | $\text{TlFeS}_2$  | A | 1968-022 | Macedonia                        | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>92</b> (1969), 38 | <i>Journal of Physics and Chemistry of Solids</i> <b>50</b> (1989), 297 |
| Raisaite        | $\text{CuMg}[\text{Te}^{6+}\text{O}_4(\text{OH})_2] \cdot 6\text{H}_2\text{O}$  | A | 2014-046 | Russia                           | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 459  |   |
| Raite           | $\text{Na}_3\text{Mn}^{2+}_3\text{Ti}_{0.25}(\text{Si}_8\text{O}_{20})(\text{OH})_2 \cdot 10\text{H}_2\text{O}$   | A | 1972-010 | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 54                   | <i>Crystallography Reports</i> <b>44</b> (1999), 565                    |
| Rajite          | $\text{CuTe}^{4+}_2\text{O}_5$  | A | 1978-039 | USA                              | <i>Mineralogical Magazine</i> <b>43</b> (1979), 91   | <i>Acta Crystallographica</i> <b>B29</b> (1973), 963                    |
| Rakovanite      | $\text{Na}_3[\text{H}_3[\text{V}_{10}\text{O}_{28}]] \cdot 15\text{H}_2\text{O}$  | A | 2010-052 | USA                              | <i>Canadian Mineralogist</i> <b>49</b> (2011), 595   |   |
| Ralphcannonite  | $\text{AgZn}_2\text{TlAs}_2\text{S}_6$  | A | 2014-077 | Switzerland                      | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1089   |   |
| Ramanite-(Cs)   | $\text{CsB}_5\text{O}_6(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A | 2007-007 | Italy                            | <i>American Mineralogist</i> <b>93</b> (2008), 1034  | <i>Acta Crystallographica</i> <b>C40</b> (1984), 1114                   |
| Ramanite-(Rb)   | $\text{RbB}_5\text{O}_6(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A | 2007-006 | Italy                            | <i>American Mineralogist</i> <b>93</b> (2008), 1034  | <i>Acta Crystallographica</i> <b>C40</b> (1984), 217                    |
| Ramazzoite      | $[\text{Mg}_8\text{Cu}_{12}(\text{PO}_4)(\text{CO}_3)_4(\text{OH})_{24}(\text{H}_2\text{O})_{20}][(\text{H}_{0.33}\text{SO}_4)_3(\text{H}_2\text{O})_{36}]$ | A | 2017-090 | Italy                            | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 827  |   |
| Rambergite      | $\text{MnS}$  | A | 1995-028 | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>118</b> (1996), A53                     | <i>Acta Crystallographica</i> <b>E57</b> (2001), i92                    |
| Ramdohrite      | $\text{Pb}_{5.9}\text{Fe}_{0.1}\text{Mn}_{0.1}\text{In}_{0.1}\text{Cd}_{0.2}\text{Ag}_{2.8}\text{Sb}_{10.8}\text{S}_{24}$                                   | G | 1930     | Bolivia                          | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> <b>8</b> (1930), 365               | <i>American Mineralogist</i> <b>98</b> (2013), 773                      |
| Rameauite       | $\text{K}_2\text{Ca}(\text{UO}_2)_6\text{O}_6(\text{OH})_4 \cdot 6\text{H}_2\text{O}$   | A | 1971-045 | France                           | <i>Mineralogical Magazine</i> <b>38</b> (1972), 781  | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 959             |
| Ramikite-(Y)    | $\text{Li}_4(\text{Na,Ca})_{12}(\text{Y,Ca,REE})_6\text{Zr}_6(\text{PO}_4)_{12}(\text{CO}_3)_4\text{O}_4[(\text{OH}),\text{F}]_4$                           | A | 2009-021 | Canada                           | <i>Canadian Mineralogist</i> <b>51</b> (2013), 569   |   |
| Rammelsbergite  | $\text{NiAs}_2$   | G | 1845     | Germany                          | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559                     | <i>Acta Chemica Scandinavica</i> <b>A33</b> (1979), 469                 |
| Ramsbeckite     | $\text{Cu}_{15}(\text{SO}_4)_4(\text{OH})_{22} \cdot 6\text{H}_2\text{O}$   | A | 1984-067 | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 550                                      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 38            |
| Ramsdellite     | $\text{MnO}_2$  | G | 1943     | USA                              | <i>Economic Geology</i> <b>38</b> (1943), 269  | <i>American Mineralogist</i> <b>89</b> (2004), 969                      |
| Ranciéite       | $(\text{Ca,Mn}^{2+})_{0.2}(\text{Mn}^{4+},\text{Mn}^{3+})\text{O}_2 \cdot 0.6\text{H}_2\text{O}$  | G | 1859     | France                           | Cours de Minéralogie, vol. 2. Masson, Toulouse (1859), 329   | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 163             |
| Rankachite      | $\text{Ca}_{0.5}(\text{V}^{4+},\text{V}^{5+})(\text{W}^{6+},\text{Fe}^{3+})_2\text{O}_8(\text{OH}) \cdot 2\text{H}_2\text{O}$                               | A | 1983-044 | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 289                                      |   |
| Rankamaite      | $(\text{Na,K})_3(\text{Ta,Nb,Al})_{11}(\text{O,OH})_{31}$   | A | 1968-002 | Democratic Republic of the Congo | <i>Bulletin of the Geological Society of Finland</i> <b>41</b> (1969), 47                          | <i>American Mineralogist</i> <b>96</b> (2011), 1455                     |
| Rankinite       | $\text{Ca}_3\text{Si}_2\text{O}_7$  | G | 1942     | United Kingdom                   | <i>Mineralogical Magazine</i> <b>26</b> (1942), 190  | <i>Mineralogical Journal</i> <b>8</b> (1976), 240                       |
| Ransomite       | $\text{CuFe}^{3+}_2(\text{SO}_4)_4 \cdot 6\text{H}_2\text{O}$   | G | 1928     | USA                              | <i>American Mineralogist</i> <b>13</b> (1928), 203   | <i>American Mineralogist</i> <b>55</b> (1970), 729                      |



|                |   |    |           |                                  |   |   |
|----------------|---|----|-----------|----------------------------------|---|---|
| Ranunculite    | $\text{Al}(\text{UO}_2)(\text{PO}_3\text{OH})(\text{OH})_3 \cdot 4\text{H}_2\text{O}$   | A  | 1978-067  | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>43</b> (1979), 321   |   |
| Rapidcreekite  | $\text{Ca}_2(\text{SO}_4)(\text{CO}_3) \cdot 4\text{H}_2\text{O}$   | A  | 1984-035  | Canada                           | <i>Canadian Mineralogist</i> <b>24</b> (1986), 51   | <i>Canadian Mineralogist</i> <b>34</b> (1996), 99   |
| Rappoldite     | $\text{PbCo}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$   | A  | 1998-015  | Germany                          | <i>Mineralogical Magazine</i> <b>64</b> (2000), 1109  |   |
| Raslakite      | $\text{Na}_{15}\text{Ca}_3\text{Fe}_3(\text{Na,Zr})_3\text{Zr}_3(\text{Si,Nb})\text{Si}_{25}\text{O}_{73}(\text{OH,H}_2\text{O})_3(\text{Cl,OH})$ | A  | 2002-067  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(5)</b> (2003), 22               | <i>Doklady Chemistry</i> <b>374</b> (2000), 195   |
| Raspite        | $\text{Pb}(\text{WO}_4)$  | G  | 1897      | Australia                        | <i>Annalen des Kaiserlich-Königlichen Naturhistorischen Hofmuseums</i> <b>12</b> (1897), 33         | <i>American Mineralogist</i> <b>99</b> (2014), 1507   |
| Rastsvetaevite | $\text{Na}_{27}\text{K}_8\text{Ca}_{12}\text{Fe}_3\text{Zr}_6\text{Si}_{52}\text{O}_{144}(\text{OH,O})_6\text{Cl}_2$                              | A  | 2000-028  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(1)</b> (2006), 49                  |   |
| Rasvumite      | $\text{KFe}_2\text{S}_3$  | A  | 1970-028  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>99</b> (1970), 712                    | <i>American Mineralogist</i> <b>65</b> (1980), 477  |
| Rathite        | $\text{Ag}_2\text{Pb}_{12-x}\text{Ti}_{x/2}\text{As}_{18+x/2}\text{S}_{40}$   | G  | 1896      | Switzerland                      | <i>Zeitschrift für Kristallographie</i> <b>26</b> (1896), 593                                       | <i>Minerals</i> <b>8</b> (2018), 466  |
| Rathite-IV     | $\text{Pb}_3\text{As}_5\text{S}_{10}$   | Q  | 1964      | Switzerland                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>44</b> (1964), 5           |   |
| Rauchite       | $\text{Ni}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 10\text{H}_2\text{O}$   | A  | 2010-037  | Russia                           | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 913   |   |
| Rauenthalite   | $\text{Ca}_3(\text{AsO}_4)_2 \cdot 10\text{H}_2\text{O}$  | A  | 1964-007  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>87</b> (1964), 169 | <i>Acta Crystallographica</i> <b>B39</b> (1983), 4  |
| Rauvite        | $\text{Ca}(\text{UO}_2)_2\text{V}_{10}\text{O}_{28} \cdot 16\text{H}_2\text{O}$   | Q  | 1922      | USA                              | <i>Engineering and Mining Journal - Press</i> <b>114</b> (1922), 272                                |   |
| Ravatite       | $\text{C}_{14}\text{H}_{10}$  | A  | 1992-019  | Tajikistan                       | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 699  | <i>Acta Crystallographica</i> <b>B46</b> (1990), 830  |
| Raygrantite    | $\text{Pb}_{10}\text{Zn}(\text{SO}_4)_6(\text{SiO}_4)_2(\text{OH})_2$   | A  | 2013-001  | USA                              | <i>Canadian Mineralogist</i> <b>54</b> (2016), 625  |   |
| Rayite         | $(\text{Ag,Tl})_2\text{Pb}_8\text{Sb}_8\text{S}_{21}$   | A  | 1982-029  | India                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 296                                       |   |
| Realgar        | $\text{AsS}$  | G  | 1747      | unknown                          | <i>Mineralogia, eller Mineralriktet. Salvius, Stockholm</i> (1747)                                  | <i>American Mineralogist</i> <b>94</b> (2009), 451  |
| Rebulite       | $\text{Tl}_5\text{Sb}_5\text{As}_8\text{S}_{22}$  | Rd | 2008 s.p. | Macedonia                        | <i>Zeitschrift für Kristallographie</i> <b>160</b> (1982), 109                                      |   |
| Rectorite      | $(\text{Na,Ca})\text{Al}_4(\text{Si,Al})_8\text{O}_{20}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A  | 1967 s.p. | USA                              | <i>American Journal of Science</i> <b>42</b> (1891), 11   | <i>American Mineralogist</i> <b>51</b> (1966), 1035   |
| Redcanyonite   | $(\text{NH}_4)_2\text{Mn}[(\text{UO}_2)_4\text{O}_4(\text{SO}_4)_2](\text{H}_2\text{O})_4$  | A  | 2016-082  | USA                              | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315                          | <a href="https://doi.org/10.1180/minmag.2017.081.094">https://doi.org/10.1180/minmag.2017.081.094</a> |
| Reddingite     | $\text{Mn}^{2+}_3(\text{PO}_4)_2 \cdot 3\text{H}_2\text{O}$   | Rd | 1980 s.p. | USA                              | <i>American Journal of Science and Arts</i> <b>116</b> (1878), 33                                   | <i>Mineralogical Magazine</i> <b>43</b> (1980), 789   |
| Redgillite     | $\text{Cu}_6(\text{SO}_4)(\text{OH})_{10} \cdot \text{H}_2\text{O}$   | A  | 2004-016  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>69</b> (2005), 973   |   |
| Redingtonite   | $\text{Fe}^{2+}\text{Cr}_2(\text{SO}_4)_4 \cdot 22\text{H}_2\text{O}$   | Q  | 1888      | USA                              | <i>U.S. Geological Survey Monograph</i> <b>13</b> (1888), 279                                       |   |
| Redledgeite    | $\text{Ba}(\text{Ti}_6\text{Cr}^{3+}_2)\text{O}_{16}$   | A  | 1967 s.p. | USA                              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1961), 107                                       | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1531   |

|                   |  |    |           |                                  |  |   |
|-------------------|--|----|-----------|----------------------------------|--|---|
| Redondite         | $\text{Al}(\text{PO}_4) \cdot 2\text{H}_2\text{O}$   | Q  | 1967 s.p. | United Kingdom                   | <i>American Journal of Science</i> <b>47</b> (1869), 428   |   |
| Reederite-(Y)     | $(\text{Na}, \text{Mn})_{15}\text{Y}_2(\text{CO}_3)_9(\text{SO}_3\text{F})\text{Cl}$   | A  | 1994-012  | Canada                           | <i>American Mineralogist</i> <b>80</b> (1995), 1059  |   |
| Reedmergnerite    | $\text{NaBSi}_3\text{O}_8$   | A  | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>45</b> (1960), 188   | <i>American Mineralogist</i> <b>84</b> (1999), 333                                      |
| Reevesite         | $\text{Ni}_6\text{Fe}^{3+}_2(\text{CO}_3)(\text{OH})_{16} \cdot 4\text{H}_2\text{O}$   | A  | 1966-025  | Australia                        | <i>American Mineralogist</i> <b>52</b> (1967), 1190  | <i>Clay Minerals</i> <b>33</b> (1998), 285  |
| Refikite          | $\text{C}_{20}\text{H}_{34}\text{O}_2$   | G  | 1852      | Italy                            | <i>Journal des Connaissances Médicales Pratique et de Pharmacologie</i> (1852), 52   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 59                                      |
| Reichenbachite    | $\text{Cu}_5(\text{PO}_4)_2(\text{OH})_4$  | A  | 1985-044  | Germany                          | <i>American Mineralogist</i> <b>72</b> (1987), 404   | <i>American Mineralogist</i> <b>62</b> (1977), 115                                      |
| Reidite           | $\text{Zr}(\text{SiO}_4)$  | A  | 2001-013  | USA / Barbados                   | <i>American Mineralogist</i> <b>87</b> (2002), 562   |   |
| Reinerite         | $\text{Zn}_3(\text{AsO}_3)_2$  | G  | 1958      | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1958), 160  | <i>American Mineralogist</i> <b>62</b> (1977), 1129                                     |
| Reinhardbraunsite | $\text{Ca}_5(\text{SiO}_4)_2(\text{OH})_2$   | A  | 1980-032  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 119  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 137 |
| Rémondite-(Ce)    | $\text{Na}_3(\text{Ce}, \text{La}, \text{Ca}, \text{Na}, \text{Sr})_3(\text{CO}_3)_5$  | Rn | 1987-035  | Cameroon                         | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>307</b> (1988), 915   | <i>Acta Crystallographica</i> <b>C45</b> (1989), 185                                    |
| Rémondite-(La)    | $\text{Na}_3(\text{La}, \text{Ce}, \text{Ca})_3(\text{CO}_3)_5$  | Rn | 1999-006  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>129(1)</b> (2000), 53  |   |
| Renardite         | $\text{Pb}(\text{UO}_2)_4(\text{PO}_4)_2(\text{OH})_4 \cdot 7\text{H}_2\text{O}$   | Q  | 1928      | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie</i> <b>51</b> (1928), 247   | <i>American Mineralogist</i> <b>39</b> (1954), 448                                      |
| Rengeite          | $\text{Sr}_4\text{Ti}_4\text{ZrO}_8(\text{Si}_2\text{O}_7)_2$  | A  | 1998-055  | Japan                            | <i>Mineralogical Magazine</i> <b>65</b> (2001), 111  | <i>Journal of Mineralogical and Petrological Sciences</i> <b>97</b> (2002), 7           |
| Renierite         | $(\text{Cu}^{1+}, \text{Zn})_{11}\text{Fe}_4(\text{Ge}^{4+}, \text{As}^{5+})_2\text{S}_{16}$   | Rn | 2007 s.p. | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>72</b> (1948), 19   | <i>American Mineralogist</i> <b>74</b> (1989), 1177                                     |
| Reppiaite         | $\text{Mn}^{2+}_5(\text{VO}_4)_2(\text{OH})_4$   | A  | 1991-007  | Italy                            | <i>Zeitschrift für Kristallographie</i> <b>201</b> (1992), 223   | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 77                               |
| Retgersite        | $\text{Ni}(\text{SO}_4) \cdot 6\text{H}_2\text{O}$   | G  | 1949      | Peru                             | <i>American Mineralogist</i> <b>34</b> (1949), 188   | <i>Acta Crystallographica</i> <b>B43</b> (1987), 319                                    |
| Retzian-(Ce)      | $\text{Mn}^{2+}_2\text{Ce}(\text{AsO}_4)(\text{OH})_4$   | Rd | 1982 s.p. | Sweden                           | <i>Bulletin of the Geological Institute of Upsala</i> <b>2</b> (1894), 54  |   |
| Retzian-(La)      | $\text{Mn}^{2+}_2\text{La}(\text{AsO}_4)(\text{OH})_4$   | A  | 1983-077  | USA                              | <i>Mineralogical Magazine</i> <b>48</b> (1984), 533  |   |
| Retzian-(Nd)      | $\text{Mn}^{2+}_2\text{Nd}(\text{AsO}_4)(\text{OH})_4$   | A  | 1982 s.p. | USA                              | <i>American Mineralogist</i> <b>67</b> (1982), 841   |   |
| Revdite           | $\text{Na}_{16}\text{Si}_{16}\text{O}_{27}(\text{OH})_{26} \cdot 28\text{H}_2\text{O}$   | A  | 1979-082  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 565  | <i>Kristallografiya</i> <b>37</b> (1992), 1177  |
| Reyerite          | $\text{Na}_2\text{Ca}_{14}\text{Al}_2\text{Si}_{22}\text{O}_{58}(\text{OH})_8 \cdot 6\text{H}_2\text{O}$   | G  | 1906      | Denmark (Greenland)              | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1906), 519  | <i>Mineralogical Magazine</i> <b>52</b> (1988), 247                                     |
| Reynoldsite       | $\text{Pb}_2\text{Mn}^{4+}_2\text{O}_5(\text{CrO}_4)$  | A  | 2011-051  | USA / Australia                  | <i>American Mineralogist</i> <b>97</b> (2012), 1187  |   |
| Rhabdobarite-(V)  | $\text{Mg}_{12}(\text{V}^{5+}, \text{Mo}^{6+}, \text{W}^{6+})_{1.5}\text{O}_6\{[\text{BO}_3]_{6-x}[(\text{P}, \text{As})\text{O}_4]_x\text{F}_{2-x}\}$ ( $x < 1$ ) | A  | 2017-108  | Russia                           | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |   |
| Rhabdobarite-(W)  | $\text{Mg}_{12}(\text{W}^{6+}, \text{V}^{5+})_{1.5}\text{O}_6\{[\text{BO}_3]_{6-x}[(\text{P}, \text{As})\text{O}_4]_x\text{F}_{2-x}\}$ ( $x < 1$ )                 | A  | 2017-109  | Russia                           | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |   |

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|------------------|---|----|-----------|----------------------------------|--|--|
| Rhabdophane-(Ce) | Ce(PO <sub>4</sub> )·H <sub>2</sub> O   | Rn | 1987 s.p. | United Kingdom                   | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>3</b> (1878), 191 |  |
| Rhabdophane-(La) | La(PO <sub>4</sub> )·H <sub>2</sub> O   | Rn | 1987 s.p. | USA                              | <i>American Journal of Science</i> <b>25</b> (1883), 459                                   |  |
| Rhabdophane-(Nd) | Nd(PO <sub>4</sub> )·H <sub>2</sub> O   | Rn | 1966 s.p. | USA                              | <i>Geological Society of America Bulletin</i> <b>68</b> (1957), 1744                       |  |
| Rhabdophane-(Y)  | Y(PO <sub>4</sub> )·H <sub>2</sub> O  | A  | 2011-031  | Japan                            | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 110           |  |
| Rheniite         | ReS <sub>2</sub>  | A  | 1999-004a | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>134(5)</b> (2005), 32         |  |
| Rhodarsenide     | Rh <sub>2</sub> As  | A  | 1996-030  | Serbia                           | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 1321                                |  |
| Rhodesite        | KHCa <sub>2</sub> Si <sub>8</sub> O <sub>19</sub> ·5H <sub>2</sub> O  | G  | 1957      | South Africa                     | <i>Mineralogical Magazine</i> <b>31</b> (1957), 607  | <i>Zeitschrift für Kristallographie</i> <b>199</b> (1992), 25  |
| Rhodium          | Rh  | A  | 1974-012  | USA                              | <i>Canadian Mineralogist</i> <b>12</b> (1974), 399   | <i>Philosophical Magazine</i> <b>15</b> (1933), 472            |
| Rhodizite        | KBe <sub>4</sub> Al <sub>4</sub> (B <sub>11</sub> Be)O <sub>28</sub>  | G  | 1834      | Russia                           | <i>Annalen der Physik und Chemie</i> <b>33</b> (1834), 253                                 | <i>Mineralogical Magazine</i> <b>50</b> (1986), 163            |
| Rhodochrosite    | Mn(CO <sub>3</sub> )  | A  | 1962 s.p. | Romania                          | Handbuch der Mineralogie, Vol. 1. Vandenhoeck und Ruprecht, Göttingen (1813), 1081         | <i>Acta Crystallographica</i> <b>B51</b> (1995), 929           |
| Rhodonite        | Mn <sup>2+</sup> SiO <sub>3</sub>   | A  | 1980 s.p. | unknown                          | <i>Journal für Chemie und Physik</i> <b>26</b> (1819), 108                                 | <i>American Mineralogist</i> <b>90</b> (2005), 969             |
| Rhodostannite    | Cu <sup>1+</sup> (Fe <sup>2+</sup> <sub>0.5</sub> Sn <sup>4+</sup> <sub>1.5</sub> )S <sub>4</sub>   | Rd | 1968-018  | Bolivia                          | <i>Mineralogical Magazine</i> <b>36</b> (1968), 1045                                       | <i>Acta Crystallographica</i> <b>B35</b> (1979), 2195          |
| Rhodplumsite     | Rh <sub>3</sub> Pb <sub>2</sub> S <sub>2</sub>  | A  | 1982-043  | Russia                           | <i>Mineralogicheskii Zhurnal</i> <b>5</b> (1983), 87                                       |  |
| Rhomboclase      | (H <sub>5</sub> O <sub>2</sub> )Fe <sup>3+</sup> (SO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O   | G  | 1891      | Slovakia                         | <i>Akadémiai Értesítő</i> <b>2</b> (1891), 96  | <i>Canadian Mineralogist</i> <b>47</b> (2009), 625             |
| Rhönite          | Ca <sub>4</sub> [Mg <sub>8</sub> Fe <sup>3+</sup> <sub>2</sub> Ti <sub>2</sub> ]O <sub>4</sub> [Si <sub>6</sub> Al <sub>6</sub> O <sub>36</sub> ]           | Rn | 2007 s.p. | Germany                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>24</b> (1907), 475    | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 203     |
| Ribbeite         | Mn <sup>2+</sup> <sub>5</sub> (SiO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub>  | A  | 1985-045  | Namibia                          | <i>American Mineralogist</i> <b>72</b> (1987), 213   | <i>American Mineralogist</i> <b>78</b> (1993), 190             |
| Richardsollyite  | TlPbAsS <sub>3</sub>  | A  | 2016-043  | Switzerland                      | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 679                                |  |
| Richellite       | CaFe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH,F) <sub>2</sub>   | Q  | 1883      | Belgium                          | <i>Annales de la Société Géologique de Belgique, Mémoires</i> <b>10</b> (1883), 36         | <i>American Mineralogist</i> <b>48</b> (1963), 300             |
| Richelsdorfite   | Ca <sub>2</sub> Cu <sub>5</sub> Sb <sup>5+</sup> (AsO <sub>4</sub> ) <sub>4</sub> (OH) <sub>6</sub> Cl·6H <sub>2</sub> O                                    | A  | 1982-019  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 145                              | <i>Zeitschrift für Kristallographie</i> <b>179</b> (1987), 323 |
| Richetite        | (Fe <sup>3+</sup> ,Mg) <sub>x</sub> Pb <sup>2+</sup> <sub>8.6</sub> (UO <sub>2</sub> ) <sub>36</sub> O <sub>36</sub> (OH) <sub>24</sub> ·41H <sub>2</sub> O | G  | 1947      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>70</b> (1947), B212                 | <i>American Mineralogist</i> <b>102</b> (2017), 1771           |
| Richterite       | Na(NaCa)Mg <sub>5</sub> Si <sub>8</sub> O <sub>22</sub> (OH) <sub>2</sub>   | Rd | 2012 s.p. | Sweden                           | <i>Berg- und Huttenmannische Zeitung</i> <b>24</b> (1865), 364                             | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 425     |
| Rickardite       | Cu <sub>3-x</sub> Te <sub>2</sub>   | G  | 1903      | USA                              | <i>American Journal of Science</i> <b>15</b> (1903), 69                                    | <i>American Mineralogist</i> <b>34</b> (1949), 441             |
| Rickturnerite    | Pb <sub>7</sub> O <sub>4</sub> [Mg(OH) <sub>4</sub> ](OH)Cl <sub>3</sub>  | A  | 2010-034  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>76</b> (2012), 59   |  |
| Riebeckite       | □Na <sub>2</sub> (Fe <sup>2+</sup> <sub>3</sub> Fe <sup>3+</sup> <sub>2</sub> )Si <sub>8</sub> O <sub>22</sub> (OH) <sub>2</sub>                            | Rd | 2012 s.p. | Yemen                            | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>40</b> (1888), 138           | <i>Mineralogical Magazine</i> <b>82</b> (2018), 837            |

|                  |   |    |           |                                |   |   |
|------------------|---|----|-----------|--------------------------------|---|---|
| Riesite          | TiO <sub>2</sub>  | A  | 2015-110a | Germany                        | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149  |   |
| Rietveldite      | Fe(UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O) <sub>5</sub>   | A  | 2016-081  | USA / Germany / Czech Republic | <i>Journal of Geosciences</i> <b>62</b> (2017), 107   |   |
| Rilandite        | Cr <sub>6</sub> SiO <sub>11</sub> ·5H <sub>2</sub> O (?)  | Q  | 1933      | USA                            | <i>American Mineralogist</i> <b>18</b> (1933), 195  |   |
| Rimkorolgit      | BaMg <sub>5</sub> (PO <sub>4</sub> ) <sub>4</sub> ·8H <sub>2</sub> O  | A  | 1990-032  | Russia                         | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(1)</b> (1995), 90   | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 397                             |
| Ringwoodite      | SiMg <sub>2</sub> O <sub>4</sub>  | A  | 1968-036  | Australia                      | <i>Nature</i> <b>221</b> (1969), 943  | <i>American Mineralogist</i> <b>97</b> (2012), 573                                      |
| Rinkite-(Ce)     | (Ca <sub>3</sub> REE)Na(NaCa)Ti(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> (OF)F <sub>2</sub>  | Rd | 2016 s.p. | Denmark (Greenland)            | <i>Zeitschrift für Kristallographie und Mineralogie</i> <b>9</b> (1884), 243  | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2755                                    |
| Rinkite-(Y)      | Na <sub>2</sub> Ca <sub>4</sub> YTi(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> OF <sub>3</sub>   | A  | 2017-043  | Tajikistan                     | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/mgm.2018.122">https://doi.org/10.1180/mgm.2018.122</a> |
| Rinmanite        | Mg <sub>2</sub> Fe <sub>4</sub> Zn <sub>2</sub> Sb <sub>2</sub> O <sub>14</sub> (OH) <sub>2</sub>   | A  | 2000-036  | Sweden                         | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1675   |   |
| Rinneite         | K <sub>3</sub> NaFe <sup>2+</sup> Cl <sub>6</sub>   | G  | 1909      | Germany                        | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1909), 72  | <i>Acta Crystallographica</i> <b>C56</b> (2000), e228                                   |
| Riomarinaite     | Bi(SO <sub>4</sub> )(OH)·H <sub>2</sub> O   | A  | 2000-004  | Italy                          | <i>Aufschuss</i> <b>56</b> (2005), 53   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 2879                                   |
| Riosecoite       | Ca <sub>2</sub> Mg(AsO <sub>3</sub> OH) <sub>3</sub> (H <sub>2</sub> O) <sub>2</sub>  | A  | 2018-023  | Chile                          | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Riotintoite      | Al(SO <sub>4</sub> )(OH)·3H <sub>2</sub> O  | A  | 2015-085  | Chile                          | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1293   |   |
| Rippite          | K <sub>2</sub> (Nb,Ti) <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> )O(O,F)  | A  | 2016-025  | Russia                         | CNMNC Newsletter 32 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 915   |   |
| Rittmannite      | (Mn <sup>2+</sup> ,Ca)Mn <sup>2+</sup> (Fe <sup>2+</sup> ,Mn <sup>2+</sup> ,Mg) <sub>2</sub> (Al,Fe <sup>3+</sup> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·8H <sub>2</sub> O | A  | 1987-048  | Portugal                       | <i>Canadian Mineralogist</i> <b>27</b> (1989), 447  |   |
| Rivadavite       | Na <sub>6</sub> Mg[B <sub>6</sub> O <sub>7</sub> (OH) <sub>6</sub> ] <sub>4</sub> ·10H <sub>2</sub> O   | A  | 1966-010  | Argentina                      | <i>American Mineralogist</i> <b>52</b> (1967), 326  | <i>Naturwissenschaften</i> <b>69</b> (1973), 350  |
| Riversideite     | Ca <sub>5</sub> Si <sub>6</sub> O <sub>16</sub> (OH) <sub>2</sub> ·2H <sub>2</sub> O  | Q  | 2014 s.p. | USA                            | <i>Bulletin of the Department of Geology of the University of California</i> <b>10</b> (1917), 327                                      | <i>Mineralogical Magazine</i> <b>30</b> (1954), 293                                     |
| Roaldite         | (Fe,Ni) <sub>4</sub> N  | A  | 1980-079  | Australia                      | <i>Lunar and Planetary Sciences</i> <b>12</b> (1981), 112   | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751                                      |
| Robertsite       | Ca <sub>2</sub> Mn <sup>3+</sup> <sub>3</sub> O <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> ·3H <sub>2</sub> O   | A  | 1973-024  | USA                            | <i>American Mineralogist</i> <b>59</b> (1974), 48   | <i>Acta Crystallographica</i> <b>E68</b> (2012), i74                                    |
| Robinsonite      | Pb <sub>4</sub> Sb <sub>6</sub> S <sub>13</sub>   | G  | 1952      | USA                            | <i>American Mineralogist</i> <b>37</b> (1952), 438  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2004), 49                            |
| Rockbridgeite    | Fe <sup>2+</sup> Fe <sup>3+</sup> <sub>4</sub> (PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>5</sub>  | G  | 1949      | USA                            | <i>American Mineralogist</i> <b>34</b> (1949), 513  | <i>Acta Crystallographica</i> <b>C62</b> (2006), i24                                    |
| Rodalquilarite   | H <sub>3</sub> Fe <sup>3+</sup> <sub>2</sub> (Te <sup>4+</sup> O <sub>3</sub> ) <sub>4</sub> Cl   | A  | 1967-040  | Spain                          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>91</b> (1968), 28                                      | <i>Journal of Geosciences</i> <b>56</b> (2011), 235                                     |
| Rodolicoite      | Fe <sup>3+</sup> (PO <sub>4</sub> )   | A  | 1995-038  | Italy                          | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 1101   | <i>Zeitschrift für Kristallographie</i> <b>177</b> (1986), 139                          |
| Roebingite       | Ca <sub>6</sub> Mn <sup>2+</sup> Pb <sub>2</sub> (Si <sub>3</sub> O <sub>9</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·4H <sub>2</sub> O                                  | G  | 1897      | USA                            | <i>American Journal of Science</i> <b>153</b> (1897), 413   | <i>American Mineralogist</i> <b>69</b> (1984), 1173                                     |
| Roedderite       | KNaMg <sub>2</sub> (Mg <sub>3</sub> Si <sub>12</sub> )O <sub>30</sub>   | A  | 1965-023  | Azerbaijan                     | <i>American Mineralogist</i> <b>51</b> (1966), 949  | <i>European Journal of Mineralogy</i> <b>1</b> (1989), 715                              |
| Rogermitchellite | Na <sub>6</sub> Sr <sub>12</sub> Ba <sub>2</sub> Zr <sub>13</sub> Si <sub>39</sub> B <sub>4</sub> O <sub>123</sub> (OH) <sub>6</sub> ·20H <sub>2</sub> O  | A  | 2003-019  | Canada                         | <i>Canadian Mineralogist</i> <b>48</b> (2010), 267  |   |

|                 |   |    |           |                     |   |  |
|-----------------|---|----|-----------|---------------------|---|--|
| Roggianite      | $\text{Ca}_2\text{BeAl}_2\text{Si}_4\text{O}_{13}(\text{OH})_2 \cdot n\text{H}_2\text{O}$ ( $n < 2.5$ ) | A  | 1968-015  | Italy               | <i>Clay Minerals</i> <b>8</b> (1969), 107   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 307                      |
| Rohaite         | $(\text{Ti}, \text{Pb}, \text{K})_2\text{Cu}_{8.7}\text{Sb}_2\text{S}_4$                                | A  | 1973-043  | Denmark (Greenland) | <i>Bulletin Grønlands Geologiske Undersøgelse</i> <b>126</b> (1978), 23   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 122          |
| Rokühnite       | $\text{FeCl}_2 \cdot 2\text{H}_2\text{O}$   | A  | 1979-036  | Germany             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 125   | <i>Journal of Chemical Physics</i> <b>42</b> (1965), 898                           |
| Rollandite      | $\text{Cu}_3(\text{AsO}_4)_2 \cdot 4\text{H}_2\text{O}$   | A  | 1998-001  | France              | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 1045  |  |
| Romanèchite     | $(\text{Ba}, \text{H}_2\text{O})_2(\text{Mn}^{4+}, \text{Mn}^{3+})_5\text{O}_{10}$                      | A  | 1982 s.p. | France              | Collection de Minéralogie du Muséum d'Histoire Naturelle. Laboratoire de Minéralogie, Paris (1900), 28                                  | <i>American Mineralogist</i> <b>73</b> (1988), 1155                                |
| Romanorlovite   | $\text{K}_{11}\text{Cu}_9\text{Cl}_{25}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$                         | A  | 2014-011  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(4)</b> (2016), 36  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(4)</b> (2016), 92 |
| Romarchite      | $\text{SnO}$  | A  | 1969-006  | Canada              | <i>Canadian Mineralogist</i> <b>10</b> (1971), 916  | <i>Acta Crystallographica</i> <b>B36</b> (1980), 2763                              |
| Römerite        | $\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{SO}_4)_4 \cdot 14\text{H}_2\text{O}$                              | G  | 1858      | Germany             | <i>Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften</i> <b>28</b> (1858), 272  | <i>American Mineralogist</i> <b>55</b> (1970), 78                                  |
| Rondorfite      | $\text{Ca}_8\text{Mg}(\text{SiO}_4)_4\text{Cl}_2$   | A  | 1997-013  | Germany             | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>179</b> (2004), 265   | <i>Crystallography Reports</i> <b>53</b> (2008), 199                               |
| Rongibbsite     | $\text{Pb}_2(\text{Si}_4\text{Al})\text{O}_{11}(\text{OH})$   | A  | 2010-055  | USA                 | <i>American Mineralogist</i> <b>98</b> (2013), 236  |  |
| Ronneburgite    | $\text{K}_2\text{MnV}_4\text{O}_{12}$   | A  | 1998-069  | Germany             | <i>American Mineralogist</i> <b>86</b> (2001), 1081   |  |
| Röntgenite-(Ce) | $\text{Ca}_2\text{Ce}_3(\text{CO}_3)_5\text{F}_3$   | A  | 1987 s.p. | Denmark (Greenland) | <i>American Mineralogist</i> <b>38</b> (1953), 868  | <i>American Mineralogist</i> <b>78</b> (1993), 415                                 |
| Rooseveltite    | $\text{Bi}(\text{AsO}_4)$   | G  | 1946      | Bolivia             | <i>Facultad Nacional Ingeniera, Universidad Tecnica Oruro, Boletin</i> <b>1</b> (1946), 10  | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1559                              |
| Roquesite       | $\text{CuInS}_2$  | Rn | 1962-001  | France              | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>86</b> (1963), 7                                       | <i>Journal of Chemical Physics</i> <b>59</b> (1973), 5415                          |
| Rorisite        | $\text{CaClF}$  | A  | 1989-015  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>119(3)</b> (1990), 73   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 2790                              |
| Rosasite        | $\text{CuZn}(\text{CO}_3)(\text{OH})_2$   | G  | 1908      | Italy               | <i>Rendiconti dell'Accademia Nazionale dei Lincei, Classe di Scienze Fisiche, Matematiche e Naturali, Serie V</i> <b>17</b> (1908), 723 | <i>Canadian Mineralogist</i> <b>55</b> (2017), 1027                                |
| Roscherite      | $\text{Ca}_2\text{Mn}^{2+}_5\text{Be}_4(\text{PO}_4)_6(\text{OH})_4 \cdot 6\text{H}_2\text{O}$          | G  | 1914      | Germany             | <i>Bulletin International, Classe des Sciences Mathématiques Naturelles et de la Médecine</i> <b>19</b> (1914), 108                     | <i>Doklady Chemistry</i> <b>403</b> (2005), 160                                    |
| Roscoelite      | $\text{KV}^{3+}_2(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_2$                                      | A  | 1998 s.p. | USA                 | <i>American Journal of Science</i> <b>12</b> (1876), 31   | <i>Clays and Clay Minerals</i> <b>51</b> (2003), 301                               |
| Roselite        | $\text{Ca}_2\text{Co}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | G  | 1824      | Germany             | <i>Annals of Philosophy</i> <b>8</b> (1824), 439  | <i>Canadian Mineralogist</i> <b>15</b> (1977), 36                                  |
| Roselite-β      | $\text{Ca}_2\text{Co}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | G  | 1955      | Germany             | <i>American Mineralogist</i> <b>40</b> (1955), 828  | <i>Zeitschrift für Kristallographie</i> <b>219</b> (2004), 341                     |
| Rosemaryite     | $\text{NaMn}^{2+}\text{Fe}^{3+}\text{Al}(\text{PO}_4)_3$  | A  | 1979 s.p. | USA                 | <i>Mineralogical Magazine</i> <b>43</b> (1979), 227   | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 775                        |
| Rosenbergite    | $\text{AlF}[\text{F}_{0.5}(\text{H}_2\text{O})_{0.5}]_4 \cdot \text{H}_2\text{O}$                       | A  | 1992-046  | Italy               | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 1167   | <i>American Mineralogist</i> <b>73</b> (1988), 855                                 |

|                |  |    |           |                                  |   |  |
|----------------|--|----|-----------|----------------------------------|---|--|
| Rosenbuschite  | $\text{Ca}_6\text{Zr}_2\text{Na}_6\text{ZrTi}(\text{Si}_2\text{O}_7)_4(\text{OF})_2\text{F}_4$   | Rd | 2016 s.p. | Norway                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>9</b> (1887), 247  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1203            |
| Rosenhahnite   | $\text{Ca}_3\text{Si}_3\text{O}_8(\text{OH})_2$  | A  | 1965-030  | USA                              | <i>American Mineralogist</i> <b>52</b> (1967), 336  | <i>American Mineralogist</i> <b>62</b> (1977), 503             |
| Roshchinite    | $(\text{Ag,Cu})_{19}\text{Pb}_{10}\text{Sb}_{51}\text{S}_{96}$   | A  | 1989-006  | Kazakhstan                       | <i>Doklady Akademii Nauk SSSR</i> <b>312</b> (1990), 197  |  |
| Rosiaite       | $\text{PbSb}_2\text{O}_6$  | A  | 1995-021  | Italy                            | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 487  |  |
| Rosickýite     | S  | G  | 1931      | Czech Republic                   | <i>Zeitschrift für Kristallographie</i> <b>80</b> (1931), 174   | <i>Acta Crystallographica</i> <b>C49</b> (1993), 125           |
| Rosièresite    | $[\text{Pb,Cu,Al,PO}_4,\text{H}_2\text{O}]$ (?)  | Q  | 1910      | France                           | Minéralogie de la France ed des ses colonies, Vol. 4. Beranger, Paris (1910), 532   |  |
| Rossiantonite  | $\text{Al}_3(\text{PO}_4)(\text{SO}_4)_2(\text{OH})_2(\text{H}_2\text{O})_{10}\cdot 4\text{H}_2\text{O}$                                     | A  | 2012-056  | Venezuela                        | <i>American Mineralogist</i> <b>98</b> (2013), 1899   |  |
| Rossite        | $\text{Ca}(\text{VO}_3)_2\cdot 4\text{H}_2\text{O}$  | G  | 1927      | USA                              | <i>Proceedings of the United States National Museum</i> <b>72</b> (1927), 1   | <i>Canadian Mineralogist</i> <b>7</b> (1963), 713              |
| Rösslerite     | $\text{Mg}(\text{AsO}_3\text{OH})\cdot 7\text{H}_2\text{O}$  | G  | 1861      | Germany                          | <i>Jahresbericht der Wetterauischen Gesellschaft für die Gesammte Naturkunde zu Hanau</i> (1861), 32                                | <i>Acta Crystallographica</i> <b>B29</b> (1973), 286           |
| Rossmannite    | $\square(\text{Al}_2\text{Li})\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$                                  | A  | 1996-018  | Czech Republic                   | <i>American Mineralogist</i> <b>83</b> (1998), 896  |  |
| Rossovskyite   | $(\text{Fe}^{3+},\text{Ta})(\text{Nb,Ti})\text{O}_4$   | A  | 2014-056  | Mongolia                         | <i>Physics and Chemistry of Minerals</i> <b>42</b> (2015), 825  |  |
| Rostite        | $\text{Al}(\text{SO}_4)(\text{OH})\cdot 5\text{H}_2\text{O}$   | Rd | 1988 s.p. | Czech Republic                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 193   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 476  |
| Rouaite        | $\text{Cu}_2(\text{NO}_3)(\text{OH})_3$  | A  | 1999-010  | France                           | <i>Riviera Scientifique</i> <b>85</b> (2001), 3   | <i>Zeitschrift für Kristallographie</i> <b>165</b> (1983), 127 |
| Roubaultite    | $\text{Cu}_2\text{O}_2(\text{UO}_2)_3(\text{CO}_3)_2(\text{OH})_2\cdot 4\text{H}_2\text{O}$  | A  | 1970-030  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 550                                 | <i>Acta Crystallographica</i> <b>C41</b> (1985), 654           |
| Roumaite       | $(\text{Nb,Ti})(\text{Ca,Na},\square)_3(\text{Ca,REE})_4(\text{Si}_2\text{O}_7)_2(\text{OH})\text{F}_3$                                      | A  | 2008-024  | Guinea                           | <i>Canadian Mineralogist</i> <b>48</b> (2010), 17   |  |
| Rouseite       | $\text{Pb}_2\text{Mn}^{2+}(\text{AsO}_3)_2\cdot 2\text{H}_2\text{O}$   | A  | 1984-071  | Sweden                           | <i>American Mineralogist</i> <b>71</b> (1986), 1034   |  |
| Routhierite    | $\text{TiCuHg}_2\text{As}_2\text{S}_6$   | A  | 1973-030  | France                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>97</b> (1974), 48                                  | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 163    |
| Rouvilleite    | $\text{Na}_3\text{CaMn}^{2+}(\text{CO}_3)_3\text{F}$   | A  | 1989-050  | Canada                           | <i>Canadian Mineralogist</i> <b>29</b> (1991), 107  | <i>Soviet Physics - Crystallography</i> <b>36</b> (1991), 14   |
| Rouxelite      | $\text{Cu}_2\text{HgPb}_{22}\text{Sb}_{28}\text{S}_{64}(\text{O,S})_2$   | A  | 2002-062  | Italy                            | <i>Canadian Mineralogist</i> <b>43</b> (2005), 919  | <i>Mineralogical Magazine</i> <b>78</b> (2014), 651            |
| Roweite        | $\text{Ca}_2\text{Mn}^{2+}_2\text{B}_4\text{O}_7(\text{OH})_6$   | G  | 1937      | USA                              | <i>American Mineralogist</i> <b>22</b> (1937), 301  | <i>American Mineralogist</i> <b>59</b> (1974), 60              |
| Rowlandite-(Y) | $\text{Fe}^{2+}\text{Y}_4(\text{Si}_2\text{O}_7)_2\text{F}_2$  | A  | 1987 s.p. | USA                              | <i>American Journal of Science</i> <b>42</b> (1891), 430  | <i>Canadian Mineralogist</i> <b>6</b> (1961), 576              |
| Rowleyite      | $[\text{Na}(\text{NH}_4,\text{K})_9\text{Cl}_4][\text{V}^{5+,4+}_2(\text{P,As})\text{O}_8]_6\cdot n[\text{H}_2\text{O,Na,NH}_4,\text{K,Cl}]$ | A  | 2016-037  | USA                              | <i>American Mineralogist</i> <b>102</b> (2017), 1037  |  |
| Roxbyite       | $\text{Cu}_9\text{S}_5$  | A  | 1986-010  | Australia                        | <i>Mineralogical Magazine</i> <b>52</b> (1988), 323   | <i>Canadian Mineralogist</i> <b>50</b> (2012), 423             |
| Roymillerite   | $\text{Pb}_{24}\text{Mg}_9(\text{Si}_{10}\text{O}_{28})(\text{CO}_3)_{10}(\text{BO}_3)(\text{SiO}_4)(\text{OH})_{13}\text{O}_5$              | A  | 2016-061  | Namibia                          | <i>Physics and Chemistry of Minerals</i> <b>44</b> (2017), 685  |  |
| Rozenite       | $\text{Fe}^{2+}(\text{SO}_4)\cdot 4\text{H}_2\text{O}$   | Rd | 1963 s.p. | Poland                           | <i>Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Chimiques Geologiques et Geographiques</i> <b>8</b> (1960), 97 | <i>Acta Crystallographica</i> <b>15</b> (1962), 815            |



|                     |  |    |           |  |   |   |
|---------------------|--|----|-----------|--|---|---|
| Rozhdestvenskayaite | $\text{Ag}_{10}\text{Zn}_2\text{Sb}_4\text{S}_{13}$  | A  | 2016-094  | Mexico                                 | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149  | <a href="https://doi.org/10.1127/ejm/2018/0030-2773">https://doi.org/10.1127/ejm/2018/0030-2773</a>   |
| Rruffite            | $\text{Ca}_2\text{Cu}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$   | A  | 2009-077  | Chile                                  | <i>Canadian Mineralogist</i> <b>49</b> (2011), 877  |   |
| Ruarsite            | $\text{RuAsS}$   | A  | 1980 s.p. | China                                  | <i>Kexue Tongbao</i> <b>24</b> (1979), 310  |   |
| Rubicline           | $\text{Rb}(\text{AlSi}_3\text{O}_8)$   | A  | 1996-058  | Italy                                  | <i>American Mineralogist</i> <b>83</b> (1998), 1335   | <i>Mineralogical Magazine</i> <b>65</b> (2001), 523   |
| Rubinite            | $\text{Ca}_3\text{Ti}^{3+}_2\text{Si}_3\text{O}_{12}$  | A  | 2016-110  | Italy (meteorite) / Mexico (meteorite) | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339  |   |
| Rucklidgeite        | $\text{PbBi}_2\text{Te}_4$   | A  | 1975-029  | Russia                                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>106</b> (1977), 62  |   |
| Rudabányaite        | $(\text{Ag}_2\text{Hg}_2)(\text{AsO}_4)\text{Cl}$  | A  | 2016-088  | Hungary                                | CNMNC Newsletter 35 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 209; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 149  |   |
| Rudashevskyite      | $(\text{Fe},\text{Zn})\text{S}$  | A  | 2005-017  | Azerbaijan (meteorite)                 | <i>American Mineralogist</i> <b>93</b> (2008), 902  |   |
| Rudenkoite          | $\text{Sr}_3\text{Al}_{3.5}\text{Si}_{3.5}\text{O}_{10}(\text{OH},\text{O})_8\text{Cl}_2 \cdot \text{H}_2\text{O}$                           | A  | 2003-060  | Russia                                 | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>133(3)</b> (2004), 37   |   |
| Rüdlingerite        | $\text{Mn}^{2+}_2\text{V}^{5+}\text{As}^{5+}\text{O}_7 \cdot 2\text{H}_2\text{O}$  | A  | 2016-054a | Switzerland / Italy                    | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |   |
| Ruifrancoite        | $\text{Ca}_2(\square, \text{Mn})_2(\text{Fe}^{3+}, \text{Mn}, \text{Mg})_4\text{Be}_4(\text{PO}_4)_6(\text{OH})_6 \cdot 4\text{H}_2\text{O}$ | A  | 2005-061a | Brazil                                 | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1263   |   |
| Ruitenbergitte      | $\text{Ca}_9\text{B}_{26}\text{O}_{34}(\text{OH})_{24}\text{Cl}_4 \cdot 13\text{H}_2\text{O}$  | A  | 1992-011  | Canada                                 | <i>Canadian Mineralogist</i> <b>31</b> (1993), 795  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 1  |
| Ruizite             | $\text{Ca}_2\text{Mn}^{3+}_2\text{Si}_4\text{O}_{11}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A  | 1977-007  | USA                                    | <i>Mineralogical Magazine</i> <b>41</b> (1977), 429   | <i>American Mineralogist</i> <b>70</b> (1985), 171  |
| Rumseyite           | $[\text{Pb}_2\text{OF}]\text{Cl}$  | A  | 2011-091  | United Kingdom                         | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1247  |   |
| Rusakovite          | $(\text{Fe},\text{Al})_5(\text{VO}_4)_2(\text{OH})_9 \cdot 3\text{H}_2\text{O}$  | A  | 1962 s.p. | Kazakhstan                             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>89</b> (1960), 440  |   |
| Rusinovite          | $\text{Ca}_{10}(\text{Si}_2\text{O}_7)_3\text{Cl}_2$   | A  | 2010-072  | Russia                                 | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 837   | <i>Minerals</i> <b>8</b> (2018), 399  |
| Russellite          | $\text{Bi}_2\text{WO}_6$   | G  | 1938      | United Kingdom                         | <i>Mineralogical Magazine</i> <b>25</b> (1938), 41  | <i>Mineralogical Magazine</i> <b>56</b> (1992), 399   |
| Russoite            | $(\text{NH}_4)\text{ClAs}_2\text{O}_3(\text{H}_2\text{O})_{0.5}$   | A  | 2015-105  | Italy                                  | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407   | <a href="https://doi.org/10.1180/minmag.2017.081.097">https://doi.org/10.1180/minmag.2017.081.097</a> |
| Rustenbergitte      | $\text{Pt}_3\text{Sn}$   | A  | 1974-040  | South Africa                           | <i>Canadian Mineralogist</i> <b>13</b> (1975), 146  |   |
| Rustumite           | $\text{Ca}_{10}(\text{Si}_2\text{O}_7)_2(\text{SiO}_4)(\text{OH})_2\text{Cl}_2$  | A  | 1964-004  | United Kingdom                         | <i>Mineralogical Magazine</i> <b>34</b> (1965), 1   | <i>American Mineralogist</i> <b>98</b> (2013), 493  |
| Ruthenarsenite      | $(\text{Ru},\text{Ni})\text{As}$   | A  | 1973-020  | Papua New Guinea                       | <i>Canadian Mineralogist</i> <b>12</b> (1974), 280  |   |
| Rutheniridosmine    | $(\text{Ir},\text{Os},\text{Ru})$  | Rd | 1973 s.p. | Japan                                  | <i>Canadian Mineralogist</i> <b>12</b> (1973), 104  | <i>Canadian Mineralogist</i> <b>29</b> (1991), 231  |
| Ruthenium           | $\text{Ru}$  | A  | 1974-013  | Japan                                  | <i>Mineralogical Journal</i> <b>7</b> (1974), 438   |   |
| Rutherfordine       | $(\text{UO}_2)(\text{CO}_3)$   | A  | 1962 s.p. | Tanzania                               | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1906), 761   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 929  |
| Rutile              | $\text{TiO}_2$   | G  | 1803      | Spain                                  | Handbuch der Mineralogie, Vol. 1. Crusius, Leipzig (1803), 305  | <i>Zeitschrift für Kristallographie</i> <b>194</b> (1991), 305  |
| Rynersonite         | $\text{CaTa}_2\text{O}_6$  | A  | 1974-058  | USA                                    | <i>American Mineralogist</i> <b>63</b> (1978), 709  | <i>Acta Chemica Scandinavica</i> <b>17</b> (1963), 2548   |
| Saamite             | $\text{Ba}\square\text{TiNbNa}_3\text{Ti}(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_2$                             | Rd | 2013-083  | Russia                                 | <i>Canadian Mineralogist</i> <b>52</b> (2014), 745  |   |



|                 |   |    |           |  |   |  |
|-----------------|---|----|-----------|--|---|--|
| Sabatierite     | $\text{Cu}_6\text{TlSe}_4$  | A  | 1976-043  | Czech Republic                             | <i>Bulletin de Minéralogie</i> <b>101</b> (1978), 557   | <i>Zeitschrift für Kristallographie</i> <b>181</b> (1987), 241                                     |
| Sabelliite      | $\text{Cu}_2\text{Zn}(\text{AsO}_4)(\text{OH})_3$   | A  | 1994-013  | Italy                                      | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 1325   | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 1331  |
| Sabieite        | $(\text{NH}_4)\text{Fe}^{3+}(\text{SO}_4)_2$  | A  | 1982-088  | South Africa                               | <i>Annals of the Geological Survey of South Africa</i> <b>17</b> (1983), 29                         | <i>American Mineralogist</i> <b>99</b> (2014), 1500  |
| Sabinaite       | $\text{Na}_4\text{TiZr}_2\text{O}_4(\text{CO}_3)_4$   | A  | 1978-071  | Canada                                     | <i>Canadian Mineralogist</i> <b>19</b> (1980), 25   | <i>Canadian Mineralogist</i> <b>34</b> (1996), 811   |
| Sabugalite      | $\text{HAl}(\text{UO}_2)_4(\text{PO}_4)_4 \cdot 16\text{H}_2\text{O}$   | G  | 1951      | Portugal                                   | <i>American Mineralogist</i> <b>36</b> (1951), 671  | <i>Physics and Chemistry of Minerals</i> <b>9</b> (1983), 23                                       |
| Sacrofanite     | $(\text{Na}_{61}\text{K}_{19}\text{Ca}_{32})_{\Sigma=112}(\text{Si}_{84}\text{Al}_{84}\text{O}_{336})(\text{SO}_4)_{26}\text{Cl}_2\text{F}_6 \cdot 2\text{H}_2\text{O}$ | A  | 1979-058  | Italy                                      | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>140</b> (1980), 102                           | <i>Microporous and Mesoporous Materials</i> <b>147</b> (2011), 318                                 |
| Sadanagaite     | $\text{NaCa}_2(\text{Mg}_3\text{Al}_2)(\text{Si}_5\text{Al}_3)\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Japan                                      | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 177   | <i>Canadian Mineralogist</i> <b>46</b> (2008), 151   |
| Saddlebackite   | $\text{Pb}_2\text{Bi}_2\text{Te}_2\text{S}_3$   | A  | 1994-051  | Australia                                  | <i>Australian Journal of Mineralogy</i> <b>3</b> (1997), 119  |  |
| Safflorite      | $\text{CoAs}_2$   | G  | 1835      | Germany                                    | <i>Journal für Praktische Chemie</i> <b>4</b> (1835), 249   | <i>Acta Crystallographica</i> <b>E64</b> (2008), i62   |
| Sahamalite-(Ce) | $\text{Ce}_2\text{Mg}(\text{CO}_3)_4$   | A  | 1987 s.p. | USA  | <i>American Mineralogist</i> <b>38</b> (1953), 721  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 39             |
| Sahlinite       | $\text{Pb}_{14}\text{O}_9(\text{AsO}_4)_2\text{Cl}_4$   | G  | 1934      | Sweden                                     | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>56</b> (1934), 493                       | <i>Mineralogical Magazine</i> <b>67</b> (2003), 15   |
| Sailaufite      | $(\text{Ca}, \text{Na}, \square)_2\text{Mn}^{3+}_3\text{O}_2(\text{AsO}_4)_2(\text{CO}_3) \cdot 3\text{H}_2\text{O}$  | A  | 2000-005  | Germany                                    | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 555   |  |
| Sainfeldite     | $\text{Ca}_5(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 4\text{H}_2\text{O}$  | A  | 1963-018  | France                                     | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>87</b> (1964), 169 | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 33 |
| Sakhaite        | $\text{Ca}_{48}\text{Mg}_{16}\text{Al}(\text{SiO}_3\text{OH})_4(\text{CO}_3)_{16}(\text{BO}_3)_{28} \cdot (\text{H}_2\text{O})_3(\text{HCl})_3$                         | A  | 1965-035  | Russia                                     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>95</b> (1966), 193                    | <i>Crystallography Reports</i> <b>50</b> (2005), 226   |
| Sakuraiite      | $(\text{Cu}, \text{Zn}, \text{Fe})_3(\text{In}, \text{Sn})\text{S}_4$   | A  | 1965-017  | Japan                                      | <i>Chigaku Kenkyu (Earth Science Studies)</i> , Sakurai volume (1965), 1                            | <i>Canadian Mineralogist</i> <b>24</b> (1986), 405   |
| Salammoniac     | $(\text{NH}_4)\text{Cl}$  | Rn | 2007 s.p. | Italy                                      | <i>De Re Metallica Libri XII</i> . Froben, Basel (1556)   | <i>Trudy Instituta Kristallografii Akademiyi Nauk SSSR</i> <b>12</b> (1956), 18                    |
| Saléeite        | $\text{Mg}(\text{UO}_2)_2(\text{PO}_4)_2(\text{H}_2\text{O})_{10}$  | G  | 1932      | Democratic Republic of the Congo / Germany | <i>Bulletin de la Société Belge de Géologie</i> <b>42</b> (1932), 96                                | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 663  |
| Salesite        | $\text{Cu}(\text{IO}_3)(\text{OH})$   | G  | 1939      | Chile                                      | <i>American Mineralogist</i> <b>24</b> (1939), 388  | <i>American Mineralogist</i> <b>63</b> (1978), 172   |
| Saliotite       | $(\text{Li}, \text{Na})\text{Al}_3(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_5$   | A  | 1990-018  | Spain                                      | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 897  |  |
| Saltonseaitite  | $\text{K}_3\text{NaMnCl}_6$   | A  | 2011-104  | USA  | <i>American Mineralogist</i> <b>98</b> (2013), 231  |  |
| Salzburgite     | $\text{Cu}_{1.6}\text{Pb}_{1.6}\text{Bi}_{6.4}\text{S}_{12}$  | A  | 2000-044  | Austria                                    | <i>Canadian Mineralogist</i> <b>43</b> (2005), 909  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 189   |
| Samaniite       | $\text{Cu}_2\text{Fe}_5\text{Ni}_2\text{S}_8$   | A  | 2007-038  | Japan                                      | <i>Journal of Mineralogical and Petrological Sciences</i> <b>106</b> (2011), 204                    |  |
| Samarskite-(Y)  | $(\text{Y}, \text{Ce}, \text{U}, \text{Fe}, \text{Nb})(\text{Nb}, \text{Ta}, \text{Ti})\text{O}_4$  | A  | 1980 s.p. | Russia                                     | <i>Annalen der Physik und Chemie</i> <b>71</b> (1847), 157  | <i>American Mineralogist</i> <b>101</b> (2016), 1679   |
| Samarskite-(Yb) | $\text{YbNbO}_4$  | A  | 2004-001  | USA  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1119   |  |
| Samfowlerite    | $\text{Ca}_{14}\text{Mn}^{3+}_3\text{Zn}_2\text{Be}_2\text{Be}_6\text{Si}_{14}\text{O}_{52}(\text{OH})_6$   | A  | 1991-045  | USA  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 43   |  |

|                 |  |   |          |                     |   |   |
|-----------------|--|---|----------|---------------------|---|---|
| Sampleite       | $\text{NaCaCu}_5(\text{PO}_4)_4\text{Cl}\cdot 5\text{H}_2\text{O}$   | G | 1942     | Chile               | <i>American Mineralogist</i> <b>27</b> (1942), 586                                    | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 75                              |
| Samsonite       | $\text{Ag}_4\text{MnSb}_2\text{S}_6$   | G | 1910     | Germany             | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1910), 331           | <i>American Mineralogist</i> <b>92</b> (2007), 886                                      |
| Samuelsonite    | $\text{Ca}_9\text{Mn}^{2+}_4\text{Al}_2(\text{PO}_4)_{10}(\text{OH})_2$  | A | 1974-026 | USA                 | <i>American Mineralogist</i> <b>60</b> (1975), 957                                    | <i>American Mineralogist</i> <b>62</b> (1977), 229                                      |
| Sanbornite      | $\text{BaSi}_2\text{O}_5$  | G | 1932     | USA                 | <i>American Mineralogist</i> <b>17</b> (1932), 161                                    | <i>Zeitschrift für Kristallographie</i> <b>153</b> (1980), 33                           |
| Sanderite       | $\text{Mg}(\text{SO}_4)\cdot 2\text{H}_2\text{O}$  | G | 1952     | Germany             | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1952), 28                          | <i>American Mineralogist</i> <b>94</b> (2009), 622                                      |
| Saneroite       | $\text{NaMn}^{2+}_5[\text{Si}_5\text{O}_{14}(\text{OH})](\text{VO}_3)(\text{OH})$  | A | 1979-060 | Italy               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 161                         | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 393                             |
| Sanguite        | $\text{KCuCl}_3$   | A | 2013-002 | Russia              | <i>Canadian Mineralogist</i> <b>53</b> (2015), 633                                    |   |
| Sanidine        | $\text{K}(\text{AlSi}_3\text{O}_8)$  | G | 1808     | Germany             | Mineralogische Studien über die Gebirge am Niederrhein. Hermann, Frankfurt (1808), 24 | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 183                             |
| Sanjuanite      | $\text{Al}_2(\text{PO}_4)(\text{SO}_4)(\text{OH})\cdot 9\text{H}_2\text{O}$  | A | 1966-043 | Argentina           | <i>American Mineralogist</i> <b>53</b> (1968), 1                                      | <i>Canadian Mineralogist</i> <b>49</b> (2011), 835                                      |
| Sanmartinite    | $\text{Zn}(\text{WO}_4)$   | G | 1948     | Argentina           | <i>Notulae Naturae of the Academy of Natural Sciences of Philadelphia</i> (1948), 205 | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 1019                             |
| Sanrománite     | $\text{Na}_2\text{CaPb}_3(\text{CO}_3)_5$  | A | 2006-009 | Chile               | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>183</b> (2007), 117             |   |
| Santabarbaraite | $\text{Fe}^{3+}_3(\text{PO}_4)_2(\text{OH})_3\cdot 5\text{H}_2\text{O}$  | A | 2000-052 | Italy               | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 185                           |   |
| Santaclaraite   | $\text{CaMn}^{2+}_4\text{Si}_5\text{O}_{14}(\text{OH})_2\cdot \text{H}_2\text{O}$  | A | 1979-005 | USA                 | <i>American Mineralogist</i> <b>69</b> (1984), 200                                    | <i>American Mineralogist</i> <b>66</b> (1981), 154                                      |
| Santafeite      | $(\text{Ca}, \text{Sr}, \text{Na})_3(\text{Mn}^{2+}, \text{Fe}^{3+})_2\text{Mn}^{4+}_2(\text{VO}_4)_4(\text{OH}, \text{O})_5\cdot 2\text{H}_2\text{O}$ | G | 1958     | USA                 | <i>American Mineralogist</i> <b>43</b> (1958), 677                                    | <i>Mineralogical Magazine</i> <b>50</b> (1986), 299                                     |
| Santanaite      | $\text{Pb}_{11}\text{CrO}_{16}$  | A | 1971-035 | Chile               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1972), 455                         |   |
| Santarosaite    | $\text{CuB}_2\text{O}_4$   | A | 2007-013 | Chile               | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>185</b> (2008), 27              |   |
| Santite         | $\text{KB}_5\text{O}_6(\text{OH})_4\cdot 2\text{H}_2\text{O}$  | A | 1969-044 | Italy               | <i>Contributions to Mineralogy and Petrology</i> <b>27</b> (1970), 159                | <i>Zeitschrift für Kristallographie</i> <b>98</b> (1937), 266                           |
| Saponite        | $(\text{Ca}, \text{Na})_{0.3}(\text{Mg}, \text{Fe})_3(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_2\cdot 4\text{H}_2\text{O}$                      | G | 1840     | United Kingdom      | <i>Kungliga Svenska Vetenskaps-Akademiens Handlingar</i> (1840), 153                  |   |
| Sapphirine      | $\text{Mg}_4(\text{Mg}_3\text{Al}_9)\text{O}_4[\text{Si}_3\text{Al}_9\text{O}_{36}]$   | G | 1819     | Denmark (Greenland) | Göttingische Gelehrte Anzeigen. Weidmannsche, Berlin (1819), 1994                     | <i>Contributions to Mineralogy and Petrology</i> <b>68</b> (1979), 357                  |
| Sarabauite      | $\text{Sb}_4\text{S}_6\cdot \text{CaSb}_6\text{O}_{10}$  | A | 1976-035 | Malaysia            | <i>American Mineralogist</i> <b>63</b> (1978), 715                                    | <i>Acta Crystallographica</i> <b>B34</b> (1978), 3569                                   |
| Saranchinaite   | $\text{Na}_2\text{Cu}(\text{SO}_4)_2$  | A | 2015-019 | Russia              | <i>Mineralogical Magazine</i> <b>82</b> (2018), 257                                   |   |
| Sarcolite       | $\text{Na}_4\text{Ca}_{12}\text{Al}_8\text{Si}_{12}\text{O}_{46}(\text{SiO}_4, \text{PO}_4)(\text{OH}, \text{H}_2\text{O})_4(\text{CO}_3, \text{Cl})$  | G | 1807     | Italy               | <i>Annales du Muséum d'Histoire Naturelle</i> <b>9</b> (1807), 241                    | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>24</b> (1977), 1   |
| Sarcopside      | $\text{Fe}^{2+}_3(\text{PO}_4)_2$  | G | 1868     | Poland              | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>20</b> (1868), 245      | <i>American Mineralogist</i> <b>57</b> (1972), 24                                       |
| Sardignaite     | $\text{BiMo}_2\text{O}_7(\text{OH})\cdot 2\text{H}_2\text{O}$  | A | 2008-040 | Italy               | <i>Mineralogy and Petrology</i> <b>100</b> (2010), 17                                 |   |
| Sarkinite       | $\text{Mn}^{2+}_2(\text{AsO}_4)(\text{OH})$  | G | 1885     | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>7</b> (1885), 724          | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>21</b> (1974), 246 |

|                     |   |   |           |                                  |  |  |
|---------------------|---|---|-----------|----------------------------------|--|--|
| Sarmientite         | $\text{Fe}^{3+}_2(\text{AsO}_4)(\text{SO}_4)(\text{OH})\cdot 5\text{H}_2\text{O}$                                   | G | 1941      | Argentina                        | <i>Notulae Naturae of the Academy of Natural Sciences of Philadelphia</i> (1941), 92   | <i>Mineralogical Magazine</i> <b>78</b> (2014), 347            |
| Sarrabusite         | $\text{Pb}_5\text{CuCl}_4(\text{SeO}_3)_4$  | A | 1997-046a | Italy                            | <i>Acta Crystallographica</i> <b>B68</b> (2012), 15  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1493            |
| Sartorite           | $\text{PbAs}_2\text{S}_4$   | G | 1868      | Switzerland                      | A System of Mineralogy, 5th ed. Wiley, New York (1868), 87   | <i>American Mineralogist</i> <b>88</b> (2003), 450             |
| Saryarkite-(Y)      | $\text{Ca}(\text{Y}, \text{Th})\text{Al}_5(\text{SiO}_4)_2(\text{PO}_4)_2(\text{OH})_7\cdot 6\text{H}_2\text{O}$    | A | 1987 s.p. | Kazakhstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>93</b> (1964), 147   |  |
| Sasaite             | $\text{Al}_6(\text{PO}_4)_5(\text{OH})_3\cdot 36\text{H}_2\text{O}$   | A | 1977-033  | South Africa                     | <i>Mineralogical Magazine</i> <b>42</b> (1978), 401  |  |
| Sassolite           | $\text{B}(\text{OH})_3$   | G | 1808      | Italy                            | Mineralogische Tabellen mit Rücksicht auf die neuesten Entdeckungen ausgearbeitet und mit erläuternden Anmerkungen versehen. Rottmann, Berlin (1808), 75 | <i>Acta Crystallographica</i> <b>B42</b> (1986), 545           |
| Satimolite          | $\text{KNa}_2\text{Al}_4(\text{B}_2\text{O}_5)_3\text{Cl}_3\cdot 13\text{H}_2\text{O}$                              | A | 1967-023  | Kazakhstan                       | <i>Trudy Mineralogicheskogo Muzeya Akademiyi Nauk SSSR</i> <b>19</b> (1969), 121   |  |
| Satpaevite          | $\text{Al}_{12}(\text{V}^{4+}, \text{V}^{5+})_8\text{O}_{37}\cdot 30\text{H}_2\text{O}$ (?)                         | Q | 1959      | Kazakhstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>88</b> (1959), 157   |  |
| Satterlyite         | $(\text{Fe}^{2+}, \text{Mg}, \text{Fe}^{3+})_{12}(\text{PO}_3\text{OH})(\text{PO}_4)_5(\text{OH}, \text{O})_6$      | A | 1976-056  | Canada                           | <i>Canadian Mineralogist</i> <b>16</b> (1978), 411   | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 127    |
| Sauconite           | $\text{Na}_{0.3}\text{Zn}_3(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_2\cdot 4\text{H}_2\text{O}$             | G | 1875      | USA                              | <i>Pennsylvania Geological Survey</i> <b>2</b> (1875), 1   | <i>American Mineralogist</i> <b>36</b> (1951), 795             |
| Sayrite             | $\text{Pb}_2(\text{UO}_2)_5\text{O}_6(\text{OH})_2\cdot 4\text{H}_2\text{O}$  | A | 1982-050  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>106</b> (1983), 299  |  |
| Sazhinite-(Ce)      | $\text{Na}_3\text{CeSi}_6\text{O}_{15}\cdot 2\text{H}_2\text{O}$  | A | 1973-060  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 338  | <i>Kristallografiya</i> <b>25</b> (1980), 728                  |
| Sazhinite-(La)      | $\text{Na}_3\text{LaSi}_6\text{O}_{15}\cdot 2\text{H}_2\text{O}$  | A | 2002-042a | Namibia                          | <i>Mineralogical Magazine</i> <b>70</b> (2006), 405  |  |
| Sazykinaite-(Y)     | $\text{Na}_5\text{YzrSi}_6\text{O}_{18}\cdot 6\text{H}_2\text{O}$   | A | 1992-031  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(5)</b> (1993), 76  |  |
| Sbacchiite          | $\text{Ca}_2\text{AlF}_7$   | A | 2017-097  | Italy                            | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183                   |  |
| Sborgite            | $\text{NaB}_5\text{O}_6(\text{OH})_4\cdot 3\text{H}_2\text{O}$  | G | 1957      | Italy                            | <i>Atti dell'Accademia Nazionale dei Lincei, Classe di Scienze Fisiche, Matematiche e Naturali, Serie VIII</i> <b>22</b> (1957), 519                     | <i>Acta Crystallographica</i> <b>B28</b> (1972), 3559          |
| Scacchite           | $\text{MnCl}_2$   | G | 1869      | Italy                            | Tableau Minéralogique. Dunod, Paris (1869), 70.  | <i>Zeitschrift für Kristallographie</i> <b>192</b> (1990), 147 |
| Scainiite           | $\text{Pb}_{14}\text{Sb}_{30}\text{S}_{54}\text{O}_5$   | A | 1996-014  | Italy                            | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 949  | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 835    |
| Scandiobabingtonite | $(\text{Ca}, \text{Na})_2(\text{Fe}^{2+}, \text{Mn})(\text{Sc}, \text{Fe}^{3+})\text{Si}_5\text{O}_{14}(\text{OH})$ | A | 1993-012  | Italy                            | <i>American Mineralogist</i> <b>83</b> (1998), 1330  |  |
| Scarbroite          | $\text{Al}_5(\text{CO}_3)(\text{OH})_{13}\cdot 5\text{H}_2\text{O}$   | G | 1829      | United Kingdom                   | <i>Philosophical Magazine</i> <b>5</b> (1829), 178   | <i>Mineralogical Magazine</i> <b>43</b> (1980), 615            |
| Scawtite            | $\text{Ca}_7(\text{Si}_3\text{O}_9)_2(\text{CO}_3)\cdot 2\text{H}_2\text{O}$  | G | 1930      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>22</b> (1930), 222  | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1489            |
| Schachnerite        | $\text{Ag}_{1.1}\text{Hg}_{0.9}$  | A | 1971-055  | Germany                          | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>117</b> (1972), 1  | <i>Mineralogical Magazine</i> <b>51</b> (1987), 318            |

|                  |   |    |           |                                  |   |  |
|------------------|---|----|-----------|----------------------------------|---|--|
| Schafarzikite    | $\text{Fe}^{2+}(\text{Sb}^{3+})_2\text{O}_4$  | G  | 1921      | Slovakia                         | <i>Zeitschrift für Kristallographie, Mineralogie und Petrographie</i> <b>56</b> (1921), 198   | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 419  |
| Schäferite       | $(\text{NaCa}_2)\text{Mg}_2(\text{VO}_4)_3$   | A  | 1997-048  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1999), 123   |  |
| Schairerite      | $\text{Na}_{21}(\text{SO}_4)_7\text{ClF}_6$   | G  | 1931      | USA                              | <i>American Mineralogist</i> <b>16</b> (1931), 133  | <i>Mineralogical Magazine</i> <b>40</b> (1975), 131  |
| Schallerite      | $\text{Mn}^{2+}_{16}\text{As}^{3+}_3\text{Si}_{12}\text{O}_{36}(\text{OH})_{17}$  | G  | 1925      | USA                              | <i>American Mineralogist</i> <b>10</b> (1925), 9  | <i>Yamaguchi University, College of Arts Bulletin</i> <b>26</b> (1992), 51   |
| Schapbachite     | $\text{Ag}_{0.4}\text{Pb}_{0.2}\text{Bi}_{0.4}\text{S}$   | Rd | 1982 s.p. | Germany                          | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>29</b> (1877), 77   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 441   |
| Schaurteite      | $\text{Ca}_3\text{Ge}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | A  | 1988 s.p. | Namibia                          | Festschrift Dr. Werner Schaurte. Bauer & Schaurte, Neuss (1967), 33   | <i>Acta Crystallographica</i> <b>E69</b> (2013), i6  |
| Scheelite        | $\text{Ca}(\text{WO}_4)$  | G  | 1821      | Sweden                           | Handbuch der Oryktognosie. Mohr & Winter, Heidelberg (1821), 594  | <i>Journal of Physics and Chemistry of Solids</i> <b>46</b> (1985), 253  |
| Schertelite      | $(\text{NH}_4)_2\text{Mg}(\text{PO}_3\text{OH})_2 \cdot 4\text{H}_2\text{O}$  | G  | 1902      | Australia                        | <i>Chemical News and Journal of Industrial Science</i> <b>85</b> (1902), 181  | <i>Acta Crystallographica</i> <b>B28</b> (1972), 683   |
| Scheuchzerite    | $\text{NaMn}^{2+}_9\text{Si}_9\text{V}^{5+}\text{O}_{28}(\text{OH})_4$  | A  | 2004-044  | Switzerland                      | <i>American Mineralogist</i> <b>91</b> (2006), 937  |  |
| Schiavinitoite   | $\text{Nb}(\text{BO}_4)$  | A  | 1999-051  | Madagascar                       | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 159   |  |
| Schieffelinite   | $\text{Pb}_{10}\text{Te}^{6+}_6\text{O}_{20}(\text{OH})_{14}(\text{SO}_4)(\text{H}_2\text{O})_5$  | A  | 1979-043  | USA                              | <i>Mineralogical Magazine</i> <b>43</b> (1980), 771   | <i>American Mineralogist</i> <b>97</b> (2012), 212   |
| Schindlerite     | $\{(\text{NH}_4)_4\text{Na}_2(\text{H}_2\text{O})_{10}\}\{\text{V}_{10}\text{O}_{28}\}$   | Rd | 2015 s.p. | USA                              | <i>Canadian Mineralogist</i> <b>51</b> (2013), 297  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 555   |
| Schizolite       | $\text{NaCaMnSi}_3\text{O}_8(\text{OH})$  | Rn | 2013-067  | South Africa                     | CNMNC Newsletter 18 - <i>Mineralogical Magazine</i> <b>77</b> (2013), 3249  | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |
| Schlegelite      | $\text{Bi}_7\text{O}_4(\text{MoO}_4)_2(\text{AsO}_4)_3$   | A  | 2003-051  | Germany                          | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 803   |  |
| Schlemaite       | $(\text{Cu}, \square)_6(\text{Pb}, \text{Bi})\text{Se}_4$   | A  | 2003-026  | Germany                          | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1433   |  |
| Schlossmacherite | $(\text{H}_3\text{O})\text{Al}_3(\text{SO}_4)_2(\text{OH})_6$   | Rd | 1979-028  | Chile                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1980), 215   |  |
| Schlüterite-(Y)  | $(\text{Y}, \text{REE})_2\text{AlSi}_2\text{O}_7(\text{OH})_2\text{F}$  | A  | 2012-015  | Norway                           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 353   |  |
| Schmidite        | $[\text{Zn}_2(\text{Fe}^{3+}, \text{Mn}^{2+})_2\text{Fe}^{3+}(\text{PO}_4)_3(\text{OH})_3(\text{H}_2\text{O})_6] \cdot 2\text{H}_2\text{O}$ | A  | 2017-012  | Germany                          | CNMNC Newsletter 37 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 737; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 529                | <a href="https://doi.org/10.1180/mgm.2018.123">https://doi.org/10.1180/mgm.2018.123</a>  |
| Schmiederite     | $\text{Cu}_2\text{Pb}_2(\text{Se}^{4+}\text{O}_3)(\text{Se}^{6+}\text{O}_4)(\text{OH})_4$   | G  | 1962      | Argentina                        | Appendix to the Second Edition of an Index of Mineral Species and Varieties Arranged Chemically. British Museum of Natural History, London (1963), 84 | <i>Mineralogy and Petrology</i> <b>36</b> (1987), 3  |
| Schmitterite     | $(\text{UO}_2)(\text{Te}^{4+}\text{O}_3)$   | A  | 1967-045  | Mexico                           | <i>American Mineralogist</i> <b>56</b> (1971), 411  | <i>Acta Crystallographica</i> <b>B29</b> (1973), 1251  |
| Schneebergite    | $\text{BiCo}_2(\text{AsO}_4)_2(\text{OH}) \cdot \text{H}_2\text{O}$   | A  | 1999-027  | Germany                          | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 115   |  |
| Schneiderhöhnite | $\text{Fe}^{2+}\text{Fe}^{3+}_3\text{As}^{3+}_5\text{O}_{13}$   | A  | 1973-046  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1973), 517   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 707   |
| Schoderite       | $\text{Al}_2(\text{PO}_4)(\text{VO}_4) \cdot 8\text{H}_2\text{O}$   | A  | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>47</b> (1962), 637  | <i>American Mineralogist</i> <b>64</b> (1979), 713   |
| Schoenfliesite   | $\text{MgSn}(\text{OH})_6$  | A  | 1968-008  | USA                              | <i>Zeitschrift für Kristallographie</i> <b>134</b> (1971), 116  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1203  |
| Schoepite        | $(\text{UO}_2)_8\text{O}_2(\text{OH})_{12} \cdot 12\text{H}_2\text{O}$  | A  | 1962 s.p. | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>8</b> (1923), 67  | <i>Canadian Mineralogist</i> <b>34</b> (1996), 1071  |

|                   |  |    |           |                                  |   |   |
|-------------------|--|----|-----------|----------------------------------|---|---|
| Schöllhornite     | $\text{Na}_{0.3}\text{CrS}_2 \cdot \text{H}_2\text{O}$   | A  | 1984-043  | USA (meteorite)                  | <i>American Mineralogist</i> <b>70</b> (1985), 638  |   |
| Scholzite         | $\text{CaZn}_2(\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}$   | G  | 1948      | Germany                          | <i>Fortschritte der Mineralogie</i> <b>27</b> (1948), 31  | <i>Zeitschrift für Kristallographie</i> <b>198</b> (1992), 239                          |
| Schoonerite       | $\text{ZnMn}^{2+}\text{Fe}^{2+}_2\text{Fe}^{3+}(\text{PO}_4)_3(\text{OH})_2 \cdot 9\text{H}_2\text{O}$ | A  | 1976-021  | USA                              | <i>American Mineralogist</i> <b>62</b> (1977), 246  | <i>American Mineralogist</i> <b>62</b> (1977), 250                                      |
| Schorl            | $\text{NaFe}^{2+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$       | Rn | 2007 s.p. | Germany                          | original paper?   | <i>American Mineralogist</i> <b>90</b> (2005), 1784                                     |
| Schorlomite       | $\text{Ca}_3\text{Ti}_2(\text{SiFe}^{3+}_2)\text{O}_{12}$  | G  | 1846      | USA                              | <i>American Journal of Science</i> <b>52</b> (1846), 249  | <i>Physics and Chemistry of Minerals</i> <b>32</b> (2005), 277                          |
| Schreibersite     | $(\text{Fe,Ni})_3\text{P}$   | G  | 1848      | Chile                            | <i>Berichte Über die Mittheilungen von Freunden der Naturwissenschaften in Wien</i> <b>3</b> (1848), 65 | <i>Physics and Chemistry of Minerals</i> <b>31</b> (2005), 721                          |
| Schreyerite       | $\text{V}^{3+}_2\text{Ti}^{4+}_3\text{O}_9$  | A  | 1976-004  | Kenya                            | <i>Naturwissenschaften</i> <b>63</b> (1976), 293  | <i>American Mineralogist</i> <b>91</b> (2006), 196                                      |
| Schröckingerite   | $\text{NaCa}_3(\text{UO}_2)(\text{SO}_4)(\text{CO}_3)_3\text{F} \cdot 10\text{H}_2\text{O}$            | G  | 1873      | Czech Republic                   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>1</b> (1873), 137                  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>35</b> (1986), 1   |
| Schubnelite       | $\text{Fe}^{3+}(\text{V}^{5+}\text{O}_4) \cdot \text{H}_2\text{O}$                                     | A  | 1970-015  | Gabon                            | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>93</b> (1970), 470     | <i>American Mineralogist</i> <b>84</b> (1999), 665                                      |
| Schuetteite       | $\text{Hg}_3\text{O}_2(\text{SO}_4)$   | A  | 1962 s.p. | USA                              | <i>American Mineralogist</i> <b>44</b> (1959), 1026   | <i>Acta Crystallographica</i> <b>E57</b> (2001), i98                                    |
| Schullingite-(Nd) | $\text{CuPbNd}(\text{CO}_3)_3(\text{OH}) \cdot 1.5\text{H}_2\text{O}$                                  | A  | 1987 s.p. | Democratic Republic of the Congo | <i>Bulletin de la Société Géologique de Belgique</i> <b>90</b> (1947), B233                             | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1463                                     |
| Schulenbergite    | $(\text{Cu,Zn})_7(\text{SO}_4)_2(\text{OH})_{10} \cdot 3\text{H}_2\text{O}$                            | A  | 1982-074  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 17  | <i>Archives de Sciences de Genève</i> <b>47</b> (1994), 117                             |
| Schüllerite       | $\text{Ba}_2\text{Ti}_2\text{Na}_2\text{Mg}_2(\text{Si}_2\text{O}_7)_2\text{O}_2\text{F}_2$            | Rd | 2010-035  | Germany                          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>140(1)</b> (2011), 36                      | <i>Canadian Mineralogist</i> <b>51</b> (2013), 715                                      |
| Schultenite       | $\text{Pb}(\text{AsO}_3\text{OH})$   | G  | 1926      | Namibia                          | <i>Mineralogical Magazine</i> <b>21</b> (1926), 149   | <i>Journal of Crystallographic and Spectroscopic Research</i> <b>21</b> (1991), 589     |
| Schumacherite     | $\text{Bi}_3\text{O}(\text{VO}_4)_2(\text{OH})$  | A  | 1982-023  | Germany                          | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 165                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1993), 487                           |
| Schwartzembergite | $\text{Pb}^{2+}_5\text{H}_2\text{I}^{3+}\text{O}_6\text{Cl}_3$   | G  | 1868      | Chile                            | <i>A System of Mineralogy</i> , 5th ed. Wiley, New York (1868), 120                                     | <i>Canadian Mineralogist</i> <b>39</b> (2001), 785                                      |
| Schwertmannite    | $\text{Fe}^{3+}_{16}\text{O}_{16}(\text{OH})_{9.6}(\text{SO}_4)_{3.2} \cdot 10\text{H}_2\text{O}$      | A  | 1990-006  | Finland                          | <i>Mineralogical Magazine</i> <b>58</b> (1994), 641   | <i>American Mineralogist</i> <b>95</b> (2010), 1312                                     |
| Sclarite          | $\text{Zn}_7(\text{CO}_3)_2(\text{OH})_{10}$   | A  | 1988-026  | USA                              | <i>American Mineralogist</i> <b>74</b> (1989), 1355   |   |
| Scolecite         | $\text{Ca}(\text{Si}_3\text{Al}_2)\text{O}_{10} \cdot 3\text{H}_2\text{O}$                             | A  | 1997 s.p. | Iceland                          | <i>Journal für Chemie und Physik</i> <b>8</b> (1813), 353   | <i>European Journal of Mineralogy</i> <b>14</b> (2002), 567                             |
| Scorodite         | $\text{Fe}^{3+}(\text{AsO}_4) \cdot 2\text{H}_2\text{O}$   | G  | 1818      | Germany                          | <i>Handbuch der Mineralogie von C.A.S. Hoffmann</i> , Vol. 4. Craz und Gerlach, Freiberg (1818), 182    | <i>Acta Crystallographica</i> <b>E63</b> (2007), i67                                    |
| Scorzalite        | $\text{Fe}^{2+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_2$  | G  | 1949      | Brazil                           | <i>American Mineralogist</i> <b>34</b> (1949), 83   | <i>Acta Crystallographica</i> <b>12</b> (1959), 695                                     |
| Scotlandite       | $\text{Pb}(\text{S}^{4+}\text{O}_3)$   | A  | 1982-001  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>48</b> (1984), 283   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>34</b> (1985), 289 |
| Scottyite         | $\text{BaCu}_2\text{Si}_2\text{O}_7$   | A  | 2012-027  | South Africa                     | <i>American Mineralogist</i> <b>98</b> (2013), 478  |   |
| Scrutinyite       | $\text{PbO}_2$   | A  | 1984-061  | USA                              | <i>Canadian Mineralogist</i> <b>26</b> (1988), 905  |   |
| Seamanite         | $\text{Mn}^{2+}_3\text{B}(\text{OH})_4(\text{PO}_4)(\text{OH})_2$                                      | G  | 1930      | USA                              | <i>American Mineralogist</i> <b>15</b> (1930), 220  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 923                                      |
| Searlesite        | $\text{NaBSi}_2\text{O}_5(\text{OH})_2$  | G  | 1914      | USA                              | <i>American Journal of Science, Ser. IV</i> <b>38</b> (1914), 437                                       | <i>American Mineralogist</i> <b>61</b> (1976), 123                                      |

|                  |  |    |           |                     |   |  |
|------------------|--|----|-----------|---------------------|---|--|
| Sederholmite     | NiSe   | A  | 1967 s.p. | Finland             | <i>Comptes Rendus de la Société Géologique de Finlande</i> <b>36</b> (1964), 113                                      | <i>Acta Chemica Scandinavica</i> <b>22</b> (1968), 2118        |
| Sedovite         | U <sup>4+</sup> (MoO <sub>4</sub> ) <sub>2</sub>   | A  | 1968 s.p. | Kazakhstan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>94</b> (1965), 548                                      |  |
| Seeligerite      | Pb <sub>3</sub> (IO <sub>4</sub> )Cl <sub>3</sub>  | A  | 1970-036  | Chile               | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1971), 210   | <i>Mineralogical Magazine</i> <b>72</b> (2008), 771            |
| Seelite          | Mg(UO <sub>2</sub> ) <sub>2</sub> (AsO <sub>3</sub> ,AsO <sub>4</sub> ) <sub>2</sub> ·7H <sub>2</sub> O  | A  | 1992-005  | France / Iran       | <i>Mineralogical Record</i> <b>24</b> (1993), 463   | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 673     |
| Segelerite       | CaMgFe <sup>3+</sup> (PO <sub>4</sub> ) <sub>2</sub> (OH)·4H <sub>2</sub> O  | A  | 1973-023  | USA                 | <i>American Mineralogist</i> <b>59</b> (1974), 48   | <i>American Mineralogist</i> <b>62</b> (1977), 692             |
| Segerstromite    | Ca <sub>3</sub> (As <sup>5+</sup> O <sub>4</sub> ) <sub>2</sub> [As <sup>3+</sup> (OH) <sub>3</sub> ] <sub>2</sub>   | A  | 2014-001  | Chile               | <i>American Mineralogist</i> <b>103</b> (2018), 1497  |  |
| Segnitite        | PbFe <sup>3+</sup> <sub>3</sub> (AsO <sub>4</sub> )(AsO <sub>3</sub> OH)(OH) <sub>6</sub>  | A  | 1991-017  | Australia           | <i>American Mineralogist</i> <b>77</b> (1992), 656  | <i>American Mineralogist</i> <b>99</b> (2014), 1355            |
| Seidite-(Ce)     | Na <sub>4</sub> (Ce,Sr) <sub>2</sub> TiSi <sub>8</sub> O <sub>18</sub> (O,OH,F) <sub>6</sub> ·5H <sub>2</sub> O  | A  | 1993-029  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(4)</b> (1998), 94                                 | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1183            |
| Seidozerite      | Na <sub>2</sub> Zr <sub>2</sub> Na <sub>2</sub> MnTi(Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>2</sub> F <sub>2</sub>                                 | Rd | 2016 s.p. | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>87</b> (1958), 590                                      | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1203            |
| Seifertite       | SiO <sub>2</sub>   | A  | 2004-010  | India (meteorite)   | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 523   | <i>American Mineralogist</i> <b>87</b> (2002), 1018            |
| Seinäjokite      | FeSb <sub>2</sub>  | A  | 1976-001  | Finland             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 617                                     | <i>Acta Chemica Scandinavica</i> <b>23</b> (1969), 3043        |
| Sejkoraite-(Y)   | Y <sub>2</sub> [(UO <sub>2</sub> ) <sub>8</sub> O <sub>6</sub> (SO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ] <sub>2</sub> ·26H <sub>2</sub> O              | A  | 2009-008  | Czech Republic      | <i>American Mineralogist</i> <b>96</b> (2011), 983  |  |
| Sekaninaite      | Fe <sup>2+</sup> <sub>2</sub> Al <sub>4</sub> Si <sub>5</sub> O <sub>18</sub>  | A  | 1967-047  | Czech Republic      | <i>Scripta Facultatis Scientiarum Naturalium Universitatis Purkynianae Brunensis, Geologia</i> <b>1(5)</b> (1975), 21 | <i>Mineralogical Magazine</i> <b>77</b> (2013), 485            |
| Selenium         | Se   | G  | 1828 ?    | unknown             | <i>American Mineralogist</i> <b>19</b> (1934), 194  | <i>Soviet Physics - Crystallography</i> <b>14</b> (1969), 259  |
| Selenojalpaite   | Ag <sub>3</sub> CuSe <sub>2</sub>  | A  | 2004-048  | Sweden              | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1373   |  |
| Selenopolybasite | Cu(Ag,Cu) <sub>6</sub> Ag <sub>9</sub> Sb <sub>2</sub> (S,Se) <sub>9</sub> Se <sub>2</sub>   | A  | 2006-053  | USA                 | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1525   | <i>Acta Crystallographica</i> <b>B62</b> (2006), 768           |
| Selenostephanite | Ag <sub>5</sub> Sb(Se,S) <sub>4</sub>  | A  | 1982-028  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 627                                     |  |
| Seligmannite     | CuPbAsS <sub>3</sub>   | G  | 1901      | Switzerland         | <i>Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften</i> (1901), 110                            | <i>Zeitschrift für Kristallographie</i> <b>131</b> (1970), 397 |
| Selivanovaite    | NaTi <sub>3</sub> (Ti,Na,Fe,Mn) <sub>4</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>2</sub> O <sub>4</sub> (OH,H <sub>2</sub> O) <sub>4</sub> ·nH <sub>2</sub> O | A  | 2015-126  | Russia              | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 525   |  |
| Sellaite         | MgF <sub>2</sub>   | G  | 1868      | France              | <i>Atti della Regia Accademia delle Scienze di Torino</i> <b>4</b> (1868), 35   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 2200          |
| Selwynite        | NaKBeZr <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> ·2H <sub>2</sub> O  | A  | 1993-037  | Australia           | <i>Canadian Mineralogist</i> <b>33</b> (1995), 55   |  |
| Semenovite-(Ce)  | (Na,Ca) <sub>9</sub> Fe <sup>2+</sup> Ce <sub>2</sub> (Si,Be) <sub>20</sub> (O,OH,F) <sub>48</sub>   | A  | 1971-036  | Denmark (Greenland) | <i>Lithos</i> <b>5</b> (1972), 163  | <i>American Mineralogist</i> <b>64</b> (1979), 202             |
| Semseyite        | Pb <sub>9</sub> Sb <sub>8</sub> S <sub>21</sub>  | G  | 1881      | Romania             | <i>Magyar Tudományos Akadémia Értésítője</i> <b>15</b> (1881), 111  | <i>American Mineralogist</i> <b>59</b> (1974), 1127            |
| Senaite          | Pb(Mn,Y,U)(Fe,Zn) <sub>2</sub> (Ti,Fe,Cr,V) <sub>18</sub> (O,OH) <sub>38</sub>   | G  | 1898      | Brazil              | <i>Mineralogical Magazine</i> <b>12</b> (1898), 30  | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 163     |
| Senarmontite     | Sb <sub>2</sub> O <sub>3</sub>   | Rn | 1851      | Algeria             | <i>American Journal of Science and Arts</i> <b>12</b> (1851), 205   | <i>Acta Crystallographica</i> <b>B31</b> (1975), 2016          |

|                |   |    |           |                                  |   |   |
|----------------|---|----|-----------|----------------------------------|---|---|
| Senegalite     | $\text{Al}_2(\text{PO}_4)(\text{OH})_3 \cdot \text{H}_2\text{O}$  | A  | 1975-004  | Senegal                          | <i>Lithos</i> <b>9</b> (1976), 165  | <i>American Mineralogist</i> <b>64</b> (1979), 1243                                     |
| Sengierite     | $\text{Cu}_2(\text{UO}_2)_2(\text{VO}_4)_2(\text{OH})_2 \cdot 6\text{H}_2\text{O}$  | Rn | 2007 s.p. | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>34</b> (1949), 109  | <i>Bulletin de Minéralogie</i> <b>103</b> (1980), 176                                   |
| Senkevichite   | $\text{CsNaKCa}_2\text{TiOSi}_7\text{O}_{18}(\text{OH})$  | A  | 2004-017  | Tajikistan                       | <i>New Data on Minerals</i> <b>40</b> (2005), 11  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1341                                     |
| Sepiolite      | $\text{Mg}_4\text{Si}_6\text{O}_{15}(\text{OH})_2 \cdot 6\text{H}_2\text{O}$  | G  | 1847      | Italy                            | Generum et Specierum Mineralium, Secundum Ordines Naturales Digestorum Synopsis. Anton, Halle (1847), 185                                   | <i>American Mineralogist</i> <b>92</b> (2007), 91                                       |
| Serandite      | $\text{NaMn}^{2+}_2\text{Si}_3\text{O}_8(\text{OH})$  | Rn | 1931      | Guinea                           | <i>Comptes Rendus de l'Academie des Sciences de Paris</i> <b>192</b> (1931), 187  | <i>American Mineralogist</i> <b>99</b> (2014), 1755                                     |
| Serendibite    | $\text{Ca}_4[\text{Mg}_6\text{Al}_6]\text{O}_4[\text{Si}_6\text{B}_3\text{Al}_3\text{O}_{36}]$  | G  | 1903      | Sri Lanka                        | <i>Mineralogical Magazine</i> <b>13</b> (1903), 224   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 1  |
| Sergeevite     | $\text{Ca}_2\text{Mg}_{11}(\text{CO}_3)_9(\text{HCO}_3)_4(\text{OH})_4 \cdot 6\text{H}_2\text{O}$                                     | A  | 1979-038  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 217   |   |
| Serpierite     | $\text{Ca}(\text{Cu},\text{Zn})_4(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$  | G  | 1881      | Greece                           | <i>Bulletin de la Société Mineralogique de France</i> <b>4</b> (1881), 89   | <i>Acta Crystallographica</i> <b>B24</b> (1968), 1214                                   |
| Serrabrancaite | $\text{Mn}(\text{PO}_4) \cdot \text{H}_2\text{O}$   | A  | 1998-006  | Brazil                           | <i>American Mineralogist</i> <b>85</b> (2000), 847  | <i>Inorganic Chemistry</i> <b>26</b> (1987), 3544                                       |
| Sewardite      | $\text{CaFe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2$   | A  | 2001-054  | Namibia                          | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1191   |   |
| Shabaite-(Nd)  | $\text{CaNd}_2(\text{UO}_2)(\text{CO}_3)_4(\text{OH})_2 \cdot 6\text{H}_2\text{O}$  | A  | 1988-005  | Democratic Republic of the Congo | <i>European Journal of Mineralogy</i> <b>1</b> (1989), 85   |   |
| Shabynite      | $\text{Mg}_5(\text{BO}_3)(\text{OH})_5\text{Cl}_2 \cdot 4\text{H}_2\text{O}$  | A  | 1979-075  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 569   |   |
| Shadlunite     | $(\text{Fe},\text{Cu})_8(\text{Pb},\text{Cd})\text{S}_8$  | A  | 1972-012  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 63  |   |
| Shafranovskite | $\text{Na}_3\text{K}_2(\text{Mn},\text{Fe},\text{Na})_4[\text{Si}_9(\text{O},\text{OH})_{27}](\text{OH})_2 \cdot n\text{H}_2\text{O}$ | A  | 1981-048  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 475   | <i>American Mineralogist</i> <b>89</b> (2004), 1816                                     |
| Shakhovite     | $\text{Hg}^{1+}_4\text{Sb}^{5+}\text{O}_3(\text{OH})_3$   | A  | 1980-069  | Kyrgyzstan                       | <i>Geologiya i Geofizika</i> <b>11</b> (1980), 128  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 227 |
| Shandite       | $\text{Ni}_3\text{Pb}_2\text{S}_2$  | G  | 1950      | Australia                        | <i>Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin (Mathematisch-naturwissenschaftliche Klasse)</i> <b>6</b> (1950), 1 | <i>American Mineralogist</i> <b>35</b> (1950), 425                                      |
| Shannonite     | $\text{Pb}_2\text{O}(\text{CO}_3)$  | A  | 1993-053  | USA                              | <i>Mineralogical Magazine</i> <b>59</b> (1995), 305   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 1063                                    |
| Sharpite       | $\text{Ca}(\text{UO}_2)_6(\text{CO}_3)_5(\text{OH})_4 \cdot 6\text{H}_2\text{O}$  | G  | 1938      | Democratic Republic of the Congo | <i>Bulletin des Séances de l'Institut Royal Colonial Belge</i> <b>9</b> (1938), 333   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 109                           |
| Sharyginite    | $\text{Ca}_3\text{TiFe}_2\text{O}_8$  | A  | 2017-014  | Germany                          | <i>Minerals</i> <b>8</b> (2018), 308  |   |
| Shattuckite    | $\text{Cu}_5(\text{SiO}_3)_4(\text{OH})_2$  | Rd | 1967 s.p. | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>5</b> (1915), 7   | <i>American Mineralogist</i> <b>62</b> (1977), 491                                      |
| Shcherbakovite | $\text{K}_2\text{NaTi}_2\text{O}(\text{OH})\text{Si}_4\text{O}_{12}$  | G  | 1954      | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>99</b> (1954), 837   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1193                                     |



|                |   |   |           |                                  |  |   |
|----------------|---|---|-----------|----------------------------------|--|---|
| Shcherbinaite  | $V_2O_5$  | A | 1971-021  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>101</b> (1972), 464  | <i>Acta Crystallographica</i> <b>C42</b> (1986), 1467   |
| Shchurovskyite | $K_2CaCu_6O_2(AsO_4)_4$                                   | A | 2013-078  | Russia                           | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1737   |   |
| Sheldrickite   | $NaCa_3(CO_3)_2F_3 \cdot H_2O$                            | A | 1996-019  | Canada                           | <i>Canadian Mineralogist</i> <b>35</b> (1997), 181   |   |
| Shenzhuangite  | $NiFeS_2$   | A | 2017-018  | China                            | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 165  |   |
| Sherwoodite    | $Ca_{4.5}AlV^{4+}_2V^{5+}_{12}O_{40} \cdot 28H_2O$        | G | 1958      | USA                              | <i>American Mineralogist</i> <b>43</b> (1958), 749   | <i>American Mineralogist</i> <b>63</b> (1978), 863  |
| Shibkovite     | $K_2Ca_2(Zn_3Si_{12})O_{30}$                              | A | 1997-018  | Tajikistan                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(4)</b> (1998), 89  | <i>Doklady Akademii Nauk</i> <b>369</b> (1999), 378   |
| Shigaite       | $Mn_6Al_3(OH)_{18}[Na(H_2O)_6](SO_4)_2 \cdot 6H_2O$       | A | 1984-057  | Japan                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 453  | <i>Canadian Mineralogist</i> <b>34</b> (1996), 91   |
| Shilovite      | $Cu(NH_3)_4(NO_3)_2$                                      | A | 2014-016  | Chile                            | <i>Mineralogical Magazine</i> <b>79</b> (2015), 613  |   |
| Shimazakiite   | $Ca_2B_2O_5$  | A | 2010-085a | Japan                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 93   |   |
| Shinkolobweite | $Pb_{1.25}[U^{5+}(H_2O)_2(U^{6+}O_2)_5O_8(OH)_2](H_2O)_5$ | A | 2016-095  | Democratic Republic of the Congo | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |   |
| Shirokshinite  | $K(Mg_2Na)Si_4O_{10}F_2$                                  | A | 2001-063  | Russia                           | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 447  |   |
| Shirozulite    | $KMn^{2+}_3(Si_3Al)O_{10}(OH)_2$                          | A | 2001-045  | Japan                            | <i>American Mineralogist</i> <b>89</b> (2004), 232   |   |
| Shkatulkalite  | $Na_{10}MnTi_3Nb_3(Si_2O_7)_6(OH)_2F \cdot 12H_2O$        | A | 1993-058  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>125(1)</b> (1996), 120   | <i>Minerals</i> <b>8</b> (2018), 303  |
| Shlykovite     | $KCa[Si_4O_9(OH)] \cdot 3H_2O$                            | A | 2008-062  | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>139(1)</b> (2010), 37   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 547   |
| Shomiokite-(Y) | $Na_3Y(CO_3)_3 \cdot 3H_2O$                               | A | 1990-015  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(6)</b> (1992), 129   | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 1249   |
| Shortite       | $Na_2Ca_2(CO_3)_3$  | G | 1939      | USA                              | <i>American Mineralogist</i> <b>24</b> (1939), 514   | <i>Journal of Research of the National Bureau of Standards - A: Physics and Chemistry</i> <b>75</b> (1971), 129 |
| Shuangfengite  | $IrTe_2$  | A | 1993-018  | China                            | <i>Acta Mineralogica Sinica</i> <b>14</b> (1994), 322  |   |
| Shubnikovite   | $Ca_2Cu_8(AsO_4)_6Cl(OH) \cdot 7H_2O$ (?)                 | Q | 1953      | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>82</b> (1953), 311   |   |
| Shuiskite      | $Ca_2MgCr_2(Si_2O_7)(SiO_4)(OH)_2 \cdot H_2O$             | A | 1980-061  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 508  |   |
| Shulamitite    | $Ca_3TiFe^{3+}AlO_8$                                      | A | 2011-016  | Israel                           | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 97   |   |
| Shumwayite     | $[(UO_2)(SO_4)(H_2O)_2]_2 \cdot H_2O$                     | A | 2015-058  | USA                              | <i>Mineralogical Magazine</i> <b>81</b> (2017), 273  |   |
| Shuvalovite    | $K_2(Ca_2Na)(SO_4)_3F$                                    | A | 2014-057  | Russia                           | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 53   |   |
| Sibirskite     | $CaH(BO_3)$   | G | 1962      | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 455   | <i>Canadian Mineralogist</i> <b>49</b> (2011), 823  |
| Sicherite      | $TlAg_2(As,Sb)_3S_6$                                      | A | 1997-051  | Switzerland                      | <i>American Mineralogist</i> <b>86</b> (2001), 1087  |   |

|                 |   |    |           |           |  |  |
|-----------------|---|----|-----------|-----------|--|--|
| Sicklerite      | $\text{LiMn}^{2+}(\text{PO}_4)$   | G  | 1912      | USA       | <i>Journal of the Washington Academy of Sciences</i> <b>2</b> (1912), 143  | <i>American Mineralogist</i> <b>70</b> (1985), 395                               |
| Siderazot       | $\text{FeN}_x$ ( $x \approx 0.25-0.5$ )   | Q  | 1876      | Italy     | <i>Annalen der Physik und Chemie</i> <b>157</b> (1876), 165  | <i>Zeitschrift für Kristallographie</i> <b>74</b> (1930), 511                    |
| Siderite        | $\text{Fe}(\text{CO}_3)$  | A  | 1962 s.p. | unknown   | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 499   | <i>Zeitschrift für Kristallographie</i> <b>156</b> (1981), 233                   |
| Sideronatrite   | $\text{Na}_2\text{Fe}^{3+}(\text{SO}_4)_2(\text{OH}) \cdot 3\text{H}_2\text{O}$             | G  | 1878      | Chile     | Mineraux du Perou. Chaix, Paris (1878), 233  | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 427                      |
| Siderophyllite  | $\text{KFe}^{2+}_2\text{Al}(\text{Si}_2\text{Al}_2\text{O}_{10}(\text{OH})_2)$              | A  | 1998 s.p. | USA       | <i>Proceedings of the Academy of Natural Sciences of Philadelphia</i> <b>32</b> (1880) 254   | <i>American Mineralogist</i> <b>85</b> (2000), 1275                              |
| Siderotil       | $(\text{Fe,Cu})(\text{SO}_4) \cdot 5\text{H}_2\text{O}$                                     | Rd | 1963 s.p. | Slovenia  | <i>Jahrbuch der Geologischen Reichsanstalt Wien</i> <b>41</b> (1891), 380  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 671                               |
| Sidorenkite     | $\text{Na}_3\text{Mn}(\text{PO}_4)(\text{CO}_3)$  | A  | 1978-013  | Russia    | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>108</b> (1979), 56   | <i>Soviet Physics Doklady</i> <b>25</b> (1980), 156                              |
| Sidpietersite   | $\text{Pb}^{2+}_4(\text{S}_2\text{O}_3)_2(\text{OH})_2$                                     | A  | 1998-036  | Namibia   | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1269  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1275                              |
| Sidwillite      | $\text{MoO}_3 \cdot 2\text{H}_2\text{O}$  | A  | 1983-089  | USA       | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 813  | <i>Acta Crystallographica</i> <b>B28</b> (1972), 2222                            |
| Siegenite       | $\text{CoNi}_2\text{S}_4$   | G  | 1850      | Germany   | A System of Mineralogy, 3rd ed. Putnam, New York and London (1850), 687  | <i>Canadian Mineralogist</i> <b>22</b> (1984), 499                               |
| Sieleckiite     | $\text{Cu}_3\text{Al}_4(\text{PO}_4)_2(\text{OH})_{12} \cdot 2\text{H}_2\text{O}$           | A  | 1987-023  | Australia | <i>Mineralogical Magazine</i> <b>52</b> (1988), 515  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 917                              |
| Sigloite        | $\text{Fe}^{3+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_3 \cdot 7\text{H}_2\text{O}$           | A  | 1967 s.p. | Bolivia   | <i>American Mineralogist</i> <b>47</b> (1962), 1   | <i>Mineralogy and Petrology</i> <b>38</b> (1988), 201                            |
| Siidraite       | $\text{Pb}_2\text{Cu}(\text{OH})_2\text{I}_3$   | A  | 2016-039  | Australia | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1027   |  |
| Silesiate       | $\text{Ca}_2\text{Fe}^{3+}\text{Sn}(\text{Si}_2\text{O}_7)(\text{Si}_2\text{O}_6\text{OH})$ | A  | 2017-064  | Poland    | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |  |
| Silhydrite      | $\text{Si}_3\text{O}_6 \cdot \text{H}_2\text{O}$  | A  | 1970-044  | USA       | <i>American Mineralogist</i> <b>57</b> (1972), 1053  |  |
| Silicocarnotite | $\text{Ca}_5[(\text{PO}_4)(\text{SiO}_4)](\text{PO}_4)$                                     | A  | 2013-139  | Israel    | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 105  |  |
| Silicon         | Si  | A  | 1982-099  | Cuba      | <i>Doklady Akademii Nauk SSSR</i> <b>309</b> (1989), 1182  |  |
| Silinaite       | $\text{NaLiSi}_2\text{O}_5 \cdot 2\text{H}_2\text{O}$                                       | A  | 1990-028  | Canada    | <i>Canadian Mineralogist</i> <b>29</b> (1991), 359   | <i>Canadian Mineralogist</i> <b>29</b> (1991), 363                               |
| Sillénite       | $\text{Bi}_{12}\text{SiO}_{20}$   | G  | 1943      | Mexico    | <i>American Mineralogist</i> <b>28</b> (1943), 521   | <i>Acta Crystallographica</i> <b>B47</b> (1991), 1                               |
| Sillimanite     | $\text{Al}_2\text{SiO}_5$   | G  | 1824      | USA       | <i>American Journal of Science and Arts</i> <b>8</b> (1824), 113   | <i>American Mineralogist</i> <b>91</b> (2006), 319                               |
| Silver          | Ag  | G  | ?         | unknown   | original paper?  |  |
| Silvialite      | $\text{Ca}_4\text{Al}_6\text{Si}_6\text{O}_{24}(\text{SO}_4)$                               | A  | 1998-010  | Australia | <i>Mineralogical Magazine</i> <b>63</b> (1999), 321  |  |
| Simferite       | $\text{Li}(\text{Mg}, \text{Fe}^{3+}, \text{Mn}^{3+})_2(\text{PO}_4)_2$                     | A  | 1989-016  | Ukraine   | <i>Mineralogichnii Zhurnal</i> <b>27</b> (2005), 112   | <i>Doklady Akademii Nauk SSSR</i> <b>307</b> (1989), 1119                        |
| Simmonsite      | $\text{Na}_2\text{LiAlF}_6$   | A  | 1997-045  | USA       | <i>American Mineralogist</i> <b>84</b> (1999), 769   | <i>Journal of Solid State Chemistry</i> <b>172</b> (2003), 95                    |
| Simonellite     | $\text{C}_{19}\text{H}_{24}$  | G  | 1919      | Italy     | <i>Atti dell'Accademia delle Scienze di Bologna</i> <b>23</b> (1919), 83   | <i>Atti dell'Accademia Nazionale dei Lincei, Rendiconti</i> <b>47</b> (1969), 41 |
| Simonite        | $\text{TIHgAs}_3\text{S}_6$   | A  | 1982-052  | Macedonia | <i>Zeitschrift für Kristallographie</i> <b>161</b> (1982), 159   |  |
| Simonkollite    | $\text{Zn}_5(\text{OH})_8\text{Cl}_2 \cdot \text{H}_2\text{O}$                              | A  | 1983-019  | Germany   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 145  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 939                               |

|                |   |    |           |                                  |  |   |
|----------------|---|----|-----------|----------------------------------|--|---|
| Simplotite     | $\text{CaV}^{4+}_4\text{O}_9 \cdot 5\text{H}_2\text{O}$   | G  | 1956      | USA                              | <i>Science</i> <b>123</b> (1956), 1078   | <i>American Mineralogist</i> <b>43</b> (1958), 16                                     |
| Simpsonite     | $\text{Al}_4\text{Ta}_3\text{O}_{13}(\text{OH})$  | G  | 1938      | Australia                        | <i>Report of the Department of Mines Western Australia</i> <b>93</b> (1938), 88  | <i>Canadian Mineralogist</i> <b>30</b> (1992), 663                                    |
| Sincosite      | $\text{Ca}(\text{VO})_2(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$   | G  | 1922      | Peru                             | <i>Journal of the Washington Academy of Sciences</i> <b>12</b> (1922), 195   | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(2)</b> (1997), 85    |
| Sinhalite      | $\text{MgAl}(\text{BO}_4)$  | G  | 1952      | Sri Lanka                        | <i>Mineralogical Magazine</i> <b>29</b> (1952), 841  | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 313                            |
| Sinjarite      | $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$   | A  | 1979-041  | Iraq                             | <i>Mineralogical Magazine</i> <b>43</b> (1980), 643  | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1608                                 |
| Sinkankasite   | $\text{Mn}^{2+}\text{Al}(\text{PO}_3\text{OH})_2(\text{OH}) \cdot 6\text{H}_2\text{O}$  | A  | 1982-078  | USA                              | <i>American Mineralogist</i> <b>69</b> (1984), 380   | <i>American Mineralogist</i> <b>80</b> (1995), 620                                    |
| Sinnerite      | $\text{Cu}_6\text{As}_4\text{S}_9$  | A  | 1964-020  | Switzerland                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>44</b> (1964), 5  | <i>Canadian Mineralogist</i> <b>51</b> (2013), 851                                    |
| Sinoite        | $\text{Si}_2\text{N}_2\text{O}$   | A  | 1967 s.p. | Pakistan                         | <i>Science</i> <b>146</b> (1964), 256  | <i>Acta Crystallographica</i> <b>C47</b> (1991), 2438                                 |
| Sitinakite     | $\text{KNa}_2\text{Ti}_4\text{Si}_2\text{O}_{13}(\text{OH}) \cdot 4\text{H}_2\text{O}$  | A  | 1989-051  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(1)</b> (1992), 94  | <i>Chemistry of Materials</i> <b>22</b> (2010), 4222                                  |
| Siudaite       | $\text{Na}_8\text{Mn}^{2+}_3\text{Ca}_6(\text{Fe}^{3+}, \text{Mn}^{2+})_3\text{Zr}_3\text{NbSi}_{24}(\text{Si}, \square, \text{Ti})\text{O}_{72}(\text{O}, \text{OH})_3\text{Cl} \cdot 4\text{H}_2\text{O}$ | A  | 2017-092  | Russia                           | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183 |   |
| Skaergaardite  | $\text{PdCu}$   | A  | 2003-049  | Denmark (Greenland)              | <i>Mineralogical Magazine</i> <b>68</b> (2004), 615  |   |
| Skinnerite     | $\text{Cu}_3\text{SbS}_3$   | A  | 1973-035  | Denmark (Greenland)              | <i>American Mineralogist</i> <b>59</b> (1974), 889   | <i>Canadian Mineralogist</i> <b>33</b> (1995), 655                                    |
| Skippenite     | $\text{Bi}_2\text{Se}_2\text{Te}$   | A  | 1986-033  | Canada                           | <i>Canadian Mineralogist</i> <b>25</b> (1987), 625   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 835                                    |
| Sklodowskite   | $\text{Mg}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2 \cdot 6\text{H}_2\text{O}$   | G  | 1924      | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie</i> <b>47</b> (1924), 162   | <i>Crystal Structure Communications</i> <b>6</b> (1977), 611                          |
| Skorpionite    | $\text{Ca}_3\text{Zn}_2(\text{PO}_4)_2(\text{CO}_3)(\text{OH})_2 \cdot \text{H}_2\text{O}$  | A  | 2005-010  | Namibia                          | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 271  |   |
| Skutterudite   | $\text{CoAs}_3$   | G  | 1845      | Norway                           | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 559   | <i>Acta Crystallographica</i> <b>B27</b> (1971), 2288                                 |
| Slavíkite      | $(\text{H}_3\text{O})_3\text{Mg}_6\text{Fe}_{15}(\text{SO}_4)_{21}(\text{OH})_{18} \cdot 98\text{H}_2\text{O}$  | Rd | 2008 s.p. | Czech Republic                   | <i>Věstník Státní Geologického Ústavu Československé Republiky</i> <b>2</b> (1926), 348  | <i>American Mineralogist</i> <b>95</b> (2010), 11                                     |
| Slavkovite     | $\text{Cu}_{13}(\text{AsO}_4)_6(\text{AsO}_3\text{OH})_4 \cdot 23\text{H}_2\text{O}$  | A  | 2004-038  | Czech Republic                   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1157  |   |
| Slawsonite     | $\text{Sr}(\text{Al}_2\text{Si}_2\text{O}_8)$   | A  | 1967-026  | USA                              | <i>American Mineralogist</i> <b>62</b> (1977), 31  |   |
| Smirnite       | $\text{Bi}^{3+}_2\text{Te}^{4+}\text{O}_5$  | A  | 1982-104  | Armenia                          | <i>Doklady Akademii Nauk SSSR</i> <b>278</b> (1984), 199   | <i>Materials Chemistry and Physics</i> <b>9</b> (1983), 467                           |
| Smirnovskite   | $(\text{Th}, \text{Ca})(\text{PO}_4) \cdot n\text{H}_2\text{O}$   | Q  | 1957      | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>86</b> (1957), 607   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(3)</b> (1993), 79 |
| Smithite       | $\text{AgAsS}_2$  | G  | 1905      | Switzerland                      | <i>Mineralogical Magazine</i> <b>14</b> (1905), 72   | <i>Naturwissenschaften</i> <b>51</b> (1964), 35                                       |
| Smithsonite    | $\text{Zn}(\text{CO}_3)$  | G  | 1832      | United Kingdom                   | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 354   | <i>Zeitschrift für Kristallographie</i> <b>156</b> (1981), 233                        |
| Smolyaninovite | $\text{Co}_3\text{Fe}^{3+}_2(\text{AsO}_4)_4 \cdot 11\text{H}_2\text{O}$  | G  | 1956      | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>109</b> (1956), 849   | <i>Mineralogical Magazine</i> <b>41</b> (1977), 385                                   |

|              |   |    |           |                                  |   |   |
|--------------|---|----|-----------|----------------------------------|---|---|
| Smrkovec     | $\text{Bi}_2\text{O}(\text{OH})(\text{PO}_4)$   | A  | 1993-040  | Czech Republic                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1996), 97  |   |
| Smythite     | $(\text{Fe},\text{Ni})_{3+x}\text{S}_4$ ( $x \approx 0-0.3$ )   | G  | 1956      | USA                              | <i>Journal of the American Chemical Society</i> <b>78</b> (1956), 2017  | <i>American Mineralogist</i> <b>57</b> (1972), 1571   |
| Sobolevite   | $\text{Na}_6(\text{Na}_2\text{Ca})(\text{NaCaMn})\text{Na}_2\text{Ti}_2\text{Na}_2(\text{TiMn})(\text{Si}_2\text{O}_7)_2(\text{PO}_4)_4\text{O}_2(\text{OF})\text{F}_2$ | Rd | 1982-042  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 456   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1527   |
| Sobolevskite | PdBi  | A  | 1973-042  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>104</b> (1975), 568   | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Sodalite     | $\text{Na}_4(\text{Si}_3\text{Al}_3)\text{O}_{12}\text{Cl}$   | G  | 1811      | Denmark (Greenland)              | <i>Journal of Natural Philosophy, Chemistry and the Arts</i> <b>29</b> (1811), 285  | <i>American Mineralogist</i> <b>89</b> (2004), 359  |
| Soddyite     | $(\text{UO}_2)_2(\text{SiO}_4) \cdot 2\text{H}_2\text{O}$   | G  | 1922      | Democratic Republic of the Congo | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>174</b> (1922), 1066   | <i>Acta Crystallographica</i> <b>C48</b> (1992), 1  |
| Sofiite      | $\text{Zn}_2(\text{Se}^{4+}\text{O}_3)\text{Cl}_2$  | A  | 1987-028  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(1)</b> (1989), 65   |   |
| Sogdianite   | $\text{KZr}_2\text{Li}_3\text{Si}_{12}\text{O}_{30}$  | A  | 1971 s.p. | Tajikistan                       | <i>Doklady Akademii Nauk SSSR</i> <b>182</b> (1968), 1176   | <i>Canadian Mineralogist</i> <b>38</b> (2000), 853  |
| Söhngeite    | $\text{Ga}(\text{OH})_3$  | A  | 1965-022  | Namibia                          | <i>Naturwissenschaften</i> <b>52</b> (1965), 493  | <i>American Mineralogist</i> <b>56</b> (1971), 355  |
| Sokolovaite  | $\text{CsLi}_2\text{AlSi}_4\text{O}_{10}\text{F}_2$   | A  | 2004-012  | Tajikistan                       | <i>New Data on Minerals</i> <b>41</b> (2006), 5   |   |
| Solongoite   | $\text{Ca}_2\text{B}_3\text{O}_4(\text{OH})_4\text{Cl}$   | A  | 1973-017  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 117   | <i>Soviet Physics - Crystallography</i> <b>22</b> (1977), 356   |
| Somersetite  | $\text{Pb}_8\text{O}_2(\text{OH})_2(\text{CO}_3)_5$   | A  | 2017-024  | United Kingdom                   | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 | <a href="https://doi.org/10.1180/minmag.2017.081.087">https://doi.org/10.1180/minmag.2017.081.087</a> |
| Sonolite     | $\text{Mn}^{2+}_9(\text{SiO}_4)_4(\text{OH})_2$   | A  | 1967 s.p. | Japan                            | <i>Memoirs of the Faculty of Science, Kyushu University, Series D: Geology</i> <b>14</b> (1963), 1                                      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 410   |
| Sonoraite    | $\text{Fe}^{3+}(\text{Te}^{4+}\text{O}_3)(\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1968-001  | Mexico                           | <i>American Mineralogist</i> <b>53</b> (1968), 1828   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>14</b> (1970), 27                |
| Sopcheite    | $\text{Ag}_4\text{Pd}_3\text{Te}_4$   | A  | 1980-101  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 114   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 603   |
| Sorbyite     | $\text{Pb}_9\text{Cu}(\text{Sb},\text{As})_{11}\text{S}_{26}$   | A  | 1966-032  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191   | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 3   |
| Sørensenite  | $\text{Na}_4\text{Be}_2\text{Sn}(\text{Si}_3\text{O}_9)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1965-006  | Denmark (Greenland)              | <i>Meddelelser om Grønland</i> <b>181</b> (1965), 1   | <i>Acta Crystallographica</i> <b>B32</b> (1976), 2553   |
| Sorosite     | $\text{Cu}_{1+x}(\text{Sn},\text{Sb})$  | A  | 1994-047  | Russia                           | <i>American Mineralogist</i> <b>83</b> (1998), 901  |   |
| Sosedkoite   | $\text{K}_5\text{Al}_2\text{Ta}_{22}\text{O}_{60}$  | A  | 1981-014  | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>264</b> (1982), 442  |   |
| Součekite    | $\text{CuPbBi}(\text{S},\text{Se})_3$   | A  | 1976-017  | Czech Republic                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 289   |   |
| Souzalite    | $\text{Mg}_3\text{Al}_4(\text{PO}_4)_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$  | G  | 1949      | Brazil                           | <i>American Mineralogist</i> <b>34</b> (1949), 83   | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 719   |
| Spadaite     | $\text{MgSiO}_2(\text{OH})_2 \cdot \text{H}_2\text{O}$ (?)  | Q  | 1843      | Italy                            | <i>Gelehrte Anzeigen der Königlich Bayerischen Akademie der Wissenschaften</i> <b>17</b> (1843), 945                                    | <i>American Mineralogist</i> <b>16</b> (1931), 231  |

|                    |   |    |           |                  |  |  |
|--------------------|---|----|-----------|------------------|--|--|
| Spaltite           | $Tl_2Cu_2As_2S_5$                             | A  | 2014-012  | Switzerland      | CNMNC Newsletter 20 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 549                                |  |
| Spangolite         | $Cu_6Al(SO_4)(OH)_{12}Cl \cdot 3H_2O$         | G  | 1890      | USA              | <i>American Journal of Science</i> <b>39</b> (1890), 370   | <i>American Mineralogist</i> <b>78</b> (1993), 649             |
| Spencerite         | $Zn_4(PO_4)_2(OH)_2 \cdot 3H_2O$              | G  | 1916      | Canada           | <i>Mineralogical Magazine</i> <b>18</b> (1916), 76   | <i>Mineralogical Magazine</i> <b>38</b> (1972), 687            |
| Sperrylite         | $PtAs_2$                                      | G  | 1889      | USA              | <i>American Journal of Science</i> <b>137</b> (1889), 67   | <i>Canadian Mineralogist</i> <b>17</b> (1979), 117             |
| Spertiniite        | $Cu(OH)_2$                                    | A  | 1980-033  | Canada           | <i>Canadian Mineralogist</i> <b>19</b> (1981), 337   | <i>Acta Crystallographica</i> <b>C46</b> (1990), 2279          |
| Spessartine        | $Mn^{2+}_3Al_2(SiO_4)_3$                      | G  | 1832      | Germany          | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 52                                    | <i>American Mineralogist</i> <b>56</b> (1971), 791             |
| Sphaerobertrandite | $Be_3(SiO_4)(OH)_2$                           | Rd | 2003 s.p. | Russia / Norway  | <i>Trudy Instituta Mineralogii Geokhimii i Kristalloghimii Redkikh Elementov</i> <b>1</b> (1957), 64     | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 157    |
| Sphaerobismoite    | $Bi_2O_3$                                     | A  | 1993-009  | Germany          | <i>Aufschluss</i> <b>46</b> (1995), 245  | <i>Acta Crystallographica</i> <b>C44</b> (1988), 587           |
| Sphalerite         | $ZnS$   | A  | 1980 s.p. | unknown          | Generum et Specierum Mineralium, Secundum Ordines Naturales Digestorum Synopsis. Anton, Halle (1847), 13 | <i>American Mineralogist</i> <b>46</b> (1961), 1399            |
| Spheniscidite      | $(NH_4)Fe^{3+}_2(PO_4)_2(OH) \cdot 2H_2O$     | A  | 1977-029  | Antarctica       | <i>Mineralogical Magazine</i> <b>50</b> (1986), 291  | <i>Acta Crystallographica</i> <b>C50</b> (1994), 1379          |
| Spherochalcite     | $Co(CO_3)$                                    | Rd | 1962 s.p. | Germany          | <i>Jahrbuch für das Berg- und Hüttenwesen im Königreiche Sachsen</i> (1877), 42                          | <i>Acta Crystallographica</i> <b>C42</b> (1986), 4             |
| Spinel             | $MgAl_2O_4$                                   | G  | 1546 ?    | unknown          | original paper?  | <i>American Mineralogist</i> <b>84</b> (1999), 299             |
| Spionkopite        | $Cu_{39}S_{28}$                               | A  | 1978-023  | Canada           | <i>Canadian Mineralogist</i> <b>18</b> (1980), 511   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1981), 489  |
| Spiroffite         | $Mn^{2+}_2Te^{4+}_3O_8$                       | A  | 1967 s.p. | Mexico           | <i>Mineralogical Society of America, Special Paper</i> <b>1</b> (1963), 305                              | <i>Canadian Mineralogist</i> <b>34</b> (1996), 821             |
| Spodumene          | $LiAlSi_2O_6$                                 | A  | 1962 s.p. | Sweden           | <i>Allgemeines Journal der Chemie</i> <b>4</b> (1800), 28  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 521             |
| Spriggite          | $Pb_3(UO_2)_6O_8(OH)_2 \cdot 3H_2O$           | A  | 2002-014  | Australia        | <i>American Mineralogist</i> <b>89</b> (2004), 339   |  |
| Springcreekite     | $BaV^{3+}_3(PO_4)(PO_3OH)(OH)_6$              | A  | 1998-048  | Australia        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1999), 529  |  |
| Spryite            | $Ag_8(As^{3+}_{0.5}As^{5+}_{0.5})S_6$         | A  | 2015-116  | Peru             | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407                                |  |
| Spurrite           | $Ca_5(SiO_4)_2(CO_3)$                         | G  | 1908      | Mexico           | <i>American Journal of Science</i> <b>176</b> (1908), 545  | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1489            |
| Srebrodolskite     | $Ca_2Fe^{3+}_2O_5$                            | A  | 1984-050  | Russia           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 195                        | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 129    |
| Šreinite           | $Pb(UO_2)_4(BiO)_3(PO_4)_2(OH)_7 \cdot 4H_2O$ | A  | 2004-022  | Czech Republic   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>184</b> (2007), 197                                |  |
| Srilankite         | $Ti_2ZrO_6$                                   | A  | 1982-056  | Sri Lanka        | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 151  | <i>Physics and Chemistry of Minerals</i> <b>32</b> (2005), 504 |
| Stalderite         | $TiCu(Zn,Fe,Hg)_2As_2S_6$                     | A  | 1987-024  | Switzerland      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>75</b> (1995), 337              |  |
| Staněkite          | $Fe^{3+}Mn^{2+}O(PO_4)$                       | A  | 1994-045  | Namibia / France | <i>European Journal of Mineralogy</i> <b>9</b> (1997), 475   | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 113    |

|                    |  |   |           |                     |   |  |
|--------------------|--|---|-----------|---------------------|---|--|
| Stanfieldite       | $\text{Ca}_4\text{Mg}_5(\text{PO}_4)_6$  | A | 1966-045  | USA                 | <i>Science</i> <b>158</b> (1967), 910   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>16</b> (1971), 79 |
| Stanleyite         | $\text{V}^{4+}\text{O}(\text{SO}_4)\cdot 6\text{H}_2\text{O}$  | A | 1980-042  | Peru                | <i>Mineralogical Magazine</i> <b>45</b> (1982), 163   |  |
| Stannite           | $\text{Cu}_2\text{FeSnS}_4$  | G | 1832      | United Kingdom      | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 416  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 639                                     |
| Stannoidite        | $\text{Cu}_8(\text{Fe,Zn})_3\text{Sn}_2\text{S}_{12}$  | A | 1968-004a | Japan               | <i>Bulletin of the National Science Museum, Tokyo</i> <b>12</b> (1969), 165   | <i>Zeitschrift für Kristallographie</i> <b>144</b> (1976), 145                         |
| Stannopalladinite  | $\text{Pd}_3\text{Sn}_2$ (?)   | G | 1947      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>58</b> (1947), 1137  |  |
| Starkeyite         | $\text{Mg}(\text{SO}_4)\cdot 4\text{H}_2\text{O}$  | A | 1970-014a | USA                 | <i>Mineralogical Record</i> <b>6</b> (1975), 144  | <i>Acta Crystallographica</i> <b>17</b> (1964), 863                                    |
| Staročeskéite      | $\text{Ag}_{0.70}\text{Pb}_{1.60}(\text{Bi}_{1.35}\text{Sb}_{1.35})_{\Sigma 2.70}\text{S}_6$   | A | 2016-101  | Czech Republic      | <i>Mineralogical Magazine</i> <b>82</b> (2018), 993   |  |
| Starovaite         | $\text{KCu}_5\text{O}(\text{VO}_4)_3$  | A | 2011-085  | Russia              | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 91  |  |
| Staurolite         | $\text{Fe}^{2+}_2\text{Al}_9\text{Si}_4\text{O}_{23}(\text{OH})$   | G | 1792      | unknown             | Manuel du Minéralogiste. Cuchet, Paris (1792), 298  | <i>Canadian Mineralogist</i> <b>31</b> (1993), 551                                     |
| Stavelotite-(La)   | $\text{La}_3\text{Mn}^{2+}_3\text{Cu}^{2+}(\text{Mn}^{3+}, \text{Fe}^{3+}, \text{Mn}^{4+})_{26}(\text{Si}_2\text{O}_7)_6\text{O}_{30}$               | A | 2004-014  | Belgium             | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 703   |  |
| Steacyite          | $\text{K}_{0.3}(\text{Na,Ca})_2\text{ThSi}_6\text{O}_{20}$   | A | 1981 s.p. | Canada              | <i>Canadian Mineralogist</i> <b>20</b> (1982), 59   |  |
| Steedeite          | $\text{NaMn}_2[\text{Si}_3\text{BO}_9](\text{OH})_2$   | A | 2013-052  | Canada              | <i>Canadian Mineralogist</i> <b>52</b> (2014), 47   |  |
| Steenstrupine-(Ce) | $\text{Na}_{14}\text{Ce}_6\text{Mn}^{2+}_2\text{Fe}^{3+}_2\text{Zr}(\text{PO}_4)_7\text{Si}_{12}\text{O}_{36}(\text{OH})_2\cdot 3\text{H}_2\text{O}$ | A | 1987 s.p. | Denmark (Greenland) | <i>Mineralogical Magazine</i> <b>5</b> (1882), 49   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 871                            |
| Stefanweissite     | $(\text{Ca,REE})_2\text{Zr}_2(\text{Nb,Ti})(\text{Ti,Nb})_2\text{Fe}^{2+}\text{O}_{14}$  | A | 2018-020  | Germany             | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |  |
| Steigerite         | $\text{Al}(\text{VO}_4)\cdot 3\text{H}_2\text{O}$  | G | 1935      | USA                 | <i>American Mineralogist</i> <b>20</b> (1935), 769  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 100      |
| Steinhardtite      | Al   | A | 2014-036  | Russia (meteorite)  | <i>American Mineralogist</i> <b>99</b> (2014), 2433   |  |
| Steinmetzite       | $\text{Zn}_2\text{Fe}^{3+}(\text{PO}_4)_2(\text{OH})\cdot 3\text{H}_2\text{O}$   | A | 2015-081  | Germany             | CNMNC Newsletter 28 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1859  |  |
| Steklite           | $\text{KAl}(\text{SO}_4)_2$  | A | 2011-041  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(4)</b> (2012), 36  |  |
| Stellerite         | $\text{Ca}_4(\text{Si}_{28}\text{Al}_8)\text{O}_{72}\cdot 28\text{H}_2\text{O}$  | A | 1997 s.p. | Russia              | <i>Bulletin International de l'Académie des Sciences de Cracovie</i> (1909), 344  | <i>American Mineralogist</i> <b>91</b> (2006), 628                                     |
| Stenhuggarite      | $\text{CaFe}^{3+}\text{Sb}^{3+}\text{As}^{3+}_2\text{O}_7$   | A | 1966-037  | Sweden              | <i>Arkiv för Mineralogi och Geologi</i> <b>5</b> (1970), 55   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 1807                                  |
| Stenonite          | $\text{Sr}_2\text{Al}(\text{CO}_3)\text{F}_5$  | A | 1967 s.p. | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>169</b> (1962), 1   | <i>Canadian Mineralogist</i> <b>22</b> (1984), 245                                     |
| Stepanovite        | $\text{NaMgFe}^{3+}(\text{C}_2\text{O}_4)_3\cdot 8\text{H}_2\text{O}$  | A | 1967 s.p. | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>82</b> (1953), 311  |  |
| Stephanite         | $\text{Ag}_5\text{SbS}_4$  | G | 1845      | Germany             | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 563  | <i>Mineralogical Magazine</i> <b>73</b> (2009), 17                                     |
| Štěpíte            | $\text{U}(\text{AsO}_3\text{OH})_2\cdot 4\text{H}_2\text{O}$   | A | 2012-006  | Czech Republic      | <i>Mineralogical Magazine</i> <b>77</b> (2013), 137   |  |
| Stercorite         | $(\text{NH}_4)\text{Na}(\text{PO}_3\text{OH})\cdot 4\text{H}_2\text{O}$  | G | 1850      | Namibia             | <i>Quarterly Journal of the Chemical Society</i> <b>2</b> (1850), 70  | <i>Acta Crystallographica</i> <b>B30</b> (1974), 504                                   |

|                   |  |    |           |                                     |  |   |
|-------------------|--|----|-----------|-------------------------------------|--|---|
| Sterlinghillite   | $Mn^{2+}_3(AsO_4)_2 \cdot 3H_2O$                           | A  | 1980-007  | USA                                 | <i>American Mineralogist</i> <b>66</b> (1981), 182   | <i>Bulletin of the National Science Museum, Tokyo, Ser. C</i> <b>26</b> (2000), 1 |
| Sternbergite      | $AgFe_2S_3$  | G  | 1828      | Czech Republic                      | <i>Transactions of the Royal Society of Edinburgh</i> <b>11</b> (1828), 1  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1987), 458                     |
| Steropesite       | $Tl_3BiCl_6$   | A  | 2008-014  | Italy                               | <i>Canadian Mineralogist</i> <b>47</b> (2009), 373   |   |
| Sterryite         | $Cu(Ag,Cu)_3Pb_{19}(Sb,As)_{22}(As)_2S_{56}$               | A  | 1966-020  | Canada                              | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191  | <i>Acta Crystallographica</i> <b>B68</b> (2012), 480                              |
| Stetefeldtite     | $Ag_2Sb_2(O,OH)_7$   | Q  | 2013 s.p. | USA                                 | <i>Berg- und Hüttenmännische Zeitung</i> <b>26</b> (1867), 253   |   |
| Stetindite-(Ce)   | $Ce(SiO_4)$  | Rn | 2008-035  | Norway                              | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>186</b> (2009), 195  |   |
| Stevensite        | $(Ca,Na)_xMg_{3-y}Si_4O_{10}(OH)_2$                        | Q  | 1873      | USA                                 | <i>American Journal of Science</i> <b>6</b> (1873), 22   | <i>American Mineralogist</i> <b>44</b> (1959), 342                                |
| Steverustite      | $Pb^{2+}_5(OH)_5[Cu^{1+}(S^{6+}O_3S^{2-})_3](H_2O)_2$      | A  | 2008-021  | United Kingdom                      | <i>Mineralogical Magazine</i> <b>73</b> (2009), 235  |   |
| Stewartite        | $Mn^{2+}Fe^{3+}_2(PO_4)_2(OH)_2 \cdot 8H_2O$               | G  | 1912      | USA                                 | <i>Journal of the Washington Academy of Sciences</i> <b>2</b> (1912), 143  | <i>American Mineralogist</i> <b>59</b> (1974), 1272                               |
| Stibarsen         | $SbAs$   | A  | 1982 s.p. | Sweden                              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>63</b> (1941), 424                                      | <i>American Mineralogist</i> <b>76</b> (1991), 257                                |
| Stibiconite       | $Sb^{3+}Sb^{5+}_2O_6(OH)$                                  | Q  | 2013 s.p. | Germany                             | Traité Élémentaire de Minéralogie, 2nd ed. Carilian Jeune, Paris (1837)  |   |
| Stibioclaudetite  | $AsSbO_3$  | A  | 2007-028  | Namibia                             | <i>Mineralogical Record</i> <b>40</b> (2009), 209  |   |
| Stibiocolumbite   | $SbNbO_4$  | G  | 1915      | USA                                 | A System of Mineralogy, 3rd Appendix. Wiley, New York (1915), 74   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2002), 145                     |
| Stibiocolusite    | $Cu_{13}V(Sb,Sn,As)_3S_{16}$                               | A  | 1991-043  | Uzbekistan                          | <i>Doklady Akademii Nauk</i> <b>324</b> (1992), 411  | <i>Resource Geology</i> <b>49</b> (1999), 75                                      |
| Stibiopalladinite | $Pd_5Sb_2$   | A  | 1980 s.p. | South Africa                        | The Platinum Deposits and Mines of South Africa. Oliver and Boyd, Edinburgh (1929)                                 | <i>Journal of the Less-Common Metals</i> <b>22</b> (1970), 445                    |
| Stibiotantalite   | $Sb^{3+}TaO_4$   | G  | 1893      | Australia                           | <i>Transactions and Proceedings and Report of the Royal Society of South Australia</i> <b>17</b> (1893), 127       | <i>Chemical Communications</i> (1965), 611  |
| Stibivanite       | $Sb^{3+}_2V^{4+}O_5$                                       | A  | 1980-020  | Canada                              | <i>Canadian Mineralogist</i> <b>18</b> (1980), 329   | <i>Canadian Mineralogist</i> <b>27</b> (1989), 625                                |
| Stibnite          | $Sb_2S_3$  | G  | 1832      | unknown                             | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 421   | <i>American Mineralogist</i> <b>89</b> (2004), 932                                |
| Stichtite         | $Mg_6Cr_2(CO_3)(OH)_{16} \cdot 4H_2O$                      | Rd | 1910      | Australia                           | Catalog of the Minerals of Tasmania, 3rd ed. Vail, Hobart (1910), 167  | <i>American Mineralogist</i> <b>96</b> (2011), 179                                |
| Stilbite-Ca       | $NaCa_4(Si_{27}Al_9)O_{72} \cdot 28H_2O$                   | A  | 1997 s.p. | Iceland / Germany / France / Norway | Traité de Minéralogie, Vol. 3. Louis, Paris (1801), 161  | <i>Acta Crystallographica</i> <b>B27</b> (1971), 833                              |
| Stilbite-Na       | $Na_9(Si_{27}Al_9)O_{72} \cdot 28H_2O$                     | A  | 1997 s.p. | Italy                               | <i>Bulletin de Minéralogie</i> <b>101</b> (1978), 368  | <i>Zeolites</i> <b>7</b> (1987), 163  |
| Stilleite         | $ZnSe$   | G  | 1956      | Democratic Republic of the Congo    | Geotektonisches Symposium zu Ehren von Hans Stille (1956), 481   | <i>Acta Crystallographica</i> <b>A36</b> (1980), 482                              |
| Stillwaterite     | $Pd_8As_3$   | A  | 1974-029  | USA                                 | <i>Canadian Mineralogist</i> <b>13</b> (1975), 321   | <i>Lithos</i> <b>19</b> (1986), 87  |
| Stillwellite-(Ce) | $CeBSiO_5$   | A  | 1987 s.p. | Australia                           | <i>Nature</i> <b>176</b> (1955), 509   | <i>Canadian Mineralogist</i> <b>31</b> (1993), 147                                |
| Stilpnomelane     | $(K,Ca,Na)(Fe,Mg,Al)_8(Si,Al)_{12}(O,OH)_{36} \cdot nH_2O$ | A  | 1971 s.p. | Poland / Czech Republic             | Beyträge zur Mineralogischen Kenntniss der Sudetenländer Insbesondere Schlesiens. Mar und Komp, Breslau (1827), 68 | <i>American Mineralogist</i> <b>79</b> (1994), 438                                |



|                |   |   |           |                          |   |   |
|----------------|---|---|-----------|--------------------------|---|---|
| Stishovite     | SiO <sub>2</sub>  | A | 1967 s.p. | USA                      | <i>Journal of Geophysical Research</i> <b>67</b> (1962), 419  | <i>American Mineralogist</i> <b>75</b> (1990), 739                                      |
| Stistaite      | SnSb  | A | 1969-039  | Uzbekistan               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>99</b> (1970), 68   | <i>Inorganic Chemistry</i> <b>48</b> (2009), 5497                                       |
| Stöfflerite    | CaAl <sub>2</sub> Si <sub>2</sub> O <sub>8</sub>  | A | 2017-062  | Morocco (meteorite)      | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |   |
| Stoiberite     | Cu <sub>5</sub> O <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub>  | A | 1979-016  | El Salvador              | <i>American Mineralogist</i> <b>64</b> (1979), 941  | <i>Acta Crystallographica</i> <b>B29</b> (1973), 1338                                   |
| Stokesite      | CaSnSi <sub>3</sub> O <sub>9</sub> ·2H <sub>2</sub> O   | G | 1900      | United Kingdom           | <i>Mineralogical Magazine</i> <b>12</b> (1900), 274   | <i>Canadian Mineralogist</i> <b>55</b> (2017), 63                                       |
| Stolperite     | AlCu  | A | 2016-033  | Russia (meteorite)       | <i>American Mineralogist</i> <b>102</b> (2017), 690   |   |
| Stolzite       | Pb(WO <sub>4</sub> )  | G | 1845      | Czech Republic / Germany | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 499  | <i>Mineralogical Magazine</i> <b>72</b> (2008), 987                                     |
| Stoppaniite    | Fe <sup>3+</sup> <sub>2</sub> Be <sub>3</sub> Si <sub>6</sub> O <sub>18</sub> ·H <sub>2</sub> O   | A | 1996-008  | Italy                    | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 121   | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 491                             |
| Stornesite-(Y) | Na <sub>6</sub> (Ca <sub>5</sub> Na <sub>3</sub> )YMg <sub>43</sub> (PO <sub>4</sub> ) <sub>36</sub>  | A | 2005-040  | Antarctica               | <i>American Mineralogist</i> <b>91</b> (2006), 1412   |   |
| Stottite       | Fe <sup>2+</sup> Ge(OH) <sub>6</sub>  | G | 1958      | Namibia                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1958), 85  | <i>American Mineralogist</i> <b>73</b> (1988), 657                                      |
| Stracherite    | BaCa <sub>6</sub> (SiO <sub>4</sub> ) <sub>2</sub> [(PO <sub>4</sub> )(CO <sub>3</sub> ) <sub>2</sub> ]F  | A | 2016-098  | Israel                   | <i>American Mineralogist</i> <b>108</b> (2018), 1699  |   |
| Straczekite    | (Ca,K,Ba)(V <sup>5+</sup> ,V <sup>4+</sup> ) <sub>8</sub> O <sub>20</sub> ·3H <sub>2</sub> O  | A | 1983-028  | USA                      | <i>Mineralogical Magazine</i> <b>48</b> (1984), 289   | <i>Zeitschrift für Kristallographie</i> <b>162</b> (1983), 263                          |
| Strakhovite    | NaBa <sub>3</sub> (Mn <sup>2+</sup> ,Mn <sup>3+</sup> ) <sub>4</sub> [Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub> ][Si <sub>2</sub> O <sub>7</sub> ] <sub>2</sub> O <sub>2</sub> ·(F,OH)·H <sub>2</sub> O | A | 1993-005  | Russia                   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>123(4)</b> (1994), 94   | <i>Kristallografiya</i> <b>37</b> (1992), 345   |
| Stranskiite    | CuZn <sub>2</sub> (AsO <sub>4</sub> ) <sub>2</sub>  | A | 1962 s.p. | Namibia                  | <i>Naturwissenschaften</i> <b>47</b> (1960), 376  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 167 |
| Strashimirite  | Cu <sub>4</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·2.5H <sub>2</sub> O   | A | 1967-025  | Bulgaria                 | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>97</b> (1968), 470  | <i>Comptes Rendus de l'Académie Bulgare des Sciences</i> <b>54</b> (2001), 49           |
| Strätlingite   | Ca <sub>2</sub> Al(Si,Al) <sub>2</sub> O <sub>2</sub> (OH) <sub>10</sub> ·2.25H <sub>2</sub> O  | A | 1975-031  | Germany                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1976), 326   | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 841                              |
| Straßmannite   | Al(UO <sub>2</sub> )(SO <sub>4</sub> ) <sub>2</sub> F·16H <sub>2</sub> O  | A | 2017-086  | USA                      | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183  | <a href="https://doi.org/10.1180/mgm.2018.118">https://doi.org/10.1180/mgm.2018.118</a> |
| Strelkinite    | Na <sub>2</sub> (UO <sub>2</sub> ) <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub> ·6H <sub>2</sub> O  | A | 1973-063  | Kazakhstan               | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 576   |   |
| Strengite      | Fe <sup>3+</sup> (PO <sub>4</sub> )·2H <sub>2</sub> O   | G | 1877      | Germany                  | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1877), 8   | <i>Crystal Research and Technology</i> <b>39</b> (2004), 1080                           |
| Stringhamite   | CaCu(SiO <sub>4</sub> )·H <sub>2</sub> O  | A | 1974-007  | USA                      | <i>American Mineralogist</i> <b>61</b> (1976), 189  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>34</b> (1985), 15  |
| Stromeyerite   | CuAgS   | G | 1832      | Czech Republic           | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 410  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 891                                    |
| Stronadelphite | Sr <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> F   | A | 2008-009  | Russia                   | <i>European Journal of Mineralogy</i> <b>22</b> (2010), 869   |   |

|                          |   |    |           |                                  |   |  |
|--------------------------|---|----|-----------|----------------------------------|---|--|
| Stronalsite              | $\text{Na}_2\text{SrAl}_4\text{Si}_4\text{O}_{16}$  | A  | 1983-016  | Japan                            | <i>Mineralogical Journal</i> <b>13</b> (1986), 368  | <i>Canadian Mineralogist</i> <b>44</b> (2006), 533   |
| Strontianite             | $\text{Sr}(\text{CO}_3)$  | G  | 1791      | United Kingdom                   | <i>Bergmannisches Journal</i> <b>1</b> (1791), 433  | <i>American Mineralogist</i> <b>97</b> (2012), 707   |
| Strontiochevkinite       | $(\text{Sr}, \text{Ce}, \text{La})_4\text{Fe}^{2+}(\text{Ti}, \text{Zr})_4\text{O}_8(\text{Si}_2\text{O}_7)_2$              | A  | 1983-009  | Paraguay                         | <i>Contributions to Mineralogy and Petrology</i> <b>84</b> (1983), 365  |  |
| Strontiodresserite       | $\text{SrAl}_2(\text{CO}_3)_2(\text{OH})_4 \cdot \text{H}_2\text{O}$  | A  | 1977-005  | Canada                           | <i>Canadian Mineralogist</i> <b>15</b> (1977), 405  | <i>Powder Diffraction</i> <b>25</b> (2010), 322  |
| Strontiofluorite         | $\text{SrF}_2$  | A  | 2009-014  | Russia                           | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1487   |  |
| Strontioiginorite        | $\text{CaSrB}_{14}\text{O}_{20}(\text{OH})_6 \cdot 5\text{H}_2\text{O}$   | G  | 1959      | Germany                          | <i>Beiträge zur Mineralogie und Petrographie</i> <b>6</b> (1959), 366   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1019  |
| Strontiohurlbutite       | $\text{SrBe}_2(\text{PO}_4)_2$  | A  | 2012-032  | China                            | <i>American Mineralogist</i> <b>99</b> (2014), 494  |  |
| Strontiojoaquinite       | $(\text{Na}, \text{Fe})_2\text{Ba}_2\text{Sr}_2\text{Ti}_2(\text{SiO}_3)_8(\text{O}, \text{OH})_2 \cdot \text{H}_2\text{O}$ | Rd | 1979-080  | USA                              | <i>American Mineralogist</i> <b>67</b> (1982), 809  |  |
| Strontiomelane           | $\text{Sr}(\text{Mn}^{4+}_6\text{Mn}^{3+}_2)\text{O}_{16}$  | A  | 1995-005  | Italy                            | <i>Canadian Mineralogist</i> <b>37</b> (1999), 673  |  |
| Strontio-orthojoaquinite | $\text{NaSr}_4\text{Fe}^{3+}\text{Ti}_2\text{Si}_8\text{O}_{24}(\text{OH})_4$   | Rd | 1979-081a | Japan                            | <i>Mineralogical Journal</i> <b>7</b> (1974), 395   | <i>Journal of the Faculty of Liberal Arts, Yamaguchi University (Natural Science)</i> <b>24</b> (1990), 23 |
| Strontioferloffite       | $\text{SrMn}^{2+}_2\text{Fe}^{3+}_2(\text{PO}_4)_3(\text{OH})_3$  | A  | 2015-023  | Australia                        | CNMNC Newsletter 26 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 941   |  |
| Strontiofarmacosiderite  | $\text{Sr}_{0.5}\text{Fe}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 4\text{H}_2\text{O}$   | A  | 2013-101  | Switzerland                      | CNMNC Newsletter 19 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 165   |  |
| Strontioruizite          | $\text{Sr}_2\text{Mn}^{3+}_2\text{Si}_4\text{O}_{11}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$                                | A  | 2017-045  | South Africa                     | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 |  |
| Strontiowhitlockite      | $\text{Sr}_9\text{Mg}(\text{PO}_3\text{OH})(\text{PO}_4)_6$   | A  | 1989-040  | Russia                           | <i>Canadian Mineralogist</i> <b>29</b> (1991), 87   |  |
| Strunzite                | $\text{Mn}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 6\text{H}_2\text{O}$                                      | G  | 1958      | Germany                          | <i>Naturwissenschaften</i> <b>45</b> (1958), 37   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1978), 77                     |
| Struvite                 | $(\text{NH}_4)\text{Mg}(\text{PO}_4) \cdot 6\text{H}_2\text{O}$   | G  | 1846      | Germany                          | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> (1847), 32   | <i>Acta Crystallographica</i> <b>B42</b> (1986), 253   |
| Struvite-(K)             | $\text{KMg}(\text{PO}_4) \cdot 6\text{H}_2\text{O}$   | A  | 2003-048  | Switzerland / Austria            | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 629   |  |
| Studenitsite             | $\text{NaCa}_2\text{B}_9\text{O}_{14}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A  | 1994-026  | Serbia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>124(3)</b> (1995), 57   | <i>Crystallography Reports</i> <b>38</b> (1993), 749   |
| Studtite                 | $(\text{UO}_2)(\text{O}_2)(\text{H}_2\text{O})_2 \cdot 2\text{H}_2\text{O}$   | G  | 1947      | Democratic Republic of the Congo | <i>Bulletin de la Société Belge de Géologie</i> <b>70</b> (1947), B212  | <i>American Mineralogist</i> <b>88</b> (2003), 1165  |
| Stumpflite               | $\text{PtSb}$   | A  | 1972-013  | South Africa                     | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>95</b> (1972), 610                                     | <i>Zeitschrift für Physikalische Chemie, Abteilung B</i> <b>4</b> (1929), 277                              |
| Sturmanite               | $\text{Ca}_6\text{Fe}^{3+}_2(\text{SO}_4)_{2.5}[\text{B}(\text{OH})_4](\text{OH})_{12} \cdot 25\text{H}_2\text{O}$          | A  | 1981-011  | South Africa                     | <i>Canadian Mineralogist</i> <b>21</b> (1983), 705  | <i>Canadian Mineralogist</i> <b>42</b> (2004), 723   |
| Stützite                 | $\text{Ag}_{5-x}\text{Te}_3$ ( $x = 0.24-0.36$ )  | Rd | 1964 s.p. | Romania                          | <i>American Mineralogist</i> <b>36</b> (1951), 458  | <i>Soviet Physics - Crystallography</i> <b>11</b> (1966), 182  |
| Suanite                  | $\text{Mg}_2\text{B}_2\text{O}_5$   | A  | 1967 s.p. | North Korea                      | <i>Mineralogical Journal</i> <b>1</b> (1953), 54  | <i>Acta Crystallographica</i> <b>C51</b> (1995), 2469  |
| Sudburyite               | $\text{PdSb}$   | A  | 1973-048  | Canada                           | <i>Canadian Mineralogist</i> <b>12</b> (1974), 275  | <i>Ti Ch'iu Hua Hseuh</i> (1979), 72   |
| Sudoite                  | $\text{Mg}_2\text{Al}_3(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_8$  | Rd | 1966-027  | Germany                          | <i>Naturwissenschaften</i> <b>49</b> (1962), 205  | <i>American Mineralogist</i> <b>92</b> (2007), 1586  |
| Sudovikovite             | $\text{PtSe}_2$   | A  | 1995-009  | Russia                           | <i>Doklady Akademii Nauk</i> <b>354</b> (1997), 486   |  |
| Suessite                 | $\text{Fe}_3\text{Si}$  | A  | 1979-056  | Australia                        | <i>Meteoritics</i> <b>15</b> (1980), 312  | <i>American Mineralogist</i> <b>67</b> (1982), 126   |

|                    |  |    |           |                |  |   |
|--------------------|--|----|-----------|----------------|--|---|
| Sugakiite          | $\text{Cu}(\text{Fe},\text{Ni})_8\text{S}_8$   | A  | 2005-033  | Japan          | <i>Canadian Mineralogist</i> <b>46</b> (2008), 263   |   |
| Sugilite           | $\text{KNa}_2\text{Fe}^{3+}_2(\text{Li}_3\text{Si}_{12})\text{O}_{30}$   | A  | 1974-060  | Japan          | <i>Mineralogical Journal</i> <b>8</b> (1976), 110  | <i>American Mineralogist</i> <b>73</b> (1988), 595  |
| Suhailite          | $(\text{NH}_4)\text{Fe}^{2+}_3(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_2$  | A  | 2007-040  | Spain          | <i>American Mineralogist</i> <b>94</b> (2009), 210   |   |
| Sulfhydrylbystrite | $\text{Na}_5\text{K}_2\text{Ca}[\text{Al}_6\text{Si}_6\text{O}_{24}](\text{S}_5)^{2-}(\text{SH})^-$  | A  | 2015-010  | Russia         | <i>Mineralogical Magazine</i> <b>81</b> (2017), 383  |   |
| Sulfoborite        | $\text{Mg}_3[\text{B}(\text{OH})_4]_2(\text{SO}_4)(\text{OH},\text{F})_2$  | G  | 1893      | Germany        | <i>Sitzungsberichte der Akademie der Wissenschaften</i> (1893), 967                        | <i>American Mineralogist</i> <b>68</b> (1983), 255  |
| Sulphohalite       | $\text{Na}_6(\text{SO}_4)_2\text{ClF}$   | G  | 1888      | USA            | <i>American Journal of Science</i> <b>136</b> (1888), 463                                  | <i>Journal of Science of the Hiroshima University, Series A-II</i> <b>32</b> (1968), 10     |
| Sulphotsumoite     | $\text{Bi}_3\text{Te}_2\text{S}$   | A  | 1980-084  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 316          |   |
| Sulphur            | S  | G  | ?         | unknown        | original paper?  | <i>Acta Crystallographica</i> <b>C43</b> (1987), 2260                                       |
| Sulphur-β          | S  | G  | 1912      | Italy          | <i>Atti dell'Accademia Gioenia di Scienze Naturali Ser. V</i> <b>5</b> (1912), 1           | <i>Acta Crystallographica</i> <b>B62</b> (2006), 953  |
| Sulvanite          | $\text{Cu}_3\text{VS}_4$   | G  | 1900      | Australia      | <i>Journal of the Chemical Society, Transactions</i> <b>77</b> (1900), 1094                | <i>American Mineralogist</i> <b>51</b> (1966), 890  |
| Sundiusite         | $\text{Pb}_{10}(\text{SO}_4)_8\text{O}_8\text{Cl}_2$   | A  | 1979-044  | Sweden         | <i>American Mineralogist</i> <b>65</b> (1980), 506   |   |
| Suolunite          | $\text{Ca}_2\text{Si}_2\text{O}_5(\text{OH})_2 \cdot \text{H}_2\text{O}$   | A  | 1968 s.p. | China          | <i>Geological Review</i> <b>23</b> (1965), 7   | <i>Kexue Tongbao</i> <b>44</b> (1999), 2125   |
| Suredate           | $\text{PbSnS}_3$   | A  | 1997-043  | Argentina      | <i>American Mineralogist</i> <b>85</b> (2000), 1066  |   |
| Surinamite         | $\text{Mg}_3\text{Al}_3\text{O}(\text{Si}_3\text{BeAlO}_{15})$   | A  | 1974-053  | Suriname       | <i>American Mineralogist</i> <b>61</b> (1976), 193   | <i>American Mineralogist</i> <b>87</b> (2002), 501  |
| Surite             | $(\text{Pb},\text{Ca})_3\text{Al}_2(\text{Si},\text{Al})_4\text{O}_{10}(\text{CO}_3)_2(\text{OH})_3 \cdot 0.3\text{H}_2\text{O}$             | A  | 1977-037  | Argentina      | <i>American Mineralogist</i> <b>63</b> (1978), 1175  | <i>American Mineralogist</i> <b>82</b> (1997), 416  |
| Surkhobite         | $\text{KBa}_3\text{Ca}_2\text{Na}_2\text{Mn}_{16}\text{Ti}_8(\text{Si}_2\text{O}_7)_8\text{O}_8(\text{OH})_4(\text{F},\text{O},\text{OH})_8$ | Rd | 2002-037  | Tajikistan     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(2)</b> (2003), 60      | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 289                                 |
| Sursassite         | $\text{Mn}^{2+}_2\text{Al}_3(\text{SiO}_4)(\text{Si}_2\text{O}_7)(\text{OH})_3$  | G  | 1926      | Switzerland    | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>6</b> (1926), 376 | <i>American Mineralogist</i> <b>94</b> (2009), 1440   |
| Susannite          | $\text{Pb}_4(\text{SO}_4)(\text{CO}_3)_2(\text{OH})_2$   | G  | 1845      | United Kingdom | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 499             | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 493                                 |
| Suseinargiuite     | $(\text{Na}_{0.5}\text{Bi}_{0.5})(\text{MoO}_4)$   | A  | 2014-089  | Italy          | <i>European Journal of Mineralogy</i> <b>27</b> (2015), 695                                |   |
| Sussexite          | $\text{Mn}^{2+}\text{BO}_2(\text{OH})$   | G  | 1868      | USA            | <i>American Journal of Science</i> <b>46</b> (1868), 140                                   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>75</b> (1995), 123 |
| Suzukiite          | $\text{BaV}^{4+}\text{Si}_2\text{O}_7$   | A  | 1978-005  | Japan          | <i>Mineralogical Journal</i> <b>11</b> (1982), 15  |   |
| Svabite            | $\text{Ca}_5(\text{AsO}_4)_3\text{F}$  | G  | 1891      | Sweden         | <i>Geologiska Föreningen i Stockholm Förhandlingar</i> <b>13</b> (1891), 789               | <i>American Mineralogist</i> <b>101</b> (2016), 1750  |
| Svanbergite        | $\text{SrAl}_3(\text{SO}_4)(\text{PO}_4)(\text{OH})_6$   | Rd | 1987 s.p. | Sweden         | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>11</b> (1854), 156     | <i>Mineralogical Journal</i> <b>8</b> (1977), 419   |
| Sveinbergeite      | $\text{Ca}(\text{Fe}^{2+}_6\text{Fe}^{3+})\text{Ti}_2(\text{Si}_4\text{O}_{12})_2\text{O}_2(\text{OH})_5(\text{H}_2\text{O})_4$              | A  | 2010-027  | Norway         | <i>Mineralogical Magazine</i> <b>75</b> (2011), 2687                                       |   |
| Sveite             | $\text{KAl}_7(\text{NO}_3)_4(\text{OH})_{16}\text{Cl}_2 \cdot 8\text{H}_2\text{O}$   | A  | 1980-005  | Venezuela      | <i>Transactions of the Geological Society of South Africa</i> <b>83</b> (1982), 239        |   |
| Švenekite          | $\text{Ca}[\text{AsO}_2(\text{OH})_2]_2$   | A  | 1999-007  | Czech Republic | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2711                                       |   |
| Sverigeite         | $\text{NaBe}_2\text{Mn}^{2+}_2\text{SnSi}_3\text{O}_{12}(\text{OH})$   | A  | 1983-066  | Sweden         | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>106</b> (1984), 175             | <i>American Mineralogist</i> <b>74</b> (1989), 1343   |

|                 |  |    |           |                                  |  |  |
|-----------------|--|----|-----------|----------------------------------|--|--|
| Svornostite     | $K_2Mg[(UO_2)(SO_4)_2]_2 \cdot 8H_2O$                        | A  | 2014-078  | Czech Republic                   | CNMNC Newsletter 23 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 51   |  |
| Svyatoslavite   | $Ca(Al_2Si_2O_8)$  | A  | 1988-012  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>118(2)</b> (1989), 111   | <i>Canadian Mineralogist</i> <b>50</b> (2012), 585                       |
| Svyazhinite     | $MgAl(SO_4)_2F \cdot 14H_2O$                                 | A  | 1983-045  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 347  |  |
| Swaknoite       | $(NH_4)_2Ca(PO_3OH)_2 \cdot H_2O$                            | A  | 1991-021  | Namibia                          | <i>Bulletin of the South African Speleological Association</i> <b>32</b> (1991), 72  |  |
| Swamboite-(Nd)  | $Nd_{0.333}[(UO_2)(SiO_3OH)](H_2O)_{-2.5}$                   | Rd | 2017 s.p. | Democratic Republic of the Congo | <i>Canadian Mineralogist</i> <b>19</b> (1981), 553   |  |
| Swartzite       | $CaMg(UO_2)(CO_3)_3 \cdot 12H_2O$                            | G  | 1951      | USA                              | <i>American Mineralogist</i> <b>36</b> (1951), 1   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 481            |
| Swedenborgite   | $NaBe_4Sb^{5+}O_7$   | G  | 1924      | Sweden                           | <i>Zeitschrift für Kristallographie</i> <b>60</b> (1924), 262  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 153                       |
| Sweetite        | $Zn(OH)_2$   | A  | 1983-011  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>48</b> (1984), 267  |  |
| Swinefordite    | $Ca_{0.2}(Li,Al,Mg,Fe)_3(Si,Al)_4O_{10}(OH,F)_2 \cdot nH_2O$ | A  | 1973-054  | USA                              | <i>American Mineralogist</i> <b>60</b> (1975), 540   |  |
| Switzerite      | $Mn^{2+}_3(PO_4)_2 \cdot 7H_2O$                              | Rd | 1966-042  | USA                              | <i>American Mineralogist</i> <b>52</b> (1967), 1595  | <i>American Mineralogist</i> <b>71</b> (1986), 1224                      |
| Sylvanite       | $AgAuTe_4$   | G  | 1835      | Romania                          | Régne Minérale. Levraut, Paris (1835), 38  | <i>American Mineralogist</i> <b>26</b> (1941), 457                       |
| Sylvite         | KCl  | G  | 1832      | Italy                            | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 511   |  |
| Symesite        | $Pb_{10}(SO_4)O_7Cl_4 \cdot H_2O$                            | A  | 1998-035  | United Kingdom                   | <i>American Mineralogist</i> <b>85</b> (2000), 1526  | <i>Acta Crystallographica</i> <b>A29</b> (1973), 514                     |
| Symplectite     | $Fe^{2+}_3(AsO_4)_2 \cdot 8H_2O$                             | G  | 1837      | Germany                          | <i>Journal für Praktische Chemie</i> <b>10</b> (1837), 501   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 94 |
| Synadelphite    | $Mn^{2+}_9(AsO_4)_2(AsO_3)(OH)_9 \cdot 2H_2O$                | G  | 1884      | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>7</b> (1884), 220   | <i>American Mineralogist</i> <b>55</b> (1970), 2023                      |
| Synchysite-(Ce) | $CaCe(CO_3)_2F$  | Rn | 1982-030  | Denmark (Greenland)              | <i>Bulletin of the Geological Institution of the University of Upsala</i> <b>5</b> (1901), 81  | <i>Canadian Mineralogist</i> <b>32</b> (1994), 865                       |
| Synchysite-(Nd) | $CaNd(CO_3)_2F$  | Rn | 1982-030a | Serbia                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 201  |  |
| Synchysite-(Y)  | $CaY(CO_3)_2F$   | Rn | 1982-030b | USA                              | <i>American Mineralogist</i> <b>45</b> (1960), 92  | <i>Acta Petrologica et Mineralogica</i> <b>14</b> (1995), 336            |
| Syngenite       | $K_2Ca(SO_4)_2 \cdot H_2O$                                   | G  | 1872      | Ukraine                          | <i>Lotos - Zeitschrift für Naturwissenschaften</i> <b>22</b> (1872), 137   | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 398           |
| Szaibélyite     | $MgBO_2(OH)$   | G  | 1862      | Romania                          | <i>Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften</i> <b>44</b> (1862), 143 | <i>Canadian Mineralogist</i> <b>46</b> (2008), 671                       |
| Szenicsite      | $Cu_3(MoO_4)(OH)_4$  | A  | 1993-011  | Chile                            | <i>Mineralogical Record</i> <b>28</b> (1997), 387  | <i>Mineralogical Magazine</i> <b>62</b> (1998), 461                      |
| Szkларыite      | $\square Al_6BAS^{3+}_3O_{15}$                               | A  | 2012-070  | Poland                           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2841   |  |
| Szmikite        | $Mn(SO_4) \cdot H_2O$  | G  | 1877      | Romania                          | <i>Verhandlungen der Kaiserlich-Königlichen Geologischen Reichsanstalt</i> (1877), 115   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 296            |
| Szomolnokite    | $Fe(SO_4) \cdot H_2O$  | G  | 1891      | Slovakia                         | <i>Magyar Tudományos Akadémia Értesítője</i> <b>2</b> (1891), 96   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1991), 296            |
| Szymańskiite    | $Hg_{16}Ni_6(CO_3)_{12}(OH)_{12}(H_3O)_8 \cdot 3H_2O$        | A  | 1989-045  | USA                              | <i>Canadian Mineralogist</i> <b>28</b> (1990), 703   | <i>Canadian Mineralogist</i> <b>28</b> (1990), 709                       |

|                 |   |    |           |                     |  |   |
|-----------------|---|----|-----------|---------------------|--|---|
| Tacharanite     | $\text{Ca}_{12}\text{Al}_2\text{Si}_{18}\text{O}_{33}(\text{OH})_{36}$  | G  | 1961      | United Kingdom      | <i>Mineralogical Magazine</i> <b>32</b> (1961), 745  | <i>Mineralogical Magazine</i> <b>40</b> (1975), 113                                     |
| Tachyhydrite    | $\text{CaMg}_2\text{Cl}_6 \cdot 12\text{H}_2\text{O}$   | G  | 1856      | Germany             | <i>Annalen der Physik</i> <b>98</b> (1856), 261  | <i>Acta Crystallographica</i> <b>B36</b> (1980), 2734                                   |
| Tadzhikite-(Ce) | $\text{Ca}_4\text{Ce}_2\text{Ti}\square(\text{B}_4\text{Si}_4\text{O}_{22})(\text{OH})_2$   | Rn | 1969-042  | Tajikistan          | <i>Doklady Akademii Nauk SSSR</i> <b>195</b> (1970), 1190  | <i>American Mineralogist</i> <b>87</b> (2002), 745                                      |
| Taenite         | (Ni,Fe)   | G  | 1861      | New Zealand ?       | <i>Annalen der Physik und Chemie</i> <b>114</b> (1861), 250  | <i>Nature</i> <b>273</b> (1978), 453  |
| Taikanite       | $\text{BaSr}_2\text{Mn}^{3+}_2\text{O}_2(\text{Si}_4\text{O}_{12})$   | A  | 1984-051  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 635  | <i>American Mineralogist</i> <b>78</b> (1993), 1088                                     |
| Taimyrite-I     | $(\text{Pd,Pt})_9\text{Cu}_3\text{Sn}_4$  | A  | 1973-065  | Russia              | <i>Proceedings of the Central Research Institute of Geological Prospecting for Base and Precious Metals (TsNIGRI)</i> <b>122</b> (1976), 107 | <i>Canadian Mineralogist</i> <b>38</b> (2000), 599                                      |
| Tainiolite      | $\text{KLiMg}_2\text{Si}_4\text{O}_{10}\text{F}_2$  | G  | 1901      | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>24</b> (1901), 115   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 541                                      |
| Takanawaite-(Y) | $\text{YTaO}_4$   | A  | 2011-099  | Japan               | <i>Journal of Mineralogical and Petrological Sciences</i> <b>108</b> (2013), 335   |   |
| Takanelite      | $(\text{Mn}^{2+}, \text{Ca})_{2x}(\text{Mn}^{4+})_{1-x}\text{O}_2 \cdot 0.7\text{H}_2\text{O}$  | A  | 1970-034  | Japan               | <i>Journal of the Japanese Association of Mineralogists, Petrologists, and Economic Geologists</i> <b>65</b> (1971), 1                       | <i>American Mineralogist</i> <b>76</b> (1991), 1426                                     |
| Takedaite       | $\text{Ca}_3\text{B}_2\text{O}_6$   | A  | 1993-049  | Japan               | <i>Mineralogical Magazine</i> <b>59</b> (1995), 549  | <i>Acta Crystallographica</i> <b>B31</b> (1975), 1416                                   |
| Takéuchiite     | $\text{Mg}_2\text{Mn}^{3+}\text{O}_2(\text{BO}_3)$  | A  | 1980-018  | Sweden              | <i>American Mineralogist</i> <b>65</b> (1980), 1130  | <i>Zeitschrift für Kristallographie</i> <b>181</b> (1987), 135                          |
| Takovite        | $\text{Ni}_6\text{Al}_2(\text{CO}_3)(\text{OH})_{16} \cdot 4\text{H}_2\text{O}$   | A  | 1977 s.p. | Serbia              | <i>Comptes Rendus des Séances de la Société Serbe de Géologie pour l'année 1955</i> (1957), 219  | <i>American Mineralogist</i> <b>62</b> (1977), 458                                      |
| Talc            | $\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$  | G  | ?         | unknown             | De natura eorum quae effluunt ex terra. Nachdruck der Ausgabe, Basel (1546), 480   | <i>Zeitschrift für Kristallographie</i> <b>156</b> (1981), 177                          |
| Talmessite      | $\text{Ca}_2\text{Mg}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$  | A  | 1985 s.p. | Iran                | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>83</b> (1960), 118  | <i>Bulletin de Minéralogie</i> <b>100</b> (1977), 230                                   |
| Talnakhite      | $\text{Cu}_9\text{Fe}_8\text{S}_{16}$   | A  | 1967-014  | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>97</b> (1968), 63  | <i>American Mineralogist</i> <b>57</b> (1972), 368                                      |
| Tamaite         | $(\text{Ca,K,Na})_x\text{Mn}_6(\text{Si,Al})_{10}\text{O}_{24}(\text{OH})_4 \cdot n\text{H}_2\text{O}$<br>( $x = 1-2$ ; $n = 7-11$ )                    | A  | 1999-011  | Japan               | <i>Journal of Mineralogical and Petrological Sciences</i> <b>95</b> (2000), 79   | <i>American Mineralogist</i> <b>88</b> (2003), 1324                                     |
| Tamarugite      | $\text{NaAl}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$  | G  | 1889      | Chile               | <i>Verhandlungen des Deutschen Wissenschaftlichen Vereines zu Santiago</i> <b>2</b> (1889), 49   | <i>Acta Crystallographica</i> <b>E69</b> (2013), i63                                    |
| Tamboite        | $\text{Fe}^{3+}_3(\text{OH})(\text{H}_2\text{O})_2(\text{SO}_4)(\text{Te}^{4+}\text{O}_3)_3[\text{Te}^{4+}\text{O}(\text{OH})_2](\text{H}_2\text{O})_3$ | A  | 2016-059  | Chile               | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135   |   |
| Tancaite-(Ce)   | $\text{FeCe}(\text{MoO}_4)_3 \cdot 3\text{H}_2\text{O}$   | A  | 2009-097  | Italy               | 20th General Meeting of IMA. Budapest, August 2010 (abstr.)  |   |
| Tancoite        | $\text{HLiNa}_2[\text{Al}(\text{PO}_4)_2(\text{OH})]$   | A  | 1979-045  | Canada              | <i>Canadian Mineralogist</i> <b>18</b> (1980), 185   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>31</b> (1983), 121 |
| Taneyamalite    | $(\text{Na,Ca})\text{Mn}^{2+}_{12}(\text{Si,Al})_{12}(\text{O,OH})_{44}$  | A  | 1977-042  | Japan               | <i>Mineralogical Magazine</i> <b>44</b> (1981), 51   |   |

|                      |   |    |           |                     |  |  |
|----------------------|---|----|-----------|---------------------|--|--|
| Tangdanite           | $\text{Ca}_2\text{Cu}_9(\text{AsO}_4)_4(\text{SO}_4)_{0.5}(\text{OH})_9 \cdot 9\text{H}_2\text{O}$  | A  | 2011-096  | China               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 559                                    |  |
| Tangeite             | $\text{CaCu}(\text{VO}_4)(\text{OH})$   | Rn | 1992 s.p. | Turkmenistan        | <i>Doklady Akademii Nauk SSSR</i> (1926), 43   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 205                    |
| Taniajacoite         | $\text{SrCaMn}^{3+}_2\text{Si}_4\text{O}_{11}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$   | A  | 2014-107  | South Africa        | CNMNC Newsletter 25 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 529              |  |
| Tanohataite          | $\text{LiMn}_2\text{Si}_3\text{O}_8(\text{OH})$   | A  | 2007-019  | Japan               | <i>Journal of Mineralogical and Petrological Sciences</i> <b>107</b> (2012), 149       |  |
| Tantalaeschynite-(Y) | $\text{Y}(\text{Ta}, \text{Ti}, \text{Nb})_2\text{O}_6$   | Rn | 1969-043  | Brazil              | <i>Mineralogical Magazine</i> <b>39</b> (1974), 571                                    |  |
| Tantalcarbide        | TaC   | G  | ?         | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(1)</b> (1997), 76  | <i>Metallwirtschaft, Metallwissenschaft, Metalltechnik</i> <b>12</b> (1933), 298 |
| Tantalite-(Fe)       | $\text{Fe}^{2+}\text{Ta}_2\text{O}_6$   | Rn | 2007 s.p. | USA                 | <i>Records of General Science</i> <b>4</b> (1836), 407                                 |  |
| Tantalite-(Mg)       | $\text{MgTa}_2\text{O}_6$   | Rn | 2002-018  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(2)</b> (2003), 49  |  |
| Tantalite-(Mn)       | $\text{Mn}^{2+}\text{Ta}_2\text{O}_6$   | Rn | 2007 s.p. | Sweden              | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>3</b> (1877), 282           | <i>Canadian Mineralogist</i> <b>14</b> (1976), 540                               |
| Tantalowodginite     | $(\text{Mn}, \square)\text{TaTa}_2\text{O}_8$   | A  | 2017-095  | USA                 | <i>Canadian Mineralogist</i> <b>56</b> (2018), 543                                     |  |
| Tanteuxenite-(Y)     | $\text{Y}(\text{Ta}, \text{Nb}, \text{Ti})_2(\text{O}, \text{OH})_6$  | A  | 1987 s.p. | Australia           | <i>Journal of the Royal Society of Western Australia</i> <b>14</b> (1928), 45          |  |
| Tantite              | $\text{Ta}_2\text{O}_5$   | A  | 1982-066  | Russia              | <i>Mineralogicheskii Zhurnal</i> <b>5</b> (1983), 90                                   | <i>Journal of Solid State Chemistry</i> <b>3</b> (1971), 145                     |
| Tapiaite             | $\text{Ca}_5\text{Al}_2(\text{AsO}_4)_4(\text{OH})_4 \cdot 12\text{H}_2\text{O}$  | A  | 2014-024  | Chile               | <i>Mineralogical Magazine</i> <b>79</b> (2015), 345                                    |  |
| Tapiolite-(Fe)       | $\text{Fe}^{2+}\text{Ta}_2\text{O}_6$   | Rn | 2007 s.p. | Finland             | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>20</b> (1863), 443 | <i>Mineralogical Magazine</i> <b>70</b> (2006), 319                              |
| Tapiolite-(Mn)       | $\text{Mn}^{2+}\text{Ta}_2\text{O}_6$   | Rn | 1983-005  | Finland             | <i>Bulletin of the Geological Society of Finland</i> <b>55</b> (1983), 101             | <i>Canadian Mineralogist</i> <b>34</b> (1996), 631                               |
| Taramellite          | $\text{Ba}_4(\text{Fe}^{3+}, \text{Ti})_4\text{O}_2[\text{B}_2\text{Si}_6\text{O}_{27}]\text{Cl}_x$   | G  | 1908      | Italy               | <i>Rendiconti della Reale Accademia dei Lincei, Serie V</i> <b>18</b> (1908), 810      | <i>American Mineralogist</i> <b>65</b> (1980), 123                               |
| Taramite             | $\text{Na}(\text{NaCa})(\text{Mg}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | Rd | 2012 s.p. | Norway              | <i>American Mineralogist</i> <b>92</b> (2007), 1428                                    |  |
| Taranakite           | $\text{K}_3\text{Al}_5(\text{PO}_3\text{OH})_6(\text{PO}_4)_2 \cdot 18\text{H}_2\text{O}$   | G  | 1865      | New Zealand         | Reports of the Jurors, New Zealand Expedition (1865), 423                              | <i>Inorganica Chimica Acta</i> <b>269</b> (1998), 47                             |
| Tarapacáite          | $\text{K}_2(\text{CrO}_4)$  | G  | 1878      | Chile               | Mineraux du Perou. Chaix, Paris (1878), 274  | <i>Acta Crystallographica</i> <b>B28</b> (1972), 2845                            |
| Tarbagataite         | $(\text{K}\square)\text{Ca}(\text{Fe}^{2+}, \text{Mn})_7\text{Ti}_2(\text{Si}_4\text{O}_{12})_2\text{O}_2(\text{OH})_5$                         | A  | 2010-048  | Kazakhstan          | <i>Canadian Mineralogist</i> <b>50</b> (2012), 159                                     |  |
| Tarbuttite           | $\text{Zn}_2(\text{PO}_4)(\text{OH})$   | G  | 1907      | Zambia              | <i>Nature</i> <b>76</b> (1907), 215  | <i>Zeitschrift für Kristallographie</i> <b>123</b> (1966), 321                   |
| Tarkianite           | $(\text{Cu}, \text{Fe})(\text{Re}, \text{Mo})_4\text{S}_8$  | A  | 2003-004  | Finland             | <i>Canadian Mineralogist</i> <b>42</b> (2004), 539                                     | <i>European Journal of Mineralogy</i> <b>3</b> (1991), 977                       |
| Taseqite             | $\text{Na}_{12}\text{Sr}_3\text{Ca}_6\text{Fe}_3\text{Zr}_3\text{NbSi}_{25}\text{O}_{73}(\text{O}, \text{OH}, \text{H}_2\text{O})_3\text{Cl}_2$ | A  | 2002-055  | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2004), 83                           |  |
| Tashelgite           | $\text{CaMgFe}^{2+}\text{Al}_9\text{O}_{16}(\text{OH})$   | A  | 2010-017  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>140(1)</b> (2011), 49     | <i>Doklady Chemistry</i> <b>434</b> (2010), 233                                  |
| Tassieite            | $\text{NaCa}_2\text{Mg}_3\text{Fe}^{2+}_2\text{Fe}^{3+}(\text{PO}_4)_6 \cdot 2\text{H}_2\text{O}$   | A  | 2005-051  | Antarctica          | <i>Canadian Mineralogist</i> <b>45</b> (2007), 293                                     |  |

|                      |  |    |           |            |  |   |
|----------------------|--|----|-----------|------------|--|---|
| Tatarinovite         | $\text{Ca}_3\text{Al}(\text{SO}_4)[\text{B}(\text{OH})_4](\text{OH})_6 \cdot 12\text{H}_2\text{O}$                 | A  | 2015-055  | Russia     | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(1)</b> (2016), 48                                   |   |
| Tatarskite           | $\text{Ca}_6\text{Mg}_2(\text{SO}_4)_2(\text{CO}_3)_2(\text{OH})_4\text{Cl}_4 \cdot 7\text{H}_2\text{O}$           | A  | 1967 s.p. | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 697                                     |   |
| Tatyanaitite         | $(\text{Pt},\text{Pd})_9\text{Cu}_3\text{Sn}_4$  | A  | 1995-049  | Russia     | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 391  | <i>Canadian Mineralogist</i> <b>38</b> (2000), 599                                      |
| Tausonite            | $\text{SrTiO}_3$   | A  | 1982-077  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 86                                     | <i>American Mineralogist</i> <b>87</b> (2002), 1183                                     |
| Tavagnascoite        | $\text{Bi}_4\text{O}_4(\text{SO}_4)(\text{OH})_2$  | A  | 2014-099  | Italy      | <i>Mineralogical Magazine</i> <b>80</b> (2016), 647  |   |
| Tavorite             | $\text{LiFe}^{3+}(\text{PO}_4)(\text{OH})$   | G  | 1955      | Brazil     | <i>American Mineralogist</i> <b>40</b> (1955), 952   | <i>Geochemistry International</i> <b>35</b> (1997), 630                                 |
| Tazheranite          | $(\text{Zr},\text{Ti},\text{Ca})(\text{O},\square)_2$  | A  | 1969-008  | Russia     | <i>Doklady Akademii Nauk SSSR</i> <b>186</b> (1969), 917   | <i>Zeitschrift für Kristallographie</i> <b>214</b> (1999), 373                          |
| Tazieffite           | $\text{Pb}_{20}\text{Cd}_2(\text{As},\text{Bi})_{22}\text{S}_{50}\text{Cl}_{10}$                                   | A  | 2008-012  | Russia     | <i>American Mineralogist</i> <b>94</b> (2009), 1312  |   |
| Tazzoliite           | $\text{Ba}_2\text{CaSr}_{0.5}\text{Na}_{0.5}\text{Ti}_2\text{Nb}_3\text{SiO}_{17}[\text{PO}_2(\text{OH})_2]_{0.5}$ | A  | 2011-018  | Italy      | <i>Mineralogical Magazine</i> <b>76</b> (2012), 827  |   |
| Teallite             | $\text{PbSnS}_2$   | G  | 1904      | Bolivia    | <i>Mineralogical Magazine</i> <b>14</b> (1904), 21   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>177</b> (2002), 163               |
| Tedhadleyite         | $\text{Hg}^{2+}\text{Hg}^{1+}_{10}\text{O}_4\text{I}_2(\text{Cl},\text{Br})_2$                                     | A  | 2001-035  | USA        | <i>Canadian Mineralogist</i> <b>40</b> (2002), 909   | <i>Mineralogical Magazine</i> <b>73</b> (2009), 227                                     |
| Teepleite            | $\text{Na}_2\text{B}(\text{OH})_4\text{Cl}$  | G  | 1939      | USA        | <i>American Mineralogist</i> <b>24</b> (1939), 48  | <i>Acta Crystallographica</i> <b>B38</b> (1982), 82                                     |
| Tegengrenite         | $(\text{Mn}^{3+}_{0.5}\text{Sb}^{5+}_{0.5})\text{Mg}_2\text{O}_4$  | Rd | 1999-002  | Sweden     | <i>American Mineralogist</i> <b>85</b> (2000), 1315  | <i>Mineralogical Magazine</i> <b>79</b> (2015), 425                                     |
| Teineite             | $\text{Cu}^{2+}(\text{Te}^{4+}\text{O}_3) \cdot 2\text{H}_2\text{O}$   | G  | 1939      | Japan      | <i>Journal of the Faculty of Science, Hokkaido University, Series 4: Geology and Mineralogy</i> <b>4</b> (1939), 465 | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>24</b> (1977), 287 |
| Telargpalite         | $(\text{Pd},\text{Ag})_3\text{Te}$   | A  | 1972-030  | Russia     | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 595                                    |   |
| Tellurantimony       | $\text{Sb}_2\text{Te}_3$   | A  | 1972-002  | Canada     | <i>Canadian Mineralogist</i> <b>12</b> (1973), 55  | <i>Acta Crystallographica</i> <b>B30</b> (1974), 1307                                   |
| Tellurite            | $\text{TeO}_2$   | G  | 1845      | Romania    | <i>Handbuch der Bestimmenden Mineralogie</i> . Braumüller and Seidel, Wien (1845), 499                               | <i>Zeitschrift für Kristallographie</i> <b>124</b> (1967), 228                          |
| Tellurium            | Te   | G  | 1802      | Romania    | <i>Beiträge zur Chemischen Kenntniss der Mineralkörper</i> , Vol. 3. Rottmann, Berlin (1802), 2                      | <i>Philosophical Magazine</i> <b>48</b> (1924), 477                                     |
| Tellurobismuthite    | $\text{Bi}_2\text{Te}_3$   | G  | 1863      | USA        | <i>American Journal of Science and Arts</i> <b>85</b> (1863), 99   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 665                                      |
| Tellurohauchecornite | $\text{Ni}_9\text{BiTeS}_8$  | A  | 1978 s.p. | Canada     | <i>Mineralogical Magazine</i> <b>43</b> (1980), 877  |   |
| Telluromandarinoite  | $\text{Fe}^{3+}_2(\text{Te}^{4+}\text{O}_3)_3 \cdot 6\text{H}_2\text{O}$   | A  | 2011-013  | Chile      | <i>Canadian Mineralogist</i> <b>55</b> (2017), 21  |   |
| Telluronevskite      | $\text{Bi}_3\text{TeSe}_2$   | A  | 1993-027a | Slovakia   | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 177  |   |
| Telluropalladinite   | $\text{Pd}_9\text{Te}_4$   | A  | 1978-078  | USA        | <i>Canadian Mineralogist</i> <b>17</b> (1979), 589   | <i>Journal of the Less-Common Metals</i> <b>58</b> (1978), P39                          |
| Telluroperite        | $\text{Pb}(\text{Te}_{0.5}\text{Pb}_{0.5})\text{O}_2\text{Cl}$   | A  | 2009-044  | USA        | <i>American Mineralogist</i> <b>95</b> (2010), 1569  |   |
| Telyushenkoite       | $\text{CsNa}_6\text{Be}_2\text{Al}_3\text{Si}_{15}\text{O}_{39}\text{F}_2$   | A  | 2001-012  | Tajikistan | <i>New Data on Minerals</i> <b>38</b> (2003), 5  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 183                                      |
| Temagamite           | $\text{Pd}_3\text{HgTe}_3$   | A  | 1973-018  | Canada     | <i>Canadian Mineralogist</i> <b>12</b> (1973), 193   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 825                             |



|                      |   |    |           |                 |   |   |
|----------------------|---|----|-----------|-----------------|---|---|
| Tengchongite         | $\text{Ca}(\text{UO}_2)_6(\text{MoO}_4)_2\text{O}_5 \cdot 12\text{H}_2\text{O}$             | A  | 1984-031  | China           | <i>Kexue Tongbao</i> <b>31</b> (1986), 396  |   |
| Tengerite-(Y)        | $\text{Y}_2(\text{CO}_3)_3 \cdot 2 \cdot 3\text{H}_2\text{O}$                               | Rd | 1993 s.p. | Sweden          | A System of Mineralogy, 5th ed. Wiley, New York (1868), 747                       | <i>American Mineralogist</i> <b>78</b> (1993), 425  |
| Tennantite           | $\text{Cu}_6[\text{Cu}_4(\text{Fe}, \text{Zn})_2]\text{As}_4\text{S}_{13}$                  | G  | 1819      | United Kingdom  | <i>Quarterly Journal of Literature, Science and the Arts</i> <b>7</b> (1819), 95  | <i>Canadian Mineralogist</i> <b>43</b> (2005), 679  |
| Tenorite             | $\text{CuO}$  | A  | 1962 s.p. | Italy           | <i>Bulletin de la Société Géologique de France</i> <b>13</b> (1842), 206          | <i>Journal of Solid State Chemistry</i> <b>122</b> (1996), 273                                      |
| Tephroite            | $\text{Mn}^{2+}_2(\text{SiO}_4)$  | G  | 1823      | USA             | Vollständige Charakteristik des Mineral-Systems. Arnoldische, Dresden (1823), 278 | <i>American Mineralogist</i> <b>65</b> (1980), 1263   |
| Terlinguacreekite    | $\text{Hg}^{2+}_3\text{O}_2\text{Cl}_2$   | A  | 2004-018  | USA             | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1055                               |   |
| Terlinguaite         | $\text{Hg}_2\text{OCl}$   | G  | 1900      | USA             | <i>Economic Geology</i> <b>1</b> (1900), 265                                      | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>575</b> (1989), 145                    |
| Ternesite            | $\text{Ca}_5(\text{SiO}_4)_2(\text{SO}_4)$  | A  | 1995-015  | Germany         | <i>Mineralogy and Petrology</i> <b>60</b> (1997), 121                             |   |
| Ternovite            | $\text{MgNb}_4\text{O}_{11} \cdot 8 \cdot 12\text{H}_2\text{O}$                             | A  | 1992-044  | Russia          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1997), 49                      | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>127(3)</b> (1997), 98               |
| Terranovaite         | $\text{NaCaAl}_3\text{Si}_{17}\text{O}_{40} \cdot \approx 8\text{H}_2\text{O}$              | A  | 1995-026  | Antarctica      | <i>American Mineralogist</i> <b>82</b> (1997), 423                                |   |
| Terrywallaceite      | $\text{AgPb}(\text{Sb}, \text{Bi})_3\text{S}_6$   | A  | 2011-017  | Peru            | <i>American Mineralogist</i> <b>98</b> (2013), 1310                               |   |
| Terskite             | $\text{Na}_4\text{ZrSi}_6\text{O}_{16} \cdot 2\text{H}_2\text{O}$                           | A  | 1982-039  | Russia          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 226 | <i>Doklady Akademii Nauk SSSR</i> <b>316</b> (1991), 645  |
| Tertschite           | $\text{Ca}_4\text{B}_{10}\text{O}_{19} \cdot 20\text{H}_2\text{O}$                          | Q  | 1953      | Turkey          | <i>Fortschritte der Mineralogie</i> <b>31</b> (1953), 39                          |   |
| Teruggite            | $\text{Ca}_4\text{Mg}[\text{AsB}_6\text{O}_{11}(\text{OH})_6]_2 \cdot 14\text{H}_2\text{O}$ | A  | 1968-007  | Argentina       | <i>American Mineralogist</i> <b>53</b> (1968), 1815                               | <i>American Mineralogist</i> <b>58</b> (1973), 1034   |
| Teschmacherite       | $(\text{NH}_4)\text{H}(\text{CO}_3)$  | G  | 1868      | South Africa    | A System of Mineralogy, 5th ed. Wiley, New York (1868), 705                       | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>29</b> (1981), 67              |
| Tetra-auricupride    | $\text{CuAu}$   | A  | 1982-005  | China           | <i>Scientia Geologica Sinica</i> (1982), 111                                      | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Tetradymite          | $\text{Bi}_2\text{Te}_2\text{S}$  | G  | 1831      | Slovakia        | <i>Zeitschrift für Physik und Mathematik</i> <b>9</b> (1831), 129                 | <i>American Mineralogist</i> <b>60</b> (1975), 994  |
| Tetraferriannite     | $\text{KFe}^{2+}_3(\text{Si}_3\text{Fe}^{3+})\text{O}_{10}(\text{OH})_2$                    | Rn | 1998 s.p. | Australia       | <i>American Journal of Science</i> <b>261</b> (1963), 581                         | <i>American Mineralogist</i> <b>84</b> (1999), 325  |
| Tetraferriphlogopite | $\text{KMg}_3(\text{Si}_3\text{Fe}^{3+})\text{O}_{10}(\text{OH})_2$                         | Rn | 1998 s.p. | Russia          | <i>Soviet Physics - Crystallography</i> <b>22</b> (1977), 680                     | <i>Clays and Clay Minerals</i> <b>44</b> (1996), 540  |
| Tetraferroplatinum   | $\text{PtFe}$   | A  | 1974-012b | South Africa    | <i>Canadian Mineralogist</i> <b>13</b> (1975), 117                                | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751  |
| Tetrahedrite         | $\text{Cu}_6[\text{Cu}_4(\text{Fe}, \text{Zn})_2]\text{Sb}_4\text{S}_{13}$                  | A  | 1962 s.p. | unknown         | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 563    | <i>American Mineralogist</i> <b>70</b> (1985), 165  |
| Tetrarooseveltite    | $\text{Bi}(\text{AsO}_4)$   | A  | 1993-006  | Czech Republic  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 179                     | <i>Acta Crystallographica</i> <b>1</b> (1948), 163  |
| Tetrataenite         | $\text{FeNi}$   | A  | 1979-076  | USA (meteorite) | <i>American Mineralogist</i> <b>65</b> (1980), 624                                | <i>Zeitschrift für Kristallographie</i> <b>210</b> (1995), 14                                       |
| Tetrawickmanite      | $\text{Mn}^{2+}\text{Sn}^{4+}(\text{OH})_6$   | A  | 1971-018  | USA             | <i>Mineralogical Record</i> <b>4</b> (1973), 24                                   |   |
| Tewite               | $\text{K}_2(\text{Te}_{1.5}\square_{0.5})_2\text{W}_5\text{O}_{19}$                         | A  | 2014-053  | China           | CNMNC Newsletter 22 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 1241        | <a href="https://doi.org/10.1127/ejm/2019/0031-2813">https://doi.org/10.1127/ejm/2019/0031-2813</a> |
| Thadeuite            | $\text{CaMg}_3(\text{PO}_4)_2(\text{OH}, \text{F})_2$                                       | A  | 1978-001  | Portugal        | <i>American Mineralogist</i> <b>64</b> (1979), 359                                | <i>American Mineralogist</i> <b>67</b> (1982), 120  |

|                                 |   |    |           |                                  |  |   |
|---------------------------------|---|----|-----------|----------------------------------|--|---|
| Thalcosite                      | $(\text{Cu,Fe})_4\text{Ti}_2\text{S}_4$   | A  | 1975-023  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 202  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>138</b> (1980), 122 |
| Thalénite-(Y)                   | $\text{Y}_3\text{Si}_3\text{O}_{10}\text{F}$  | Rd | 2014 s.p. | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>20</b> (1898), 308  | <i>Mineralogical Magazine</i> <b>82</b> (2018), 313                       |
| Thalfenisite                    | $\text{Ti}_6(\text{Fe,Ni})_{25}\text{S}_{26}\text{Cl}$                                  | A  | 1979-018  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>108</b> (1979), 696  |   |
| Thalhammerite                   | $\text{Pd}_9\text{Ag}_2\text{Bi}_2\text{S}_4$   | A  | 2017-111  | Russia                           | <i>Minerals</i> <b>8</b> (2018), 339   |   |
| Thalliumpharmacosiderite        | $\text{TlFe}_4[(\text{AsO}_4)_3(\text{OH})_4]\cdot 4\text{H}_2\text{O}$                 | A  | 2013-124  | Macedonia                        | CNMNC Newsletter 20 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 549  |   |
| Thaumasite                      | $\text{Ca}_3\text{Si}(\text{OH})_6(\text{CO}_3)(\text{SO}_4)\cdot 12\text{H}_2\text{O}$ | G  | 1878      | Sweden                           | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>87</b> (1878), 313                                       | <i>American Mineralogist</i> <b>97</b> (2012), 1060                       |
| Theisite                        | $\text{Cu}_5\text{Zn}_5(\text{AsO}_4)_2(\text{OH})_{14}$                                | A  | 1980-040  | USA                              | <i>Mineralogical Magazine</i> <b>46</b> (1982), 49   |   |
| Thénardite                      | $\text{Na}_2(\text{SO}_4)$  | Rn | 2014 s.p. | Spain                            | <i>Annals of Philosophy</i> <b>12</b> (1826), 312  | <i>Canadian Mineralogist</i> <b>13</b> (1975), 181                        |
| Theoparacelsite                 | $\text{Cu}_3(\text{OH})_2\text{As}_2\text{O}_7$   | A  | 1998-012  | France                           | <i>Archives de Sciences de Genève</i> <b>54</b> (2001), 7  |   |
| Theophrastite                   | $\text{Ni}(\text{OH})_2$  | A  | 1980-059  | Greece                           | <i>American Mineralogist</i> <b>66</b> (1981), 1020  |   |
| Therasiaite                     | $(\text{NH}_4)_3\text{KNa}_2\text{Fe}^{2+}\text{Fe}^{3+}(\text{SO}_4)_3\text{Cl}_5$     | A  | 2013-050  | Italy                            | <i>Mineralogical Magazine</i> <b>78</b> (2014), 203  |   |
| Thérèsemaganite                 | $\text{NaCo}_4(\text{SO}_4)(\text{OH})_6\text{Cl}\cdot 6\text{H}_2\text{O}$             | Rd | 1991-026  | France                           | <i>Archives de Sciences de Genève</i> <b>46</b> (1993), 37   | <i>Mineralogical Magazine</i> <b>82</b> (2018), 159                       |
| Thermaerogenite                 | $\text{CuAl}_2\text{O}_4$   | A  | 2018-021  | Russia                           | <i>Minerals</i> <b>8</b> (2018), 498   |   |
| Thermessaite                    | $\text{K}_2\text{AlF}_3(\text{SO}_4)$   | A  | 2007-030  | Italy                            | <i>Canadian Mineralogist</i> <b>46</b> (2008), 693   |   |
| Thermessaite-(NH <sub>4</sub> ) | $(\text{NH}_4)_2\text{AlF}_3(\text{SO}_4)$  | A  | 2011-077  | Italy                            | CNMNC Newsletter 12 - <i>Mineralogical Magazine</i> <b>76</b> (2012), 151  |   |
| Thermonatrite                   | $\text{Na}_2(\text{CO}_3)\cdot \text{H}_2\text{O}$                                      | G  | 1845      | Russia                           | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845)  | <i>Acta Crystallographica</i> <b>B31</b> (1975), 890                      |
| Thomasclarkite-(Y)              | $\text{NaY}(\text{HCO}_3)(\text{OH})_3\cdot 4\text{H}_2\text{O}$                        | A  | 1997-047  | Canada                           | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1293  |   |
| Thometzekite                    | $\text{PbCu}^{2+}_2(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$                           | A  | 1982-103  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 446  | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179               |
| Thomsenolite                    | $\text{NaCaAlF}_6\cdot \text{H}_2\text{O}$  | G  | 1868      | Denmark (Greenland)              | A System of Mineralogy, 5th ed. Wiley, New York (1868), 129  | <i>Canadian Journal of Chemistry</i> <b>63</b> (1985), 3322               |
| Thomsonite-Ca                   | $\text{NaCa}_2(\text{Al}_5\text{Si}_5)\text{O}_{20}\cdot 6\text{H}_2\text{O}$           | Rn | 1997 s.p. | United Kingdom                   | <i>Annals of Philosophy</i> <b>16</b> (1820), 193  | <i>Acta Crystallographica</i> <b>C46</b> (1990), 1370                     |
| Thomsonite-Sr                   | $\text{NaSr}_2(\text{Al}_5\text{Si}_5)\text{O}_{20}\cdot 6\cdot 7\text{H}_2\text{O}$    | A  | 2000-025  | Japan                            | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(4)</b> (2001), 46  | <i>Doklady Earth Sciences</i> <b>376</b> (2001), 101                      |
| Thorasphite                     | $\text{Th}_2\text{H}(\text{PO}_4,\text{AsO}_4)_3\cdot 6\text{H}_2\text{O}$              | A  | 2017-085  | Australia                        | CNMNC Newsletter 41 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 229; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 183 |   |
| Thorbastnäsité                  | $\text{ThCa}(\text{CO}_3)_2\text{F}_2\cdot 3\text{H}_2\text{O}$                         | A  | 1968 s.p. | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>94</b> (1965), 105   |   |
| Thoreaulite                     | $\text{Sn}^{2+}\text{Ta}_2\text{O}_6$   | G  | 1933      | Democratic Republic of the Congo | <i>Bulletin de la Société Géologique de Belgique</i> <b>56</b> (1933), 327   | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 501               |
| Thorianite                      | $\text{ThO}_2$  | G  | 1904      | Sri Lanka                        | <i>Nature</i> <b>69</b> (1904), 510  |   |

|                    |  |    |           |                                  |  |   |
|--------------------|--|----|-----------|----------------------------------|--|---|
| Thorikosite        | $\text{Pb}_3\text{O}_3\text{Sb}^{3+}(\text{OH})\text{Cl}_2$  | A  | 1984-013  | Greece                           | <i>American Mineralogist</i> <b>70</b> (1985), 845   | <i>Journal of Solid State Chemistry</i> <b>57</b> (1985), 389                           |
| Thorite            | $\text{Th}(\text{SiO}_4)$  | G  | 1829      | Norway                           | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> (1829), 1                         | <i>Acta Crystallographica</i> <b>B34</b> (1978), 1074                                   |
| Thornasite         | $\text{Na}_{12}\text{Th}_3(\text{Si}_8\text{O}_{19})_4 \cdot 18\text{H}_2\text{O}$   | A  | 1985-050  | Canada                           | <i>Canadian Mineralogist</i> <b>25</b> (1987), 181   | <i>American Mineralogist</i> <b>85</b> (2000), 1521                                     |
| Thorneite          | $\text{Pb}_8(\text{Te}_2\text{O}_{10})(\text{CO}_3)\text{Cl}_2(\text{H}_2\text{O})$  | A  | 2009-023  | USA                              | <i>American Mineralogist</i> <b>95</b> (2010), 1548  |   |
| Thorosteenstrupine | $(\text{Ca}, \text{Th}, \text{Mn})_3\text{Si}_4\text{O}_{11}\text{F} \cdot 6\text{H}_2\text{O}$  | A  | 1967 s.p. | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 325           |   |
| Thortveitite       | $\text{Sc}_2\text{Si}_2\text{O}_7$   | G  | 1911      | Norway                           | <i>Centralblatt für Mineralogie, Geologie und Paläontologie</i> (1911), 721                | <i>American Mineralogist</i> <b>73</b> (1988), 601                                      |
| Thorutite          | $(\text{Th}, \text{U}, \text{Ca})\text{Ti}_2(\text{O}, \text{OH})_6$   | G  | 1958      | Kyrgyzstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>87</b> (1958), 201           | <i>Physics and Chemistry of Minerals</i> <b>26</b> (1999), 396                          |
| Threadgoldite      | $\text{Al}(\text{UO}_2)_2(\text{PO}_4)_2(\text{OH}) \cdot 8\text{H}_2\text{O}$   | A  | 1978-066  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 338                                      | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 111 |
| Tiberiobardiite    | $\{\text{Cu}_9\text{Al}[\text{SiO}_3(\text{OH})]_2(\text{OH})_{12}(\text{H}_2\text{O})_6\}(\text{SO}_4)_{1.5} \cdot 10\text{H}_2\text{O}$                                | A  | 2016-096  | Italy                            | <i>Minerals</i> <b>8</b> (2018), 152   |   |
| Tiemannite         | $\text{HgSe}$  | G  | 1855      | Germany                          | <i>Elemente der Mineralogie</i> . Engelmann, Leipzig (1855), 425                           | <i>American Mineralogist</i> <b>35</b> (1950), 337                                      |
| Tienshanite        | $\text{K}(\text{Na}, \text{K}, \square)_9\text{Ca}_2\text{Ba}_6\text{Mn}^{2+}_6\text{Ti}_6\text{B}_{12}\text{Si}_{36}\text{O}_{114}(\text{O}, \text{OH}, \text{F})_{11}$ | A  | 1967-028  | Tajikistan                       | <i>Doklady Akademii Nauk SSSR</i> <b>177</b> (1967), 678                                   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1305                                     |
| Tiettaite          | $\text{Na}_{17}\text{Fe}^{3+}\text{TiSi}_{16}\text{O}_{29}(\text{OH})_{30} \cdot 2\text{H}_2\text{O}$  | A  | 1991-013  | Russia                           | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(1)</b> (1993), 121     |   |
| Tikhonenkovite     | $\text{SrAlF}_4(\text{OH}) \cdot \text{H}_2\text{O}$   | A  | 1967 s.p. | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>156</b> (1964), 345                                   | <i>Journal of Structural Chemistry</i> <b>14</b> (1973), 445                            |
| Tilasite           | $\text{CaMg}(\text{AsO}_4)\text{F}$  | G  | 1895      | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>17</b> (1895), 291              | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 289                           |
| Tilleyite          | $\text{Ca}_5\text{Si}_2\text{O}_7(\text{CO}_3)_2$  | G  | 1933      | USA                              | <i>American Mineralogist</i> <b>18</b> (1933), 469   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1489                                     |
| Tillmansite        | $\text{HgAg}_3(\text{VO}_4)$   | A  | 2001-010  | France                           | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 177                                |   |
| Timroseite         | $\text{Pb}_2\text{Cu}_5(\text{TeO}_6)_2(\text{OH})_2$  | A  | 2009-064  | USA                              | <i>American Mineralogist</i> <b>95</b> (2010), 1560  |   |
| Tin                | $\text{Sn}$  | G  | ?         | unknown                          | original paper?  | <i>Journal of Applied Physics</i> <b>20</b> (1949), 726                                 |
| Tinaksite          | $\text{K}_2\text{NaCa}_2\text{TiSi}_7\text{O}_{18}(\text{OH})\text{O}$   | A  | 1968 s.p. | Russia                           | <i>Doklady Akademii Nauk SSSR</i> <b>162</b> (1965), 658                                   | <i>Mineralogical Magazine</i> <b>81</b> (2017), 251                                     |
| Tincalconite       | $\text{Na}_2\text{B}_4\text{O}_5(\text{OH})_4 \cdot 3\text{H}_2\text{O}$   | G  | 1878      | USA                              | <i>Bulletin de la Société Minéralogique de France</i> <b>1</b> (1878), 144                 | <i>American Mineralogist</i> <b>87</b> (2002), 350                                      |
| Tinnunculite       | $\text{C}_5\text{H}_4\text{N}_4\text{O}_3 \cdot 2\text{H}_2\text{O}$   | A  | 2015-021a | Russia                           | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>145(4)</b> (2016), 20         |   |
| Tinsleyite         | $\text{KAl}_2(\text{PO}_4)_2(\text{OH}) \cdot 2\text{H}_2\text{O}$   | A  | 1983-004  | USA                              | <i>American Mineralogist</i> <b>69</b> (1984), 374   | <i>Zeitschrift für Naturforschung B: Chemical Science</i> <b>54</b> (1999), 1385        |
| Tintcicite         | $\text{Fe}^{3+}_3(\text{PO}_4)_2(\text{OH})_3 \cdot 3\text{H}_2\text{O}$   | G  | 1946      | USA                              | <i>American Mineralogist</i> <b>31</b> (1946), 395   | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 71                              |
| Tintinaite         | $\text{Pb}_{10}\text{Cu}_2\text{Sb}_{16}\text{S}_{35}$   | A  | 1967-010  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1968), 371  | <i>Canadian Mineralogist</i> <b>22</b> (1984), 219                                      |
| Tinzenite          | $\text{Ca}_2\text{Mn}^{2+}_4\text{Al}_4[\text{B}_2\text{Si}_8\text{O}_{30}](\text{OH})_2$  | Rd | 2016 s.p. | Switzerland                      | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>3</b> (1923), 227 | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 177                             |

|                  |   |    |           |                       |   |   |
|------------------|---|----|-----------|-----------------------|---|---|
| Tiptopite        | $K_2(Li,Na,Ca)_6(Be_6P_6)O_{24}(OH)_2 \cdot 1.3H_2O$            | A  | 1983-007  | USA                   | <i>Canadian Mineralogist</i> <b>23</b> (1985), 43   | <i>American Mineralogist</i> <b>72</b> (1987), 816                    |
| Tiragalloite     | $Mn^{2+}_4As^{5+}_5Si_3O_{12}(OH)$                              | A  | 1979-061  | Italy                 | <i>American Mineralogist</i> <b>65</b> (1980), 947  | <i>Acta Crystallographica</i> <b>B35</b> (1979), 2287                 |
| Tischendorfite   | $Pd_8Hg_3Se_9$  | A  | 2001-061  | Germany               | <i>Canadian Mineralogist</i> <b>40</b> (2002), 739  | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 157           |
| Tisinalite       | $Na_3Mn^{2+}TiSi_6O_{15}(OH)_3$                                 | A  | 1979-052  | Russia                | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 223                   | <i>Crystallography Reports</i> <b>48</b> (2003), 551                  |
| Tissintite       | $(Ca,Na,\square)AlSi_2O_6$                                      | A  | 2013-027  | Morocco (meteorite)   | <i>Earth and Planetary Science Letters</i> <b>422</b> (2015), 194                                   |   |
| Tistarite        | $Ti_2O_3$   | A  | 2008-016  | Mexico (meteorite)    | <i>American Mineralogist</i> <b>94</b> (2009), 841  |   |
| Titanite         | $CaTi(SiO_4)O$  | A  | 1967 s.p. | Germany               | Beiträge zur Chemischen Kenntniss der Mineralkörper, Vol. 1. Decker, Berlin (1795), 245             | <i>American Mineralogist</i> <b>85</b> (2000), 1465                   |
| Titanium         | Ti  | A  | 2010-044  | China                 | <i>Acta Geologica Sinica</i> <b>87</b> (2013), 1275   |   |
| Titanoholtite    | $(Ti_{0.75}\square_{0.25})Al_6BSi_3O_{18}$                      | A  | 2012-069  | Poland                | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2841  |   |
| Titanomaghemite  | $(Ti_{0.5}\square_{0.5})Fe^{3+}_2O_4$                           | Rd | 1955      | South Africa          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>78</b> (1955), 307 | <i>American Mineralogist</i> <b>73</b> (1988), 153                    |
| Titanowodginite  | $Mn^{2+}TiTa_2O_8$  | A  | 1984-008  | Canada                | <i>Canadian Mineralogist</i> <b>30</b> (1992), 633  |   |
| Titantaramellite | $Ba_4(Ti,Fe^{3+},Mg)_4(O,OH)_2[B_2Si_8O_{27}]Cl_x$              | A  | 1977-046  | Canada / Mexico / USA | <i>American Mineralogist</i> <b>69</b> (1984), 358  |   |
| Tivanite         | $TiV^{3+}O_3(OH)$   | A  | 1980-035  | Australia             | <i>American Mineralogist</i> <b>66</b> (1981), 866  |   |
| Tllocite         | $Cu_{10}Zn_6(Te^{4+}O_3)(Te^{6+}O_4)_2Cl(OH)_{25} \cdot 27H_2O$ | A  | 1974-047  | Mexico                | <i>Mineralogical Magazine</i> <b>40</b> (1975), 221   |   |
| Tlapallite       | $H_6(Ca,Pb)_2(Cu,Zn)_3O_2(SO_4)(Te^{4+}O_3)_4(Te^{6+}O_4)$      | A  | 1977-044  | Mexico                | <i>Mineralogical Magazine</i> <b>42</b> (1978), 181   |   |
| Tobelite         | $(NH_4)Al_2(Si_3Al)O_{10}(OH)_2$                                | A  | 1981-021  | Japan                 | <i>Mineralogical Journal</i> <b>11</b> (1982), 138  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 143                   |
| Tobermorite      | $Ca_4Si_6O_{17}(H_2O)_2 \cdot (Ca \cdot 3H_2O)$                 | Rd | 2014 s.p. | United Kingdom        | <i>Mineralogical Magazine</i> <b>4</b> (1880), 117  | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 577           |
| Tochilinite      | $6(Fe_{0.9}S) \cdot 5[(Mg,Fe)(OH)_2]$                           | A  | 1971-002  | Russia                | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>100</b> (1971), 477                   | <i>Soviet Physics - Crystallography</i> <b>18</b> (1974), 606         |
| Tocornalite      | $(Ag,Hg)I$ (?)  | Q  | 1867      | Chile                 | Mineralojia de Chile, Appendix II. Libreria Central de Servat, Santiago (1867), 41                  | <i>Smithsonian Contribution to Earth Sciences</i> <b>9</b> (1972), 79 |
| Todorokite       | $(Na,Ca,K,Ba,Sr)_{1-x}(Mn,Mg,Al)_6O_{12} \cdot 3-4H_2O$         | A  | 1962 s.p. | Japan                 | <i>Journal of the Faculty of Science, Hokkaido University, Series 4</i> <b>2</b> (1934), 289        | <i>American Mineralogist</i> <b>88</b> (2003), 142                    |
| Tokkoite         | $K_2Ca_4Si_7O_{18}(OH)F$  | A  | 1985-009  | Russia                | <i>Mineralogicheskii Zhurnal</i> <b>8</b> (1986), 85  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 251                   |
| Tokyoite         | $Ba_2Mn^{3+}(VO_4)_2OH$   | A  | 2003-036  | Japan                 | <i>Journal of Mineralogical and Petrological Sciences</i> <b>99</b> (2004), 363                     | <i>Canadian Mineralogist</i> <b>53</b> (2015), 981                    |
| Tolbachite       | $CuCl_2$  | A  | 1982-067  | Russia                | <i>Doklady Akademii Nauk SSSR</i> <b>270</b> (1983), 415  | <i>American Mineralogist</i> <b>78</b> (1993), 187                    |
| Tolovkite        | $IrSbS$   | A  | 1980-055  | Russia                | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 474                   | <i>American Mineralogist</i> <b>74</b> (1989), 1168                   |
| Tomichite        | $V^{3+}_4Ti^{4+}_3As^{3+}O_{13}(OH)$                            | A  | 1978-074  | Australia             | <i>Mineralogical Magazine</i> <b>43</b> (1979), 469   | <i>American Mineralogist</i> <b>72</b> (1987), 201                    |
| Tondiite         | $Cu_3MgCl_2(OH)_6$  | A  | 2013-077  | Italy                 | <i>Mineralogical Magazine</i> <b>78</b> (2014), 583   |   |
| Tongbaite        | $Cr_3C_2$   | A  | 1982-003  | China                 | <i>Acta Mineralogica Sinica</i> <b>3</b> (1983), 241  | <i>Acta Mineralogica Sinica</i> <b>24</b> (2004), 1                   |

|                   |  |    |           |                     |   |   |
|-------------------|--|----|-----------|---------------------|---|---|
| Tooeleite         | $\text{Fe}^{3+}_6(\text{AsO}_3)_4(\text{SO}_4)(\text{OH})_4 \cdot 4\text{H}_2\text{O}$   | A  | 1990-010  | USA                 | <i>Mineralogical Magazine</i> <b>56</b> (1992), 71  | <i>American Mineralogist</i> <b>92</b> (2007), 193                        |
| Topaz             | $\text{Al}_2\text{SiO}_4\text{F}_2$  | G  | ?         | unknown             | Mineralogia, eller Mineralriket. Lars Salvius, Stockholm (1847), 117                        | <i>American Mineralogist</i> <b>91</b> (2006), 1839                       |
| Topsøeite         | $\text{FeF}_3(\text{H}_2\text{O})_3$   | A  | 2016-113  | Iceland             | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 841                                 |   |
| Torbernite        | $\text{Cu}(\text{UO}_2)_2(\text{PO}_4)_2 \cdot 12\text{H}_2\text{O}$   | A  | 1980 s.p. | Czech Republic      | Über Herrn Werners Verbesserungen in der Mineralogie. Haude und Spener, Berlin (1793), 43   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 489                        |
| Törnebohmite-(Ce) | $\text{Ce}_2\text{Al}(\text{SiO}_4)_2(\text{OH})$  | Rn | 1966 s.p. | Sweden              | <i>Sveriges Geologiska Undersökning</i> <b>14</b> (1921), 304                               | <i>American Mineralogist</i> <b>67</b> (1982), 1021                       |
| Törnebohmite-(La) | $\text{La}_2\text{Al}(\text{SiO}_4)_2(\text{OH})$  | Rn | 1966 s.p. | Russia              | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 97             |   |
| Törnroosite       | $\text{Pd}_{11}\text{As}_2\text{Te}_2$   | A  | 2010-043  | Finland             | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1643   | <i>Canadian Mineralogist</i> <b>54</b> (2016), 511                        |
| Torreillasite     | $\text{Na}(\text{As,Sb})^{3+}_4\text{O}_6\text{Cl}$  | A  | 2013-112  | Chile               | <i>Mineralogical Magazine</i> <b>78</b> (2014), 747   |   |
| Torreyite         | $\text{Mg}_9\text{Zn}_4(\text{SO}_4)_2(\text{OH})_{22} \cdot 8\text{H}_2\text{O}$  | G  | 1949      | USA                 | <i>American Mineralogist</i> <b>34</b> (1949), 589  | <i>American Mineralogist</i> <b>67</b> (1982), 1029                       |
| Tosudite          | $\text{Na}_{0.5}(\text{Al,Mg})_6(\text{Si,Al})_8\text{O}_{18}(\text{OH})_{12} \cdot 5\text{H}_2\text{O}$   | G  | 1963      | Ukraine             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>92</b> (1963), 560            | <i>Clays and Clay Minerals</i> <b>23</b> (1975), 337                      |
| Toturite          | $\text{Ca}_3\text{Sn}_2(\text{SiFe}^{3+}_2)\text{O}_{12}$  | A  | 2009-033  | Russia              | <i>American Mineralogist</i> <b>95</b> (2010), 1305   |   |
| Tounkite          | $(\text{Na,Ca,K})_8(\text{Si}_6\text{Al}_6)\text{O}_{24}(\text{SO}_4)_2\text{Cl} \cdot 0.5\text{H}_2\text{O}$  | A  | 1990-009  | Russia              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(2)</b> (1992), 92       |   |
| Townendite        | $\text{Na}_8\text{ZrSi}_6\text{O}_{18}$  | A  | 2009-066  | Denmark (Greenland) | <i>American Mineralogist</i> <b>95</b> (2010), 646  |   |
| Toyohaite         | $\text{Ag}^{1+}(\text{Fe}^{2+}_{0.5}\text{Sn}^{4+}_{1.5})\text{S}_4$   | Rd | 1989-007  | Japan               | <i>Mineralogical Journal</i> <b>15</b> (1991), 222  |   |
| Trabzonite        | $\text{Ca}_4[\text{Si}_3\text{O}_9(\text{OH})](\text{OH})$   | A  | 1983-071a | Turkey              | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>66</b> (1986), 453 | <i>Mineralogical Magazine</i> <b>76</b> (2012), 455                       |
| Tranquillityite   | $\text{Fe}^{2+}_8\text{Ti}_3\text{Zr}_2\text{Si}_3\text{O}_{24}$   | A  | 1971-013  | Moon                | <i>Proceedings of the 2nd Lunar Scientific Conference</i> <b>1</b> (1971), 39               | <i>Geology</i> <b>40</b> (2012), 83                                       |
| Transjordanite    | $\text{Ni}_2\text{P}$  | A  | 2013-106  | Jordan / Israel     | CNMNC Newsletter 19 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 165                   |   |
| Traskite          | $\text{Ba}_{21}\text{Ca}(\text{Fe}^{2+},\text{Mn,Ti})_4(\text{Ti,Fe,Mg})_{12}(\text{Si}_{12}\text{O}_{36})(\text{Si}_2\text{O}_7)_6(\text{O,OH})_{30}\text{Cl}_6 \cdot 14\text{H}_2\text{O}$ | A  | 1964-014  | USA                 | <i>American Mineralogist</i> <b>50</b> (1965), 314  | <i>Doklady Akademii Nauk SSSR</i> <b>229</b> (1976), 1101                 |
| Trattnerite       | $\text{Fe}^{3+}_2(\text{Mg}_3\text{Si}_{12})\text{O}_{30}$   | A  | 2002-002  | Austria             | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 375                                 |   |
| Treasurite        | $\text{Ag}_7\text{Pb}_6\text{Bi}_{15}\text{S}_{30}$  | A  | 1976-008  | USA                 | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>131</b> (1977), 56                    | <i>Bulletin of the Geological Society of Denmark</i> <b>26</b> (1977), 41 |
| Trébeurdenite     | $\text{Fe}^{2+}_2\text{Fe}^{3+}_4\text{O}_2(\text{OH})_{10}(\text{CO}_3) \cdot 3\text{H}_2\text{O}$  | A  | 2012 s.p. | France              | <i>Mineralogical Magazine</i> <b>76</b> (2012), 1289  |   |
| Trechmannite      | $\text{AgAsS}_2$   | G  | 1905      | Switzerland         | <i>Mineralogical Magazine</i> <b>14</b> (1905), 72  | <i>Zeitschrift für Kristallographie</i> <b>129</b> (1969), 163            |
| Tredouxite        | $\text{NiSb}_2\text{O}_6$  | A  | 2017-061  | South Africa        | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 393                                 |   |
| Trembathite       | $\text{Mg}_3\text{B}_7\text{O}_{13}\text{Cl}$  | A  | 1991-018  | Canada              | <i>Canadian Mineralogist</i> <b>30</b> (1992), 445  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1195                       |
| Tremolite         | $\square\text{Ca}_2(\text{Mg}_{5.0-4.5}\text{Fe}^{2+}_{0.0-0.5})\text{Si}_6\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | Switzerland         | <i>Magazin für die Naturkunde Helvetiens</i> <b>4</b> (1789), 255                           | <i>Canadian Mineralogist</i> <b>14</b> (1976), 334                        |

|                 |   |    |           |                                  |  |   |
|-----------------|---|----|-----------|----------------------------------|--|---|
| Trevorite       | $\text{NiFe}^{3+}_2\text{O}_4$  | G  | 1921      | South Africa                     | <i>Journal of the Chemical, Metallurgical and Mineralogical Society of South Africa</i> <b>21</b> (1921), 126                          | <i>Solid State Ionics</i> <b>63</b> (1993), 429   |
| Triangulite     | $\text{Al}_3(\text{UO}_2)_4(\text{PO}_4)_4(\text{OH})_5 \cdot 5\text{H}_2\text{O}$                    | A  | 1981-056  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 611  |   |
| Triazolite      | $\text{NaCu}_2(\text{N}_3\text{C}_2\text{H}_2)_2(\text{NH}_3)_2\text{Cl}_3 \cdot 4\text{H}_2\text{O}$ | A  | 2017-025  | Chile                            | <i>Mineralogical Magazine</i> <b>82</b> (2018), 1007   |   |
| Tridymite       | $\text{SiO}_2$  | G  | 1868      | Mexico                           | <i>Annalen der Physik und Chemie</i> <b>135</b> (1868), 437  | <i>Physics and Chemistry of Minerals</i> <b>28</b> (2001), 313                          |
| Trigonite       | $\text{Pb}_3\text{Mn}^{2+}(\text{AsO}_3)_2(\text{AsO}_2\text{OH})$                                    | G  | 1920      | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>42</b> (1920), 436  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1978), 95  |
| Trikalsilite    | $\text{K}_2\text{NaAl}_3(\text{SiO}_4)_3$   | G  | 1957      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>42</b> (1957), 286   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 559                           |
| Trilithionite   | $\text{KLi}_{1.5}\text{Al}_{1.5}(\text{Si}_3\text{Al})\text{O}_{10}\text{F}_2$                        | Rd | 1998 s.p. | Sweden                           | <i>Mineralogical Magazine</i> <b>53</b> (1989), 165  | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 475                             |
| Trimerite       | $\text{CaBe}_3\text{Mn}^{2+}_2(\text{SiO}_4)_3$   | G  | 1890      | Sweden                           | <i>Zeitschrift für Kristallographie</i> <b>18</b> (1890), 361  | <i>Zeitschrift für Kristallographie</i> <b>145</b> (1977), 46                           |
| Trimounsite-(Y) | $\text{Y}_2\text{Ti}_2\text{SiO}_9$   | A  | 1989-042  | France                           | <i>European Journal of Mineralogy</i> <b>2</b> (1990), 725   | <i>European Journal of Mineralogy</i> <b>13</b> (2001), 761                             |
| Trinepheline    | $\text{NaAlSiO}_4$  | A  | 2012-024  | Myanmar                          | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 257  |   |
| Triphylite      | $\text{LiFe}^{2+}(\text{PO}_4)$   | G  | 1834      | Germany                          | <i>Journal für Praktische Chemie</i> <b>3</b> (1834), 98   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1105                                     |
| Triplite        | $(\text{Mn}^{2+}, \text{Fe}^{2+})_2(\text{PO}_4)\text{F}$   | G  | 1813      | France                           | Handbuch der Mineralogie, Vol. 3. Vandenhoeck und Ruprecht, Göttingen (1813), 1079   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 235                                      |
| Triploidite     | $\text{Mn}^{2+}_2(\text{PO}_4)(\text{OH})$  | G  | 1878      | USA                              | <i>American Journal of Science</i> <b>16</b> (1878), 42  | <i>Zeitschrift für Kristallographie</i> <b>131</b> (1970), 1                            |
| Trippkeite      | $\text{Cu}^{2+}\text{As}^{3+}_2\text{O}_4$  | G  | 1880      | Chile                            | <i>Verhandlungen des Naturhistorischen Vereines der Preussischen Rheinlande und Westphalens</i> <b>37</b> (1880), 207                  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 211 |
| Tripuyhite      | $\text{Fe}^{3+}\text{Sb}^{5+}\text{O}_4$  | Rd | 2002 s.p. | Brazil                           | <i>Mineralogical Magazine</i> <b>11</b> (1897), 302  | <i>Mineralogical Magazine</i> <b>67</b> (2003), 31                                      |
| Tristramite     | $(\text{Ca}, \text{U}^{4+}, \text{Fe}^{3+})(\text{PO}_4, \text{SO}_4) \cdot 2\text{H}_2\text{O}$      | A  | 1982-037  | United Kingdom                   | <i>Mineralogical Magazine</i> <b>47</b> (1983), 393  |   |
| Tritomite-(Ce)  | $\text{Ce}_5(\text{SiO}_4, \text{BO}_4)_3(\text{OH}, \text{O})$                                       | Rn | 1987 s.p. | Norway                           | <i>Annalen der Physik und Chemie</i> <b>79</b> (1850), 299   |   |
| Tritomite-(Y)   | $\text{Y}_5(\text{SiO}_4, \text{BO}_4)_3(\text{O}, \text{OH}, \text{F})$                              | Rn | 1966 s.p. | USA                              | <i>American Mineralogist</i> <b>47</b> (1962), 9   |   |
| Trögerite       | $(\text{H}_3\text{O})(\text{UO}_2)(\text{AsO}_4) \cdot 3\text{H}_2\text{O}$                           | G  | 1871      | Germany                          | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1871), 869  | <i>Acta Crystallographica</i> <b>C39</b> (1983), 159                                    |
| Trogtalite      | $\text{CoSe}_2$   | G  | 1955      | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1955), 133  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 650                                    |
| Troilite        | $\text{FeS}$  | G  | 1863      | Italy (meteorite)                | <i>Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse</i> <b>47</b> (1863), 283 | <i>American Mineralogist</i> <b>91</b> (2006), 917                                      |
| Trolleite       | $\text{Al}_4(\text{PO}_4)_3(\text{OH})_3$   | G  | 1868      | Sweden                           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> <b>25</b> (1868), 197   | <i>American Mineralogist</i> <b>59</b> (1974), 974                                      |



|                   |   |    |           |                         |   |   |
|-------------------|---|----|-----------|-------------------------|---|---|
| Trona             | $\text{Na}_3(\text{HCO}_3)(\text{CO}_3)\cdot 2\text{H}_2\text{O}$   | G  | 1773      | Libya                   | <i>Svenska Vetenskaps-Akademiens Handlingar</i> <b>34</b> (1773), 140   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 2874                                   |
| Truscottite       | $\text{Ca}_{14}\text{Si}_{24}\text{O}_{58}(\text{OH})_8\cdot 2\text{H}_2\text{O}$   | G  | 1914      | Indonesia               | <i>Verhandlungen Jaarboek van het Mijnwezen in Nederlandsch Oost-Indië</i> <b>41</b> (1914), 202  | <i>Mineralogical Magazine</i> <b>43</b> (1979), 333                                     |
| Trüstedtite       | $\text{Ni}^{2+}\text{Ni}^{3+}_2\text{Se}_4$   | A  | 1967 s.p. | Finland                 | <i>Comptes Rendus de la Société Géologique de Finlande</i> <b>36</b> (1964), 113  |   |
| Tsangpoite        | $\text{Ca}_5(\text{PO}_4)_2(\text{SiO}_4)$  | A  | 2014-110  | Argentina               | CNMNC Newsletter 25 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 529   | <a href="https://doi.org/10.1180/mgm.2018.125">https://doi.org/10.1180/mgm.2018.125</a> |
| Tsaregorodtsevite | $\text{N}(\text{CH}_3)_4\text{Si}_4(\text{SiAl})\text{O}_{12}$  | A  | 1991-042  | Russia                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>122(1)</b> (1993), 128  | <i>Doklady Akademii Nauk SSSR</i> <b>332</b> (1993) 309                                 |
| Tschermakite      | $\square\text{Ca}_2(\text{Mg}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$                                | Rd | 2012 s.p. | unknown                 | <i>American Mineralogist</i> <b>30</b> (1945), 27   |   |
| Tschermigite      | $(\text{NH}_4)\text{Al}(\text{SO}_4)_2\cdot 12\text{H}_2\text{O}$   | G  | 1853      | Czech Republic          | Tafeln zur Bestimmung der Mineralien mittelst einfacher chemischer Versuche auf trockenem und nassem Wege. Lindauer, München (1853), 47 | <i>Zeitschrift für Kristallographie</i> <b>157</b> (1982), 147                          |
| Tschernichite     | $\text{CaAl}_2\text{Si}_6\text{O}_{16}\cdot 8\text{H}_2\text{O}$  | A  | 1989-037  | USA                     | <i>American Mineralogist</i> <b>78</b> (1993), 822  | <i>Journal of Physical Chemistry</i> <b>B106</b> (2002), 10277                          |
| Tschörtnerite     | $\text{Ca}_4(\text{K,Ca,Sr,Ba})_3\text{Cu}_3\text{Al}_{12}\text{Si}_{12}\text{O}_{48}(\text{OH})_8\cdot 20\text{H}_2\text{O}$ | A  | 1995-051  | Germany                 | <i>American Mineralogist</i> <b>83</b> (1998), 607  |   |
| Tsepinite-Ca      | $(\text{Ca,K,Na})_{2-x}(\text{Ti,Nb})_2(\text{Si}_4\text{O}_{12})(\text{OH,O})_2\cdot 4\text{H}_2\text{O}$                    | A  | 2002-020  | Russia                  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2003), 461   |   |
| Tsepinite-K       | $(\text{K,Ba,Na})_2(\text{Ti,Nb})_2(\text{Si}_4\text{O}_{12})(\text{OH,O})_2\cdot 3\text{H}_2\text{O}$                        | A  | 2002-005  | Russia                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(1)</b> (2003), 38   | <i>Doklady Chemistry</i> <b>386</b> (2002), 246   |
| Tsepinite-Na      | $(\text{Na,H}_3\text{O,K,Sr,Ba},\square)_2(\text{Ti,Nb})_2(\text{Si}_4\text{O}_{12})(\text{OH,O})_2\cdot 3\text{H}_2\text{O}$ | Rn | 2000-046  | Russia                  | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>130(3)</b> (2001), 43   | <i>Doklady Chemistry</i> <b>371</b> (2000), 52  |
| Tsepinite-Sr      | $(\text{Sr,Ba,K})(\text{Ti,Nb})_2(\text{Si}_4\text{O}_{12})(\text{OH,O})_2\cdot 3\text{H}_2\text{O}$                          | A  | 2004-008  | Russia                  | <i>New Data on Minerals</i> <b>40</b> (2005), 11  | <i>Doklady Akademii Nauk</i> <b>393</b> (2003), 784                                     |
| Tsilaisite        | $\text{NaMn}^{2+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3(\text{OH})$                              | A  | 2011-047  | Italy                   | <i>American Mineralogist</i> <b>97</b> (2012), 989  |   |
| Tsnigriite        | $\text{Ag}_9\text{SbTe}_3(\text{S,Se})_3$   | A  | 1991-051  | Uzbekistan              | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(5)</b> (1992), 95   |   |
| Tsugaruite        | $\text{Pb}_4\text{As}_2\text{S}_7$  | A  | 1997-010  | Japan                   | <i>Mineralogical Magazine</i> <b>62</b> (1998), 793   |   |
| Tsumcorite        | $\text{PbZn}_2(\text{AsO}_4)_2\cdot 2\text{H}_2\text{O}$  | A  | 1969-047  | Namibia                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1971), 304   | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 179                             |
| Tsumebite         | $\text{Pb}_2\text{Cu}(\text{PO}_4)(\text{SO}_4)(\text{OH})$   | G  | 1912      | Namibia                 | <i>Versammlung Deutschen Naturforscher und Ärzte</i> <b>84</b> (1912), 230  | <i>Mineralogical Magazine</i> <b>36</b> (1967), 522                                     |
| Tsumgallite       | $\text{GaO}(\text{OH})$   | A  | 2002-011  | Namibia                 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2003), 521   |   |
| Tsumoite          | $\text{BiTe}$   | A  | 1972-010a | Japan                   | <i>American Mineralogist</i> <b>63</b> (1978), 1162   | <i>Acta Crystallographica</i> <b>B35</b> (1979), 147                                    |
| Tsygankoite       | $\text{Mn}_8\text{Ti}_8\text{Hg}_2(\text{Sb}_{21}\text{Pb}_2\text{Ti})\text{S}_{48}$  | A  | 2017-088  | Russia                  | <i>Minerals</i> <b>8</b> (2018), 218  |   |
| Tubulite          | $\text{Ag}_2\text{Pb}_{22}\text{Sb}_{20}\text{S}_{53}$  | A  | 2011-109  | France / Italy          | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 1017  |   |
| Tučekite          | $\text{Ni}_9\text{Sb}_2\text{S}_8$  | A  | 1975-022  | Australia /South Africa | <i>Mineralogical Magazine</i> <b>42</b> (1978), 278   |   |



|                  |   |    |           |                         |   |  |
|------------------|---|----|-----------|-------------------------|---|--|
| Tugarinovite     | MoO <sub>2</sub>  | A  | 1979-072  | Russia                  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>109</b> (1980), 465     | <i>Australian Journal of Chemistry</i> <b>48</b> (1995), 1473                          |
| Tugtupite        | Na <sub>4</sub> BeAlSi <sub>4</sub> O <sub>12</sub> Cl  | A  | 1967 s.p. | Denmark (Greenland)     | <i>Meddelelser om Grønland</i> <b>167</b> (1962), 1                                   |  |
| Tuhualite        | NaFe <sup>2+</sup> Fe <sup>3+</sup> Si <sub>6</sub> O <sub>15</sub>   | G  | 1932      | New Zealand             | <i>New Zealand Journal of Science and Technology</i> <b>13</b> (1932), 198            | <i>Science</i> <b>166</b> (1969), 1399   |
| Tuite            | Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>   | A  | 2001-070  | China (meteorite)       | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1001                          |  |
| Tulameenite      | Pt <sub>2</sub> CuFe  | A  | 1972-016  | Canada                  | <i>Canadian Mineralogist</i> <b>12</b> (1973), 21                                     | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751                                     |
| Tuliokite        | Na <sub>6</sub> BaTh(CO <sub>3</sub> ) <sub>6</sub> ·6H <sub>2</sub> O  | A  | 1988-041  | Russia                  | <i>Mineralogicheskii Zhurnal</i> <b>12</b> (1990), 74                                 | <i>Doklady Akademii Nauk SSSR</i> <b>310</b> (1990), 99                                |
| Tululite         | Ca <sub>14</sub> (Fe <sup>3+</sup> ,Al)(Al,Zn,Fe <sup>3+</sup> ,Si,P,Mn,Mg) <sub>15</sub> O <sub>36</sub>                               | A  | 2014-065  | Jordan                  | <i>Mineralogy and Petrology</i> <b>110</b> (2016), 125                                |  |
| Tumchaite        | Na <sub>2</sub> ZrSi <sub>4</sub> O <sub>11</sub> ·2H <sub>2</sub> O  | A  | 1999-041  | Russia                  | <i>American Mineralogist</i> <b>85</b> (2000), 1516                                   | <i>American Mineralogist</i> <b>89</b> (2004), 492                                     |
| Tundrite-(Ce)    | Na <sub>2</sub> Ce <sub>2</sub> TiO <sub>2</sub> (SiO <sub>4</sub> )(CO <sub>3</sub> ) <sub>2</sub>                                     | A  | 1968 s.p. | Russia                  | <i>Izdatelstvo Akademii Nauk SSSR</i> (1963), 209                                     | <i>Canadian Mineralogist</i> <b>46</b> (2008), 413                                     |
| Tundrite-(Nd)    | Na <sub>2</sub> Nd <sub>2</sub> TiO <sub>2</sub> (SiO <sub>4</sub> )(CO <sub>3</sub> ) <sub>2</sub>                                     | Rn | 1987 s.p. | Denmark (Greenland)     | <i>Meddelelser om Grønland</i> <b>181</b> (1967), 1                                   |  |
| Tunellite        | SrB <sub>6</sub> O <sub>9</sub> (OH) <sub>2</sub> ·3H <sub>2</sub> O  | A  | 1967 s.p. | USA                     | <i>U.S. Geological Survey, Professional Paper</i> <b>424-C</b> (1961), 294            | <i>Canadian Mineralogist</i> <b>32</b> (1994), 895                                     |
| Tungsten         | W   | A  | 2011-004  | Russia                  | <i>CNMNC Newsletter 9 - Mineralogical Magazine</i> <b>75</b> (2011), 2535             |  |
| Tungstenite      | WS <sub>2</sub>   | G  | 1917      | USA                     | <i>Journal of the Washington Academy of Sciences</i> <b>7</b> (1917), 596             | <i>Journal of Solid State Chemistry</i> <b>70</b> (1987), 207                          |
| Tungstibite      | Sb <sub>2</sub> WO <sub>6</sub>   | A  | 1993-059  | Germany                 | <i>Chemie der Erde</i> <b>55</b> (1995), 217  |  |
| Tungstite        | WO <sub>3</sub> ·H <sub>2</sub> O   | G  | 1868      | USA                     | <i>A System of Mineralogy</i> , 5th ed. Wiley, New York (1868),186                    | <i>Canadian Mineralogist</i> <b>22</b> (1984), 681                                     |
| Tungusite        | Ca <sub>14</sub> Fe <sup>2+</sup> <sub>9</sub> Si <sub>24</sub> O <sub>60</sub> (OH) <sub>22</sub>                                      | A  | 1966-029  | Russia                  | <i>Doklady Akademii Nauk SSSR</i> <b>171</b> (1966), 1167                             | <i>Mineralogical Magazine</i> <b>59</b> (1995), 535                                    |
| Tunisiaite       | NaCa <sub>2</sub> Al <sub>4</sub> (CO <sub>3</sub> ) <sub>4</sub> (OH) <sub>8</sub> Cl  | A  | 1967-038  | Tunisia                 | <i>American Mineralogist</i> <b>54</b> (1969), 1                                      | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>28</b> (1981), 65 |
| Tuperssuatsiaite | Na <sub>2</sub> (Fe <sup>3+</sup> ,Mn <sup>2+</sup> ) <sub>3</sub> Si <sub>8</sub> O <sub>20</sub> (OH) <sub>2</sub> ·4H <sub>2</sub> O | A  | 1984-002  | Denmark (Greenland)     | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 501                         | <i>American Mineralogist</i> <b>87</b> (2002), 1458                                    |
| Turanite         | Cu <sup>2+</sup> <sub>5</sub> (VO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub>   | G  | 1909      | Uzbekistan              | <i>Izvestiya Imperatorskoy Akademii Nauk</i> <b>3</b> (1909), 185                     | <i>Canadian Mineralogist</i> <b>42</b> (2004), 761                                     |
| Turkestanite     | (K,□)(Ca,Na) <sub>2</sub> ThSi <sub>8</sub> O <sub>20</sub> ·nH <sub>2</sub> O  | A  | 1996-036  | Kyrgyzstan / Tajikistan | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(6)</b> (1998), 45 | <i>Crystallography Reports</i> <b>43</b> (1998), 584                                   |
| Turneureite      | Ca <sub>5</sub> (AsO <sub>4</sub> ) <sub>3</sub> Cl   | A  | 1983-063  | USA                     | <i>Canadian Mineralogist</i> <b>23</b> (1985), 251                                    | <i>American Mineralogist</i> <b>102</b> (2017), 1981                                   |
| Turquoise        | CuAl <sub>6</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>8</sub> ·4H <sub>2</sub> O  | A  | 1967 s.p. | unknown                 | original paper?   | <i>Mineralogical Magazine</i> <b>64</b> (2000), 905                                    |
| Turtmannite      | Mn <sub>25</sub> O <sub>5</sub> (VO <sub>4</sub> ) <sub>3</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH) <sub>20</sub>                     | A  | 2000-007  | Switzerland             | <i>American Mineralogist</i> <b>86</b> (2001), 1494                                   |  |
| Tuscanite        | KCa <sub>6</sub> (Si,Al) <sub>10</sub> O <sub>22</sub> (SO <sub>4</sub> ,CO <sub>3</sub> ) <sub>2</sub> (OH)·H <sub>2</sub> O           | A  | 1976-031  | Italy                   | <i>American Mineralogist</i> <b>62</b> (1977), 1110                                   | <i>American Mineralogist</i> <b>62</b> (1977), 1114                                    |
| Tusionite        | Mn <sup>2+</sup> Sn(BO <sub>3</sub> ) <sub>2</sub>  | A  | 1982-090  | Tajikistan              | <i>Doklady Akademii Nauk SSSR</i> <b>272</b> (1983), 1449                             | <i>Canadian Mineralogist</i> <b>32</b> (1994), 903                                     |
| Tuzlaite         | NaCaB <sub>5</sub> O <sub>8</sub> (OH) <sub>2</sub> ·3H <sub>2</sub> O  | A  | 1993-022  | Bosnia and Herzegovina  | <i>American Mineralogist</i> <b>79</b> (1994), 562                                    |  |
| Tvalchrelidzeite | Hg <sub>3</sub> SbAsS <sub>3</sub>  | A  | 1974-052  | Georgia                 | <i>Doklady Akademii Nauk SSSR</i> <b>225</b> (1975), 911                              | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1529                                    |

|                      |  |    |           |                    |  |   |
|----------------------|--|----|-----------|--------------------|--|---|
| Tvedalite            | $\text{Ca}_4\text{Be}_3\text{Si}_6\text{O}_{17}(\text{OH})_4 \cdot 3\text{H}_2\text{O}$  | A  | 1990-027  | Norway             | <i>American Mineralogist</i> <b>77</b> (1992), 438   |   |
| Tveitite-(Y)         | $(\text{Y}, \text{Na})_6(\text{Ca}, \text{Na}, \text{REE})_{12}(\text{Ca}, \text{Na})\text{F}_{42}$                            | A  | 1975-033  | Norway             | <i>Lithos</i> <b>10</b> (1977), 81   | <i>Crystallography Reports</i> <b>52</b> (2007), 71                                 |
| Tvrđýite             | $\text{Fe}^{2+}\text{Fe}^{3+}_2\text{Al}_3(\text{PO}_4)_4(\text{OH})_5(\text{H}_2\text{O})_4 \cdot 2\text{H}_2\text{O}$        | A  | 2014-082  | Czech Republic     | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1077   |   |
| Tweddillite          | $\text{CaSr}(\text{Mn}^{3+}_2\text{Al})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                               | Rn | 2001-014  | South Africa       | <i>Mineralogical Magazine</i> <b>66</b> (2002), 137  |   |
| Twinnite             | $\text{Pb}(\text{Sb}_{0.63}\text{As}_{0.37})_2\text{S}_4$  | A  | 1966-017  | Canada             | <i>Canadian Mineralogist</i> <b>9</b> (1967), 191  |   |
| Tychite              | $\text{Na}_6\text{Mg}_2(\text{CO}_3)_4(\text{SO}_4)$   | G  | 1905      | USA                | <i>American Journal of Science</i> <b>20</b> (1905), 217   | <i>Acta Crystallographica</i> <b>E62</b> (2006), 207                                |
| Tyretskite           | $\text{Ca}_2\text{B}_5\text{O}_9(\text{OH}) \cdot \text{H}_2\text{O}$  | A  | 1968 s.p. | Russia             | <i>Rentgenografia Mineral'nogo Syr'ia, Vsesoyuznogo nauchno-issledovatel'skogo Instituta, Akademii Nauk SSSR</i> <b>4</b> (1964), 10     | <i>American Mineralogist</i> <b>53</b> (1968), 2084                                 |
| Tyrolite             | $\text{Ca}_2\text{Cu}_9(\text{AsO}_4)_4(\text{CO}_3)(\text{OH})_8 \cdot 11\text{H}_2\text{O}$                                  | G  | 1845      | Austria            | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 509   | <i>American Mineralogist</i> <b>91</b> (2006), 1378                                 |
| Tyrrellite           | $\text{Cu}(\text{Co}, \text{Ni})_2\text{Se}_4$   | G  | 1952      | Canada             | <i>American Mineralogist</i> <b>37</b> (1952), 542   | <i>Acta Crystallographica</i> <b>C63</b> (2007), i73                                |
| Tyuyamunite          | $\text{Ca}(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 5-8\text{H}_2\text{O}$  | G  | 1912      | Kyrgyzstan         | <i>Bulletin de l'Académie Impériale des Sciences de St.-Pétersbourg</i> <b>6</b> (1912), 945   | <i>Bulletin of the United States Geological Survey</i> <b>1009-B</b> (1954), 37     |
| Uakitite             | VN   | A  | 2018-003  | Russia (meteorite) | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647   |   |
| Uchucchacuaite       | $\text{AgMnPb}_3\text{Sb}_5\text{S}_{12}$  | Rn | 1981-007  | Peru               | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 597  | <i>American Mineralogist</i> <b>96</b> (2011), 1186                                 |
| Udinaite             | $\text{NaMg}_4(\text{VO}_4)_3$   | A  | 2018-066  | Russia             | CNMNC Newsletter 45 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1225; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 1037 |   |
| Uduminelite          | $\text{Ca}_3\text{Al}_8(\text{PO}_4)_2\text{O}_{12} \cdot 2\text{H}_2\text{O}$   | Q  | 1950      | Japan              | <i>Journal Geological Survey of Japan</i> <b>56</b> (1950), 243  | <i>American Mineralogist</i> <b>58</b> (1973), 806                                  |
| Uedaite-(Ce)         | $\text{Mn}^{2+}\text{Ce}(\text{Al}_2\text{Fe}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                   | A  | 2006-022  | Japan              | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 261  |   |
| Uklonskovite         | $\text{NaMg}(\text{SO}_4)\text{F} \cdot 2\text{H}_2\text{O}$   | A  | 2016 s.p. | Uzbekistan         | <i>Doklady Akademii Nauk SSSR</i> <b>158</b> (1964), 1093  | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1397                                |
| Ulexite              | $\text{NaCaB}_5\text{O}_6(\text{OH})_6 \cdot 5\text{H}_2\text{O}$  | G  | 1850      | Chile              | A System of Mineralogy, 3rd ed. Putnam, New York and London (1850), 695  | <i>American Mineralogist</i> <b>63</b> (1978), 160                                  |
| Ulfanderssonite-(Ce) | $(\text{Ce}_{15}\text{Ca})_{\Sigma 16}\text{Mg}_2(\text{SiO}_4)_{10}(\text{SiO}_3\text{OH})(\text{OH}, \text{F})_5\text{Cl}_3$ | A  | 2016-107  | Sweden             | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1015   |   |
| Ullmannite           | $\text{NiSbS}$   | G  | 1843      | Germany            | Grundzüge eines Systems der Krystallogogie. Druck und Winterthur, Zürich (1843), 42  | <i>American Mineralogist</i> <b>65</b> (1980), 154                                  |
| Ulrichite            | $\text{CaCu}(\text{UO}_2)(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$  | A  | 1988-006  | Australia          | <i>Australian Mineralogist</i> <b>3</b> (1988), 125  | <i>Mineralogical Magazine</i> <b>65</b> (2001), 717                                 |
| Ulvöspinel           | $\text{Fe}^{2+}_2\text{TiO}_4$   | G  | 1946      | Sweden             | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>68</b> (1946), 578  | <i>American Mineralogist</i> <b>94</b> (2009), 181                                  |
| Umangite             | $\text{Cu}_3\text{Se}_2$   | G  | 1891      | Argentina          | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>19</b> (1891), 265  | <i>Canadian Journal of Chemistry</i> <b>54</b> (1976), 841                          |
| Umbite               | $\text{K}_2\text{ZrSi}_3\text{O}_9 \cdot \text{H}_2\text{O}$   | A  | 1982-006  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 461  | <i>Izvestiya Akademii Nauk SSSR Neorganicheskie Materialy</i> <b>29</b> (1993), 971 |
| Umbozerite           | $\text{Na}_3\text{Sr}_4\text{ThSi}_8(\text{O}, \text{OH})_{24}$  | A  | 1973-039  | Russia             | <i>Doklady Akademii Nauk SSSR</i> <b>216</b> (1974), 169   |   |

|                      |   |   |           |                                  |   |  |
|----------------------|---|---|-----------|----------------------------------|---|--|
| Umbrianite           | $K_7Na_2Ca_2[Al_3Si_{10}O_{29}]F_2Cl_2$       | A | 2011-074  | Italy                            | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 655   |  |
| Umohoite             | $(UO_2)(MoO_4) \cdot 2H_2O$                   | G | 1953      | USA                              | <i>United States Atomic Energy Commission, Annual Report</i> (1953), 45   | <i>Canadian Mineralogist</i> <b>38</b> (2000), 717                   |
| Ungavaite            | $Pd_4Sb_3$                                    | A | 2004-020  | Canada                           | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1735   |  |
| Ungemachite          | $K_3Na_8Fe^{3+}(SO_4)_6(NO_3)_2 \cdot 6H_2O$  | G | 1938      | Chile                            | <i>American Mineralogist</i> <b>23</b> (1938), 314  | <i>American Mineralogist</i> <b>71</b> (1986), 826                   |
| Upalite              | $Al(UO_2)_3(PO_4)_2O(OH) \cdot 7H_2O$         | A | 1978-045  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>102</b> (1979), 333   | <i>Bulletin de Minéralogie</i> <b>106</b> (1983), 383                |
| Uralborite           | $CaB_2O_2(OH)_4$                              | A | 1967 s.p. | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>90</b> (1961), 673                                | <i>Doklady Akademii Nauk SSSR</i> <b>234</b> (1977), 822             |
| Uralolite            | $Ca_2Be_4(PO_4)_3(OH)_3 \cdot 5H_2O$          | G | 1964      | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>93</b> (1964), 156                                | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 887           |
| Uramarsite           | $(NH_4)(UO_2)(AsO_4) \cdot 3H_2O$             | A | 2005-043  | Kazakhstan                       | <i>Transactions (Doklady) of the Russian Academy of Sciences, Earth Science Section</i> <b>415A</b> (2007), 965 | <i>Crystallography Reports</i> <b>53</b> (2008), 771                 |
| Uramphite            | $(NH_4)(UO_2)(PO_4) \cdot 3H_2O$              | G | 1957      | Kyrgyzstan                       | <i>Voprosy Geologii Urana</i> . Atomic Press, Moscow (1957), 67   | <i>Acta Crystallographica</i> <b>C39</b> (1983), 162                 |
| Uranalcarite         | $Ca(UO_2)_3(CO_3)(OH)_6 \cdot 3H_2O$          | A | 1983-052  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>107</b> (1984), 21  | <i>Acta Mineralogica Sinica</i> <b>12</b> (1992), 78                 |
| Uraninite            | $UO_2$  | G | 1845      | Czech Republic                   | <i>Handbuch der Bestimmenden Mineralogie</i> . Braumüller and Seidel, Wien (1845), 546                          | <i>Journal of the American Chemical Society</i> <b>70</b> (1948), 99 |
| Uranocircite-II      | $Ba(UO_2)_2(PO_4)_2 \cdot 10H_2O$             | G | 1877      | Germany                          | <i>Jahrbuch für das Berg- und Hüttenwesen im Königreiche Sachsen</i> 1877. Craz & Gerlach, Freiberg (1877), 48  |  |
| Uranophane- $\alpha$ | $Ca(UO_2)_2(SiO_3OH)_2 \cdot 5H_2O$           | G | 1853      | Poland                           | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>5</b> (1853), 373                                 | <i>Acta Crystallographica</i> <b>C44</b> (1988), 421                 |
| Uranophane- $\beta$  | $Ca(UO_2)_2(SiO_3OH)_2 \cdot 5H_2O$           | G | 1935      | Czech Republic                   | <i>Vestniku Královské České Společnosti Nauk</i> <b>7</b> (1935), 1   | <i>American Mineralogist</i> <b>71</b> (1986), 1489                  |
| Uranopilite          | $(UO_2)_6(SO_4)O_2(OH)_6 \cdot 14H_2O$        | G | 1882      | Czech Republic / Germany         | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> <b>2</b> (1882), 249                          | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1139                  |
| Uranopolycrase       | $(U, Y)(Ti, Nb, Ta)_2(O, OH)_6$               | A | 1990-046  | Italy                            | <i>European Journal of Mineralogy</i> <b>5</b> (1993), 1161   |  |
| Uranosilite          | $(UO_2)Si_7O_{15}$                            | A | 1981-066  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1983), 259   |  |
| Uranospathite        | $(Al, \square)(UO_2)_2F(PO_4)_2 \cdot 20H_2O$ | G | 1915      | United Kingdom                   | <i>Mineralogical Magazine</i> <b>17</b> (1915), 221   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 989                   |
| Uranosphaerite       | $Bi(UO_2)O_2(OH)$                             | G | 1873      | Germany                          | <i>Jahrbuch für das Berg- und Hüttenwesen im Königreiche Sachsen, Abhandlungen</i> (1873), 119                  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 677                   |
| Uranospinite         | $Ca(UO_2)_2(AsO_4)_2 \cdot 10H_2O$            | G | 1873      | Germany                          | <i>Jahrbuch für das Berg- und Hüttenwesen im Königreiche Sachsen, Abhandlungen</i> (1873), 119                  | <i>U.S. Geological Survey Bulletin</i> <b>1064</b> (1958), 183       |

|                              |  |    |           |                                  |   |   |
|------------------------------|--|----|-----------|----------------------------------|---|---|
| Uranotungstite               | $\text{Fe}(\text{UO}_2)_2(\text{WO}_4)(\text{OH})_4 \cdot 12\text{H}_2\text{O}$                      | A  | 1984-005  | Germany                          | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>34</b> (1985), 25  |   |
| Urea                         | $\text{CO}(\text{NH}_2)_2$   | A  | 1972-031  | Australia                        | <i>Mineralogical Magazine</i> <b>39</b> (1973), 346   | <i>Acta Crystallographica</i> <b>B40</b> (1984), 300  |
| Uricite                      | $\text{C}_5\text{H}_4\text{N}_4\text{O}_3$   | A  | 1973-055  | Australia                        | <i>Mineralogical Magazine</i> <b>39</b> (1974), 889   | <i>Acta Crystallographica</i> <b>20</b> (1966), 397   |
| Urusovite                    | $\text{CuAlO}(\text{AsO}_4)$   | A  | 1998-067  | Russia                           | <i>European Journal of Mineralogy</i> <b>12</b> (2000), 1041  | <i>Crystallography Reports</i> <b>45</b> (2000), 723  |
| Urvantsevite                 | $\text{Pd}(\text{Bi},\text{Pb})_2$   | A  | 1976-025  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>105</b> (1976), 704   | <i>Soviet Journal of Experimental and Theoretical Physics</i> <b>5</b> (1957), 1064                                   |
| Ushkovite                    | $\text{MgFe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$                           | A  | 1982-014  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>112</b> (1983), 42  | <i>Canadian Mineralogist</i> <b>40</b> (2002), 929  |
| Usovite                      | $\text{Ba}_2\text{CaMgAl}_2\text{F}_{14}$  | A  | 1966-038  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>96</b> (1967), 63   | <i>Dopovidi Akademii Nauk Ukrainskoi RSR Seriya B: Geologichni Khimichni Ta Biologichni Nauki</i> <b>3</b> (1980), 47 |
| Ussingite                    | $\text{Na}_2\text{AlSi}_3\text{O}_8(\text{OH})$  | G  | 1915      | Denmark (Greenland)              | <i>Zeitschrift für Krystallographie und Mineralogie</i> <b>54</b> (1915), 120   | <i>American Mineralogist</i> <b>59</b> (1974), 335  |
| Ustarasite                   | $\text{Pb}(\text{Bi},\text{Sb})_6\text{S}_{10}$  | Q  | 1955      | Russia                           | <i>Trudy Mineralogicheskogo Muzeya Akademiyi Nauk SSSR</i> <b>7</b> (1955), 112   |   |
| Usturite                     | $\text{Ca}_3(\text{SbZr})(\text{FeO}_4)_3$   | Rn | 2009-053  | Russia                           | <i>American Mineralogist</i> <b>95</b> (2010), 959  |   |
| Utahite                      | $\text{Cu}_5\text{Zn}_3(\text{Te}^{6+}\text{O}_4)_4(\text{OH})_8 \cdot 7\text{H}_2\text{O}$          | A  | 1995-039  | USA                              | <i>Mineralogical Record</i> <b>28</b> (1997), 175   |   |
| Uvanite                      | $(\text{UO}_2)_2\text{V}^{5+}_6\text{O}_{17} \cdot 15\text{H}_2\text{O} (?)$                         | Q  | 1914      | USA                              | <i>Journal of the Washington Academy of Sciences</i> <b>4</b> (1914), 576   | <i>Anorganische Chemie</i> <b>7</b> (1965), 347   |
| Uvarovite                    | $\text{Ca}_3\text{Cr}_2(\text{SiO}_4)_3$   | A  | 1967 s.p. | Russia                           | <i>Annalen der Physik und Chemie</i> <b>24</b> (1832), 388  | <i>American Mineralogist</i> <b>56</b> (1971), 791  |
| Uytenbogaardtite             | $\text{Ag}_3\text{AuS}_2$  | A  | 1977-018  | Indonesia / Russia / USA         | <i>Canadian Mineralogist</i> <b>16</b> (1978), 651  | <i>Mineralogical Magazine</i> <b>80</b> (2016), 1031  |
| Uzonite                      | $\text{As}_4\text{S}_5$  | A  | 1984-027  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>114</b> (1985), 369   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1463   |
| Vaesite                      | $\text{NiS}_2$   | G  | 1945      | Democratic Republic of the Congo | <i>American Mineralogist</i> <b>30</b> (1945), 483  | <i>Acta Crystallographica</i> <b>B47</b> (1991), 650  |
| Vajdakite                    | $(\text{Mo}^{6+}\text{O}_2)_2\text{As}^{3+}_2\text{O}_5 \cdot 3\text{H}_2\text{O}$                   | A  | 1998-031  | Czech Republic                   | <i>American Mineralogist</i> <b>87</b> (2002), 983  |   |
| Valentinite                  | $\text{Sb}_2\text{O}_3$  | A  | 1980 s.p. | France                           | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 499  | <i>Dalton Transactions</i> (2004), 23   |
| Valleriite                   | $2[(\text{Fe},\text{Cu})\text{S}] \cdot 1.53[(\text{Mg},\text{Al})(\text{OH})_2]$                    | G  | 1870      | Sweden                           | <i>Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar</i> (1870), 19   | <i>Zeitschrift für Kristallographie</i> <b>127</b> (1968), 73   |
| Valleyite                    | $\text{Ca}_4\text{Fe}_6\text{O}_{13}$  | A  | 2017-026  | USA                              | CNMNC Newsletter 38 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1033; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 779 |   |
| Vanackerite                  | $\text{Pb}_4\text{Cd}(\text{AsO}_4)_3(\text{Cl},\text{OH})$  | A  | 2011-114  | Namibia                          | <i>Journal of Mineralogy and Geochemistry</i> <b>193</b> (2016), 79   |   |
| Vanadinite                   | $\text{Pb}_5(\text{VO}_4)_3\text{Cl}$  | G  | 1838      | Mexico                           | Grundzüge der Mineralogie. Schrag, Nürnberg (1838), 283   | <i>Journal of the Czech Geological Society</i> <b>51</b> (2006), 271  |
| Vanadiocarpholite            | $\text{Mn}^{2+}\text{V}^{3+}\text{AlSi}_2\text{O}_6(\text{OH})_4$                                    | A  | 2003-055  | Italy                            | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 501   |   |
| Vanadio-oxy-chromium-dravite | $\text{NaV}_3(\text{Cr}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$ | A  | 2012-034  | Russia                           | <i>American Mineralogist</i> <b>99</b> (2014), 1155   |   |

|                      |   |   |           |                                  |  |  |
|----------------------|---|---|-----------|----------------------------------|--|--|
| Vanadio-oxy-dravite  | $\text{NaV}_3(\text{Al}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$                                | A | 2012-074  | Russia                           | <i>American Mineralogist</i> <b>99</b> (2014), 218   |  |
| Vanadio-pargasite    | $\text{NaCa}_2(\text{Mg}_4\text{V})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$  | A | 2017-019  | Russia                           | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 981  | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>146(6)</b> (2017), 62 |
| Vanadium             | V   | A | 2012-021a | Mexico                           | <i>Mineralogical Magazine</i> <b>80</b> (2016), 371  |  |
| Vanadoallanite-(La)  | $\text{CaLa}^{3+}(\text{V}^{3+}\text{AlFe}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                           | A | 2012-095  | Japan                            | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2739   |  |
| Vanadoandrosite-(Ce) | $\text{MnCe}(\text{V}^{3+}\text{AlMn}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$                                | A | 2004-015  | France                           | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 569  |  |
| Vanadomalayaite      | $\text{CaVO}(\text{SiO}_4)$   | A | 1993-032  | Italy                            | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 489  |  |
| Vanalite             | $\text{NaAl}_8\text{V}_{10}\text{O}_{38}\cdot 30\text{H}_2\text{O}$   | A | 1967 s.p. | Kazakhstan                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 307   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 100  |
| Vanarsite            | $\text{NaCa}_{12}(\text{As}^{3+}\text{V}^{5+}_{8.5}\text{V}^{4+}_{3.5}\text{As}^{5+}_{6}\text{O}_{51})_2\cdot 78\text{H}_2\text{O}$ | A | 2014-031  | USA                              | <i>Canadian Mineralogist</i> <b>54</b> (2016), 145   |  |
| Vandenbrandeite      | $\text{Cu}(\text{UO}_2)(\text{OH})_4$   | G | 1932      | Democratic Republic of the Congo | <i>Annales du Musée du Congo Belge</i> <b>1</b> (1932), 24   | <i>Crystal Structure Communications</i> <b>6</b> (1977), 53                        |
| Vandendriesscheite   | $\text{Pb}_{1.6}(\text{UO}_2)_{10}\text{O}_6(\text{OH})_{11}\cdot 11\text{H}_2\text{O}$   | G | 1947      | Democratic Republic of the Congo | <i>Annales de la Société Géologique de Belgique</i> <b>70</b> (1947), B212   | <i>American Mineralogist</i> <b>82</b> (1997), 1176                                |
| Vanderheydenite      | $\text{Zn}_6(\text{PO}_4)_2(\text{SO}_4)(\text{OH})_4\cdot 7\text{H}_2\text{O}$   | A | 2014-076  | Australia                        | <i>European Journal of Mineralogy</i> <b>30</b> (2018), 835  |  |
| Vandermeerscheite    | $\text{K}_2[(\text{UO}_2)_2\text{V}_2\text{O}_8]\cdot 2\text{H}_2\text{O}$  | A | 2017-104  | Germany                          | CNMNC Newsletter 42 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 445; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 405 |  |
| Vaniniite            | $\text{Ca}_2\text{Mn}^{2+}_3\text{Mn}^{3+}_2\text{O}_2(\text{AsO}_4)_4\cdot 2\text{H}_2\text{O}$                                    | A | 2017-116  | Switzerland                      | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647 |  |
| Vanmeersscheite      | $\text{U}(\text{UO}_2)_3(\text{PO}_4)_2(\text{OH})_6\cdot 4\text{H}_2\text{O}$  | A | 1981-009  | Democratic Republic of the Congo | <i>Bulletin de Minéralogie</i> <b>105</b> (1982), 125  |  |
| Vanoxite             | $\text{V}_6\text{O}_{13}\cdot 8\text{H}_2\text{O}$ (?)  | G | 1924      | USA                              | <i>U.S. Geological Survey Bulletin</i> <b>750-D</b> (1924), 63   |  |
| Vantasselite         | $\text{Al}_4(\text{PO}_4)_3(\text{OH})_3\cdot 9\text{H}_2\text{O}$  | A | 1986-016  | Belgium                          | <i>Bulletin de Minéralogie</i> <b>110</b> (1987), 647  |  |
| Vanthoffite          | $\text{Na}_6\text{Mg}(\text{SO}_4)_4$   | G | 1902      | Germany                          | <i>Akademie der Wissenschaften, Berichte</i> <b>21</b> (1902), 404   | <i>Acta Crystallographica</i> <b>17</b> (1964), 1613                               |
| Vanuralite           | $\text{Al}(\text{UO}_2)_2(\text{VO}_4)_2(\text{OH})\cdot 11\text{H}_2\text{O}$  | A | 1967 s.p. | Gabon                            | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences</i> <b>256</b> (1963), 5374                                     |  |
| Vapnikite            | $\text{Ca}_2\text{CaUO}_6$  | A | 2013-082  | Israel                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 571  |  |
| Varenesite           | $\text{Na}_8\text{Mn}_2\text{Si}_{10}\text{O}_{25}(\text{OH},\text{Cl})_2\cdot 12\text{H}_2\text{O}$                                | A | 1994-017  | Canada                           | <i>Canadian Mineralogist</i> <b>33</b> (1995), 1073  |  |
| Variscite            | $\text{Al}(\text{PO}_4)\cdot 2\text{H}_2\text{O}$   | A | 1967 s.p. | Germany                          | <i>Journal für Praktische Chemie</i> <b>10</b> (1837), 506   | <i>Acta Crystallographica</i> <b>B33</b> (1977), 263                               |
| Varlamoffite         | $(\text{Sn},\text{Fe})(\text{O},\text{OH})_2$   | Q | 1947      | Democratic Republic of the Congo | <i>Les minéraux de Belgique et du Congo Belge</i> . Dunod, Paris (1947), 182   | <i>Mineralogicheskij Zhurnal</i> <b>15</b> (1993), 94                              |
| Varulite             | $\text{NaCaMn}^{2+}_3(\text{PO}_4)_3$   | G | 1937      | Sweden                           | <i>Geologiska Föreningens i Stockholm Förhandlingar</i> <b>59</b> (1937), 77   |  |
| Vashegyite           | $\text{Al}_{11}(\text{PO}_4)_9(\text{OH})_6\cdot 38\text{H}_2\text{O}$  | G | 1909      | Slovakia                         | <i>Matematikai és Természet-tudományi Értesítő</i> <b>27</b> (1909), 64  | <i>Canadian Mineralogist</i> <b>21</b> (1983), 489                                 |

|                     |   |   |           |                                  |  |  |
|---------------------|---|---|-----------|----------------------------------|--|--|
| Vasilite            | $(\text{Pd,Cu})_{16}(\text{S,Te})_7$  | A | 1989-044  | Bulgaria                         | <i>Canadian Mineralogist</i> <b>28</b> (1990), 687   | <i>Journal of the Less-Common Metals</i> <b>50</b> (1976), 165                         |
| Vasilseverginite    | $\text{Cu}_9\text{O}_4(\text{AsO}_4)_2(\text{SO}_4)_2$  | A | 2015-083  | Russia                           | CNMNC Newsletter 28 - <i>Mineralogical Magazine</i> <b>79</b> (2015), 1859   |  |
| Vasilyevite         | $(\text{Hg}_2)^{2+}_{10}\text{O}_6\text{I}_3\text{Br}_2\text{Cl}(\text{CO}_3)$  | A | 2003-016  | USA                              | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1167  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 1173                                    |
| Västmanlandite-(Ce) | $\text{Ce}_3\text{CaMg}_2\text{Al}_2\text{Si}_5\text{O}_{19}(\text{OH})_2\text{F}$  | A | 2002-025  | Sweden                           | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 129  |  |
| Vaterite            | $\text{Ca}(\text{CO}_3)$  | A | 1962 s.p. | United Kingdom                   | <i>Verhandlungen der Gesellschaft Deutscher Naturforscher und Ärzte</i> <b>82</b> (1911), 120  | <i>Science</i> <b>340</b> (2013), 454  |
| Vaughanite          | $\text{TiHgSb}_4\text{S}_7$   | A | 1987-055  | Canada                           | <i>Mineralogical Magazine</i> <b>53</b> (1989), 79   |  |
| Vauquelinite        | $\text{CuPb}_2(\text{CrO}_4)(\text{PO}_4)(\text{OH})$   | G | 1818      | Russia                           | <i>Afhandlingar i Fysik, Kemi och Mineralogi</i> <b>6</b> (1818), 246  | <i>Zeitschrift für Kristallographie</i> <b>126</b> (1968), 433                         |
| Vauxite             | $\text{Fe}^{2+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 6\text{H}_2\text{O}$   | G | 1922      | Bolivia                          | <i>Science</i> <b>56</b> (1922), 50  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 163                                     |
| Vavřinite           | $\text{Ni}_2\text{SbTe}_2$  | A | 2005-045  | Czech Republic                   | <i>Canadian Mineralogist</i> <b>45</b> (2007), 1213  |  |
| Väyrynenite         | $\text{BeMn}^{2+}(\text{PO}_4)(\text{OH})$  | G | 1954      | Finland                          | <i>Anzeiger der Österreichischen Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche Klasse</i> <b>2</b> (1954), 21        | <i>Canadian Mineralogist</i> <b>38</b> (2000), 1425                                    |
| Veatchite           | $\text{Sr}_2\text{B}_{11}\text{O}_{16}(\text{OH})_5 \cdot \text{H}_2\text{O}$   | A | 1938      | USA                              | <i>American Mineralogist</i> <b>23</b> (1938), 409   | <i>American Mineralogist</i> <b>97</b> (2012), 489                                     |
| Veblenite           | $\text{K}_2\text{Na}(\text{Fe}^{2+}_5\text{Fe}^{3+}_4\text{Mn}_7)\text{Nb}_3\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{Si}_8\text{O}_{22})_2\text{O}_6(\text{OH})_{10}(\text{H}_2\text{O})_3$ | A | 2010-050  | Canada                           | <i>Mineralogical Magazine</i> <b>77</b> (2013), 2955   |  |
| Veenite             | $\text{Pb}_2(\text{Sb,As})_2\text{S}_5$   | A | 1966-016  | Canada                           | <i>Canadian Mineralogist</i> <b>9</b> (1967), 7  |  |
| Velikite            | $\text{Cu}_2\text{HgSnS}_4$   | A | 1996-052  | Kyrgyzstan                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>126(4)</b> (1997), 71  | <i>Soviet Physics - Crystallography</i> <b>22</b> (1977), 99                           |
| Vendidaite          | $\text{Al}_2(\text{SO}_4)(\text{OH})_3\text{Cl} \cdot 6\text{H}_2\text{O}$  | A | 2012-089  | Chile                            | <i>Canadian Mineralogist</i> <b>51</b> (2013), 559   |  |
| Verbeekite          | $\text{PdSe}_2$   | A | 2001-005  | Democratic Republic of the Congo | <i>Mineralogical Magazine</i> <b>66</b> (2002), 173  |  |
| Verbierite          | $\text{BeCl}^{3+}_2\text{TiO}_6$  | A | 2015-089  | Switzerland                      | CNMNC Newsletter 30 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 407  |  |
| Vergasovaite        | $\text{Cu}_3\text{O}(\text{MoO}_4)(\text{SO}_4)$  | A | 1998-009  | Russia                           | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>78</b> (1998), 479  | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 101                            |
| Vermiculite         | $\text{Mg}_{0.7}(\text{Mg,Fe,Al})_6(\text{Si,Al})_8\text{O}_{20}(\text{OH})_4 \cdot 8\text{H}_2\text{O}$  | G | 1824      | USA                              | <i>American Journal of Science and Arts</i> <b>7</b> (1824), 55  | <i>American Mineralogist</i> <b>51</b> (1966), 1124                                    |
| Vernadite           | $(\text{Mn,Fe,Ca,Na})(\text{O,OH})_2 \cdot n\text{H}_2\text{O}$   | Q | 1944      | Russia                           | <i>Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya</i> <b>4</b> (1944), 35  | <i>Mineralium Deposita</i> <b>15</b> (1980), 251                                       |
| Verneite            | $\text{Na}_2\text{Ca}_3\text{Al}_2\text{F}_{14}$  | A | 2016-112  | Iceland / Italy                  | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |  |
| Verplanckite        | $\text{Ba}_4\text{Mn}^{2+}_2\text{Si}_4\text{O}_{12}(\text{OH,H}_2\text{O})_3\text{Cl}_3$   | A | 1964-011  | USA                              | <i>American Mineralogist</i> <b>50</b> (1965), 314   | <i>Acta Crystallographica</i> <b>B29</b> (1973), 2019                                  |
| Versiliaite         | $(\text{Fe}^{2+}_2\text{Fe}^{3+}_2)(\text{Fe}^{3+}_2\text{Sb}^{3+}_6)\text{O}_{16}\text{S}$   | A | 1978-068  | Italy                            | <i>American Mineralogist</i> <b>64</b> (1979), 1230  | <i>American Mineralogist</i> <b>64</b> (1979), 1235                                    |
| Vertumnite          | $\text{Ca}_4\text{Al}_4\text{Si}_4\text{O}_6(\text{OH})_{24} \cdot 3\text{H}_2\text{O}$   | A | 1975-043  | Italy                            | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>24</b> (1977), 57   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>25</b> (1978), 33 |

|                |   |    |           |                     |   |  |
|----------------|---|----|-----------|---------------------|---|--|
| Veselovskýite  | $ZnCu_4(AsO_4)_2(AsO_3OH)_2 \cdot 9H_2O$                                    | A  | 2005-053  | Czech Republic      | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>187</b> (2010), 83                                    |  |
| Vésigniéite    | $Cu_3Ba(VO_4)_2(OH)_2$  | G  | 1955      | Germany             | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences de Paris</i> <b>240</b> (1955), 2331 | <i>Acta Geologica Sinica</i> <b>4</b> (1991), 145  |
| Vestaite       | $(Ti^{4+}Fe^{2+})Ti^{4+}_3O_9$  | A  | 2017-068  | Morocco (meteorite) | <i>American Mineralogist</i> <b>103</b> (2018), 1502  |  |
| Vesuvianite    | $(Ca,Na)_{19}(Al,Mg,Fe)_{13}(SiO_4)_{10}(Si_2O_7)_4(OH,F,O)_{10}$           | A  | 1962 s.p. | Italy               | Beiträge zur Chemischen Kenntniss der Mineralkörper, Vol. 1. Decker, Berlin (1795), 34                      | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1525  |
| Veszelyite     | $(Cu,Zn)_2Zn(PO_4)(OH)_3 \cdot 2H_2O$                                       | G  | 1874      | Romania             | <i>Anzeiger der Kaiserlichen Akademie der Wissenschaften</i> <b>11</b> (1874), 135                          | <i>American Mineralogist</i> <b>98</b> (2013), 1261  |
| Viaeneite      | $(Fe,Pb)_4S_8O$   | A  | 1993-051  | Belgium             | <i>European Journal of Mineralogy</i> <b>8</b> (1996), 93   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1995), 433                                      |
| Vicanite-(Ce)  | $(Ca,Ce,La,Th)_{15}As^{5+}(As^{3+},Na)_{0.5}Fe^{3+}_{0.7}Si_6B_4(O,F)_{47}$ | A  | 1991-050  | Italy               | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 439  | <i>American Mineralogist</i> <b>87</b> (2002), 1139  |
| Vigezzite      | $(Ca,Ce)(Nb,Ta,Ti)_2O_6$  | A  | 1977-008  | Italy               | <i>Mineralogical Magazine</i> <b>43</b> (1979), 459   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 301                                      |
| Vigrishinite   | $NaZnTi_4(Si_2O_7)_2O_3(OH)(H_2O)_4$  | Rd | 2011-073  | Russia              | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>141(4)</b> (2012), 12                          | <i>Mineralogical Magazine</i> <b>82</b> (2018), 787  |
| Vihorlatite    | $Bi_{24}Se_{17}Te_4$  | A  | 1988-047  | Slovakia            | <i>European Journal of Mineralogy</i> <b>19</b> (2007), 255   |  |
| Viitaniemiite  | $NaCaAl(PO_4)F_3$   | A  | 1977-043  | Finland             | <i>Bulletin of the Geological Society of Finland</i> <b>314</b> (1981), 1                                   | <i>American Mineralogist</i> <b>69</b> (1984), 961   |
| Vikingite      | $Ag_5Pb_8Bi_{13}S_{30}$   | A  | 1976-006  | Denmark (Greenland) | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>131</b> (1977), 56                                    | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1992), 454                                      |
| Villamanínite  | $CuS_2$   | Rd | 1989 s.p. | Spain               | <i>Mineralogical Magazine</i> <b>19</b> (1920), 14  | <i>American Mineralogist</i> <b>64</b> (1979), 1265  |
| Villiumite     | $NaF$   | G  | 1908      | Guinea              | <i>Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences de Paris</i> <b>146</b> (1908), 213  | <i>Acta Crystallographica</i> <b>14</b> (1961), 794  |
| Villyaellenite | $(Mn,Ca)Mn_2Ca_2(AsO_3OH)_2(AsO_4)_2 \cdot 4H_2O$                           | A  | 1983-008a | France              | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>64</b> (1984), 323                 | <i>American Mineralogist</i> <b>73</b> (1988), 1172  |
| Vimsite        | $CaB_2O_2(OH)_4$  | A  | 1968-034  | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>182</b> (1968), 1402   | <i>Kristallografiya</i> <b>21</b> (1976), 592  |
| Vincentite     | $Pd_3As$  | A  | 1973-051  | Indonesia           | <i>Mineralogical Magazine</i> <b>39</b> (1974), 525   | <i>Canadian Mineralogist</i> <b>40</b> (2002), 457   |
| Vinciennite    | $Cu_{10}Fe_4SnAsS_{16}$   | A  | 1983-031  | France              | <i>Bulletin de Minéralogie</i> <b>108</b> (1985), 447   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 1501  |
| Vinogradovite  | $Na_4Ti_4(Si_2O_6)_2[(Si,Al)_4O_{10}]O_4 \cdot (H_2O,Na,K)_3$               | G  | 1956      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>109</b> (1956), 617  | <i>Zeitschrift für Kristallographie</i> <b>200</b> (1992), 237                                     |
| Violarite      | $FeNi_2S_4$   | G  | 1924      | Canada              | <i>Economic Geology</i> <b>19</b> (1924), 309   | <i>American Mineralogist</i> <b>91</b> (2006), 1442  |
| Virgilite      | $LiAlSi_2O_6$   | A  | 1977-009  | Peru                | <i>American Mineralogist</i> <b>63</b> (1978), 461  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 493                                      |
| Vishnevite     | $Na_8(Al_6Si_6)O_{24}(SO_4) \cdot 2H_2O$                                    | G  | 1944      | Russia              | <i>Doklady Akademii Nauk SSSR</i> <b>42</b> (1944), 304   | <i>American Mineralogist</i> <b>92</b> (2007), 713   |
| Vismirnovite   | $ZnSn(OH)_6$  | A  | 1980-029  | Tajikistan          | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 492                           | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>90</b> (1967), 32 |



|                    |   |    |           |                              |  |   |
|--------------------|---|----|-----------|------------------------------|--|---|
| Vistepite          | $\text{Mn}_4\text{SnB}_2\text{O}_2(\text{Si}_2\text{O}_7)_2(\text{OH})_2$   | A  | 1991-012  | Kyrgyzstan                   | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>121(4)</b> (1992), 107                             | <i>Canadian Mineralogist</i> <b>35</b> (1997), 1283                                     |
| Vitimitite         | $\text{Ca}_6\text{B}_{14}\text{O}_{19}(\text{SO}_4)(\text{OH})_{14}\cdot 5\text{H}_2\text{O}$   | A  | 2001-057  | Russia                       | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>131(4)</b> (2002), 41                              |   |
| Vitusite-(Ce)      | $\text{Na}_3\text{Ce}(\text{PO}_4)_2$   | A  | 1976-055  | Denmark (Greenland) / Russia | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>137</b> (1979), 42   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1994), 49                            |
| Vivianite          | $\text{Fe}^{2+}_3(\text{PO}_4)_2\cdot 8\text{H}_2\text{O}$  | G  | 1817      | United Kingdom               | Letztes Mineral-System. Craz und Gerlach - Gerold, Freiberg und Wien (1817), 41                                    | <i>Zeitschrift für Analytische Chemie</i> <b>333</b> (1989), 401                        |
| Vladimirite        | $\text{Ca}_4(\text{AsO}_4)_2(\text{AsO}_3\text{OH})\cdot 4\text{H}_2\text{O}$   | Rd | 1964 s.p. | Russia                       | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>82</b> (1953), 311                                   | <i>Canadian Mineralogist</i> <b>49</b> (2011), 1055                                     |
| Vladimirivanovite  | $\text{Na}_6\text{Ca}_2[\text{Al}_6\text{Si}_6\text{O}_{24}](\text{SO}_4, \text{S}_3, \text{S}_2, \text{Cl})_2\cdot \text{H}_2\text{O}$ | A  | 2010-070  | Russia / Tajikistan          | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>140(5)</b> (2011), 36                                 |   |
| Vladkrivovichevite | $[\text{Pb}_{32}\text{O}_{18}][\text{Pb}_4\text{Mn}_2\text{O}]\text{Cl}_{14}(\text{BO}_3)_8\cdot 2\text{H}_2\text{O}$                   | A  | 2011-020  | Namibia                      | <i>Mineralogical Magazine</i> <b>76</b> (2012), 883  | <i>American Mineralogist</i> <b>98</b> (2013), 256                                      |
| Vladykinite        | $\text{Na}_3\text{Sr}_4(\text{Fe}^{2+}\text{Fe}^{3+})\text{Si}_8\text{O}_{24}$  | A  | 2011-052  | Russia                       | <i>American Mineralogist</i> <b>99</b> (2014), 235   |   |
| Vlasovite          | $\text{Na}_2\text{ZrSi}_4\text{O}_{11}$   | A  | 1967 s.p. | Russia                       | <i>Doklady Akademii Nauk SSSR</i> <b>137</b> (1961), 944   | <i>Canadian Mineralogist</i> <b>44</b> (2006), 1349                                     |
| Vlodavetsite       | $\text{Ca}_2\text{Al}(\text{SO}_4)_2\text{F}_2\text{Cl}\cdot 4\text{H}_2\text{O}$   | A  | 1993-023  | Russia                       | <i>Doklady Akademii Nauk</i> <b>343</b> (1995), 358  | <i>Mineralogical Magazine</i> <b>59</b> (1995), 159                                     |
| Vochtenite         | $\text{Fe}^{2+}\text{Fe}^{3+}(\text{UO}_2)_4(\text{PO}_4)_4(\text{OH})\cdot 12\text{-}13\text{H}_2\text{O}$                             | A  | 1987-047  | United Kingdom               | <i>Mineralogical Magazine</i> <b>53</b> (1989), 473  |   |
| Voggite            | $\text{Na}_2\text{Zr}(\text{PO}_4)(\text{CO}_3)(\text{OH})\cdot 2\text{H}_2\text{O}$  | A  | 1988-037  | Canada                       | <i>Canadian Mineralogist</i> <b>28</b> (1990), 155   | <i>Mineralogical Magazine</i> <b>54</b> (1990), 495                                     |
| Voglite            | $\text{Ca}_2\text{Cu}(\text{UO}_2)(\text{CO}_3)_4\cdot 6\text{H}_2\text{O}$   | G  | 1853      | Czech Republic               | <i>Jahrbuch der Kaiserlich-Königlichen Geologischen Reichsanstalt</i> <b>4</b> (1853), 220                         | <i>Journal of Applied Crystallography</i> <b>12</b> (1979), 616                         |
| Volaschioite       | $\text{Fe}_4(\text{SO}_4)_2(\text{OH})_6\cdot 2\text{H}_2\text{O}$  | A  | 2010-005  | Italy                        | <i>Canadian Mineralogist</i> <b>49</b> (2011), 605   |   |
| Volborthite        | $\text{Cu}_3\text{V}_2\text{O}_7(\text{OH})_2\cdot 2\text{H}_2\text{O}$   | A  | 1968 s.p. | Russia                       | <i>Bulletin Scientifique publié par L'Académie Impériale des Sciences de Saint-Pétersbourg</i> <b>4</b> (1838), 21 | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1988), 385                           |
| Volkonskoite       | $\text{Ca}_{0.3}(\text{Cr}, \text{Mg})_2(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_2\cdot 4\text{H}_2\text{O}$                    | Rd | 1987 s.p. | Russia                       | <i>Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefaktenkunde</i> <b>2</b> (1831), 420               | <i>Clays and Clay Minerals</i> <b>35</b> (1987), 139                                    |
| Volkovskite        | $\text{KCa}_4\text{B}_{22}\text{O}_{32}(\text{OH})_{10}\text{Cl}\cdot 4\text{H}_2\text{O}$  | A  | 1968 s.p. | Kazakhstan                   | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>95</b> (1966), 45                                    | <i>Canadian Mineralogist</i> <b>51</b> (2013), 157                                      |
| Voloshinite        | $\text{Rb}(\text{LiAl}_{1.5}\square_{0.5})(\text{Al}_{0.5}\text{Si}_{3.5})\text{O}_{10}\text{F}_2$                                      | A  | 2007-052  | Russia                       | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(3)</b> (2009), 90                                 |   |
| Voltaite           | $\text{K}_2\text{Fe}^{2+}_5\text{Fe}^{3+}_3\text{Al}(\text{SO}_4)_{12}\cdot 18\text{H}_2\text{O}$                                       | G  | 1841      | Italy                        | <i>Antologia di Scienze Naturali di Napoli</i> <b>1</b> (1841), 67   | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>18</b> (1972), 185 |
| Volynskite         | $\text{AgBiTe}_2$   | A  | 1968 s.p. | Armenia                      | <i>Akademii Nauk SSSR, Eksperimentalno Metodicheskie Issledovaniia Rudnykh Mineralov</i> (1965), 129               | <i>American Mineralogist</i> <b>76</b> (1991), 257                                      |
| Vonbezingite       | $\text{Ca}_6\text{Cu}_3(\text{SO}_4)_3(\text{OH})_{12}\cdot 2\text{H}_2\text{O}$  | A  | 1991-031  | South Africa                 | <i>American Mineralogist</i> <b>77</b> (1992), 1292  |   |

|                    |  |    |           |                    |  |   |
|--------------------|--|----|-----------|--------------------|--|---|
| Vondechenite       | $\text{Cu}_4\text{CaCl}_2(\text{OH})_8 \cdot 4\text{H}_2\text{O}$  | A  | 2016-065  | Germany            | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315         |   |
| Vonsenite          | $\text{Fe}^{2+}_2\text{Fe}^{3+}\text{O}_2(\text{BO}_3)$  | G  | 1920      | USA                | <i>American Mineralogist</i> <b>5</b> (1920), 141                                  | <i>American Mineralogist</i> <b>68</b> (1983), 827                        |
| Vorlanite          | $\text{CaUO}_4$  | A  | 2009-032  | Russia             | <i>American Mineralogist</i> <b>96</b> (2011), 188                                 | <i>American Mineralogist</i> <b>98</b> (2013), 518                        |
| Voronkovite        | $\text{Na}_{15}(\text{Na}, \text{Ca}, \text{Ce})_3(\text{Mn}, \text{Ca})_3\text{Fe}_3\text{Zr}_3\text{Si}_{26}\text{O}_{72}(\text{OH}, \text{O})_4 \cdot \text{Cl} \cdot \text{H}_2\text{O}$ | A  | 2007-023  | Russia             | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(2)</b> (2009), 66 |   |
| Vorontsovite       | $(\text{Hg}_5\text{Cu})\text{TlAs}_4\text{S}_{12}$   | A  | 2016-076  | Russia             | <i>Minerals</i> <b>8</b> (2018), 185   |   |
| Voudourisite       | $\text{Cd}(\text{SO}_4) \cdot \text{H}_2\text{O}$  | A  | 2012-042  | Greece             | CNMNC Newsletter 14 - <i>Mineralogical Magazine</i> <b>76</b> (2012), 1281         | <i>Acta Crystallographica</i> <b>E71</b> (2014), i8                       |
| Vozhminite         | $\text{Ni}_4\text{AsS}_2$  | A  | 1981-040  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 480  |   |
| Vránaite           | $\text{Al}_{16}\text{B}_4\text{Si}_4\text{O}_{38}$   | A  | 2015-084  | Madagascar         | <i>American Mineralogist</i> <b>101</b> (2016), 2108                               |   |
| Vrbaite            | $\text{Hg}_3\text{Tl}_4\text{As}_8\text{Sb}_2\text{S}_{20}$  | G  | 1912      | Macedonia          | <i>Zeitschrift für Kristallographie</i> <b>51</b> (1912), 365                      | <i>Zeitschrift für Kristallographie</i> <b>134</b> (1961), 360            |
| Vuagnatite         | $\text{CaAlSiO}_4(\text{OH})$  | A  | 1975-007  | Turkey             | <i>American Mineralogist</i> <b>61</b> (1976), 825                                 | <i>American Mineralogist</i> <b>61</b> (1976), 831                        |
| Vulcanite          | $\text{CuTe}$  | A  | 1967 s.p. | USA                | <i>American Mineralogist</i> <b>46</b> (1961), 258                                 | <i>Mineralogy and Petrology</i> <b>71</b> (2001), 149                     |
| Vuonnemite         | $\text{Na}_6\text{Na}_2\text{Nb}_2\text{Na}_3\text{Ti}(\text{Si}_2\text{O}_7)_2(\text{PO}_4)_2\text{O}_2(\text{OF})$   | Rd | 1973-015  | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 423  | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1311                       |
| Vuorelainenite     | $\text{Mn}^{2+}\text{V}^{3+}_2\text{O}_4$  | A  | 1980-048  | Sweden             | <i>Canadian Mineralogist</i> <b>20</b> (1982), 281                                 |   |
| Vuoriyarvite-K     | $(\text{K}, \text{Na}, \square)_{12}\text{Nb}_8(\text{Si}_4\text{O}_{12})_4\text{O}_8 \cdot 12\text{-}16\text{H}_2\text{O}$  | Rn | 1995-031  | Russia             | <i>Doklady Earth Sciences</i> <b>358</b> (1998), 73                                | <i>Crystallography Reports</i> <b>43</b> (1998), 820                      |
| Vurroite           | $\text{Pb}_{20}\text{Sn}_2(\text{Bi}, \text{As})_{22}\text{S}_{54}\text{Cl}_6$   | A  | 2003-027  | Italy              | <i>Canadian Mineralogist</i> <b>43</b> (2005), 703                                 | <i>American Mineralogist</i> <b>93</b> (2008), 713                        |
| Vyacheslavite      | $\text{U}^{4+}(\text{PO}_4)(\text{OH}) \cdot 2.5\text{H}_2\text{O}$  | A  | 1983-017  | Uzbekistan         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>113</b> (1984), 360  |   |
| Vyalsovite         | $\text{CaFeAlS}(\text{OH})_5$  | A  | 1989-004  | Russia             | <i>American Mineralogist</i> <b>77</b> (1992), 201                                 |   |
| Vymazalováite      | $\text{Pd}_3\text{Bi}_2\text{S}_2$   | A  | 2016-105  | Russia             | <i>Mineralogical Magazine</i> <b>82</b> (2018), 367                                |   |
| Vysokýite          | $\text{U}^{4+}[\text{AsO}_2(\text{OH})_2]_4 \cdot 4\text{H}_2\text{O}$   | A  | 2012-067  | Czech Republic     | <i>Mineralogical Magazine</i> <b>77</b> (2013), 3055                               |   |
| Vysotskite         | $(\text{Pd}, \text{Ni})\text{S}$   | A  | 1967 s.p. | Russia             | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>91</b> (1962), 718   | <i>Acta Crystallographica</i> <b>C41</b> (1985), 1829                     |
| Vyuntspakhkite-(Y) | $\text{Y}(\text{Al}, \text{Si})(\text{SiO}_4)(\text{OH}, \text{O})_2$  | A  | 1982-040  | Russia             | <i>Mineralogicheskii Zhurnal</i> <b>5</b> (1983), 89                               | <i>Crystallography Reports</i> <b>54</b> (2009), 822                      |
| Wadalite           | $\text{Ca}_6\text{Al}_5\text{Si}_2\text{O}_{16}\text{Cl}_3$  | A  | 1987-045  | Japan              | <i>Acta Crystallographica</i> <b>C49</b> (1993), 205                               | <i>Bulletin of the Geological Survey of Japan</i> <b>48</b> (1997), 413   |
| Wadeite            | $\text{K}_2\text{ZrSi}_3\text{O}_9$  | G  | 1939      | Australia          | <i>Mineralogical Magazine</i> <b>25</b> (1939), 373                                | <i>Physics and Chemistry of Minerals</i> <b>32</b> (2005), 426            |
| Wadsleyite         | $\text{Mg}_2\text{SiO}_4$  | A  | 1982-012  | Canada (meteorite) | <i>Canadian Mineralogist</i> <b>21</b> (1983), 29                                  | <i>Physics of the Earth and Planetary Interiors</i> <b>189</b> (2011), 56 |
| Wagnerite          | $\text{Mg}_2(\text{PO}_4)\text{F}$   | Rd | 2003 s.p. | Austria            | <i>Journal für Chemie und Physik</i> <b>33</b> (1821), 269                         | <i>Canadian Mineralogist</i> <b>41</b> (2003), 393                        |
| Waimirite-(Y)      | $\text{YF}_3$  | A  | 2013-108  | Brazil             | <i>Mineralogical Magazine</i> <b>79</b> (2015), 767                                |   |
| Wairakite          | $\text{Ca}(\text{Si}_4\text{Al}_2)\text{O}_{12} \cdot 2\text{H}_2\text{O}$   | A  | 1997 s.p. | New Zealand        | <i>Mineralogical Magazine</i> <b>30</b> (1955), 691                                | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 475               |
| Wairauite          | $\text{CoFe}$  | A  | 1964-015  | New Zealand        | <i>Mineralogical Magazine</i> <b>33</b> (1964), 942                                | <i>Canadian Mineralogist</i> <b>28</b> (1990), 751                        |
| Wakabayashilite    | $(\text{As}, \text{Sb})_6\text{As}_4\text{S}_{14}$   | A  | 1969-024  | Japan              | <i>Geological Survey of Japan</i> (1970), 92                                       | <i>Mineralogical Magazine</i> <b>78</b> (2014), 693                       |

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|---------------------|---|----|------------|---|--|---|
| Wakefieldite-(Ce)   | CeVO <sub>4</sub>   | Rn | 1976-xxx ? | Democratic Republic of the Congo          | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>100</b> (1977), 39                | <i>Bulletin de Minéralogie</i> <b>110</b> (1987), 657                                   |
| Wakefieldite-(La)   | LaVO <sub>4</sub>   | A  | 1989-035a  | Germany                                   | <i>European Journal of Mineralogy</i> <b>20</b> (2008) 1135  |   |
| Wakefieldite-(Nd)   | NdVO <sub>4</sub>   | A  | 2008-031   | Japan                                     | <i>Resource Geology</i> <b>61</b> (2011), 101  |   |
| Wakefieldite-(Y)    | YVO <sub>4</sub>  | Rn | 1969-012   | Canada                                    | <i>American Mineralogist</i> <b>56</b> (1971), 395   | <i>Rendiconti Lincei, Scienze Fisiche e Naturali</i> <b>22</b> (2011), 307              |
| Walentaite          | H <sub>2</sub> Ca <sub>2</sub> Fe <sup>3+</sup> <sub>6</sub> (AsO <sub>4</sub> ) <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> ·14H <sub>2</sub> O | A  | 1983-047   | USA                                       | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1984), 169  |   |
| Walfordite          | (Fe <sup>3+</sup> ,Te <sup>6+</sup> ,Ti <sup>4+</sup> ,Mg)Te <sup>4+</sup> <sub>3</sub> O <sub>8</sub>  | A  | 1996-003   | Chile                                     | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1261  |   |
| Walkerite           | Ca <sub>16</sub> (Mg,Li) <sub>2</sub> [B <sub>13</sub> O <sub>17</sub> (OH) <sub>12</sub> Cl <sub>6</sub> ·28H <sub>2</sub> O                     | A  | 2001-051   | Canada                                    | <i>Canadian Mineralogist</i> <b>40</b> (2002), 1675  |   |
| Wallisite           | CuPbTlAs <sub>2</sub> S <sub>5</sub>  | A  | 1971 s.p.  | Switzerland                               | <i>Eclogae Geologicae Helvetiae</i> <b>58</b> (1965), 403  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2003), 396                           |
| Walkilldellite      | Ca <sub>2</sub> Mn <sup>2+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·9H <sub>2</sub> O                               | A  | 1982-084   | USA                                       | <i>American Mineralogist</i> <b>68</b> (1983), 1029  |   |
| Walkilldellite-(Fe) | Ca <sub>2</sub> Fe <sup>2+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·9H <sub>2</sub> O                               | A  | 1997-032   | France                                    | <i>Riviera Scientifique</i> (1999), 5  |   |
| Walpurgite          | Bi <sub>4</sub> O <sub>4</sub> (UO <sub>2</sub> )(AsO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O  | G  | 1871       | Germany                                   | <i>Neues Jahrbuch für Mineralogie, Geologie und Paläontologie</i> (1871), 869                                      | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>30</b> (1982), 129 |
| Walstromite         | BaCa <sub>2</sub> Si <sub>3</sub> O <sub>9</sub>  | A  | 1964-009   | USA                                       | <i>American Mineralogist</i> <b>50</b> (1965), 314   | <i>American Mineralogist</i> <b>53</b> (1968), 9  |
| Walthierite         | Ba <sub>0.5</sub> Al <sub>3</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>   | A  | 1991-008   | Chile                                     | <i>American Mineralogist</i> <b>77</b> (1992), 1275  |   |
| Wampenite           | C <sub>18</sub> H <sub>16</sub>   | A  | 2015-061   | Germany                                   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 511  |   |
| Wangdaodeite        | FeTiO <sub>3</sub>  | A  | 2016-007   | China                                     | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691  |   |
| Wardite             | NaAl <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>4</sub> ·2H <sub>2</sub> O  | G  | 1896       | USA                                       | <i>American Journal of Science</i> <b>152</b> (1896), 154  | <i>Mineralogical Magazine</i> <b>37</b> (1970), 598                                     |
| Wardsmithite        | Ca <sub>5</sub> Mg(B <sub>4</sub> O <sub>7</sub> ) <sub>6</sub> ·30H <sub>2</sub> O   | A  | 1967-030   | USA                                       | <i>American Mineralogist</i> <b>55</b> (1970), 349   |   |
| Warikahnite         | Zn <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O   | A  | 1978-038   | Namibia                                   | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1979), 389  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>27</b> (1980), 187 |
| Warkite             | Ca <sub>2</sub> Sc <sub>6</sub> Al <sub>6</sub> O <sub>20</sub>   | A  | 2013-129   | Australia (meteorite) / Italy (meteorite) | CNMNC Newsletter 20 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 549  |   |
| Warwickite          | (Mg,Ti,Fe,Cr,Al) <sub>2</sub> O(BO <sub>3</sub> )   | G  | 1838       | USA                                       | <i>American Journal of Science and Arts</i> <b>34</b> (1838), 313  | <i>American Mineralogist</i> <b>59</b> (1974), 985                                      |
| Wassonite           | TiS   | A  | 2010-074   | Antarctica                                | <i>American Mineralogist</i> <b>97</b> (2012), 807   |   |
| Watanabeite         | Cu <sub>4</sub> (As,Sb) <sub>2</sub> S <sub>5</sub>   | A  | 1991-025   | Japan                                     | <i>Mineralogical Magazine</i> <b>57</b> (1993), 643  |   |
| Watatsumiite        | LiNa <sub>2</sub> KMn <sub>2</sub> V <sub>2</sub> Si <sub>8</sub> O <sub>24</sub>   | A  | 2001-043   | Japan                                     | <i>Journal of Mineralogical and Petrological Sciences</i> <b>98</b> (2003), 142                                    |   |
| Waterhouseite       | Mn <sub>7</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>8</sub>   | A  | 2004-035   | Australia                                 | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1401  |   |
| Watkinsonite        | PbCu <sub>2</sub> Bi <sub>4</sub> (Se,S) <sub>8</sub>   | A  | 1985-024   | Canada                                    | <i>Canadian Mineralogist</i> <b>25</b> (1987), 625   | <i>Canadian Mineralogist</i> <b>48</b> (2010), 1109                                     |
| Wattersite          | Hg <sup>1+</sup> <sub>4</sub> Hg <sup>2+</sup> O <sub>2</sub> (CrO <sub>4</sub> )   | A  | 1987-030   | USA                                       | <i>Mineralogical Record</i> <b>22</b> (1991), 269  | <i>Canadian Mineralogist</i> <b>33</b> (1995), 41                                       |
| Wattevilleite       | Na <sub>2</sub> Ca(SO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O (?)  | Q  | 1879       | Germany                                   | Beitraege zur Kenntniss der am Bauersberge bei Bischofsheim vor der Rhön vorkommenden Sulfate. Wurzburg (1879), 18 | <i>Australian Journal of Mineralogy</i> <b>13</b> (2007), 41                            |

|                 |  |    |           |                     |   |  |
|-----------------|--|----|-----------|---------------------|---|--|
| Wavellite       | $\text{Al}_3(\text{PO}_4)_2(\text{OH})_3 \cdot 5\text{H}_2\text{O}$  | A  | 1971 s.p. | United Kingdom      | <i>Philosophical Transactions of the Royal Society of London</i> (1805), 162                        | <i>Zeitschrift für Kristallographie</i> <b>127</b> (1968), 21  |
| Wawayandaite    | $\text{Ca}_6\text{Be}_9\text{Mn}^{2+}_2\text{BSi}_6\text{O}_{23}(\text{OH},\text{Cl})_{15}$                          | A  | 1988-043  | USA                 | <i>American Mineralogist</i> <b>75</b> (1990), 405  |  |
| Waylandite      | $\text{BiAl}_3(\text{PO}_4)_2(\text{OH})_6$  | A  | 1962-003  | Uganda              | <i>Geological Society of America Special Paper</i> <b>73</b> (1963), 256A                           | <i>Mineralogy and Petrology</i> <b>100</b> (2010), 249         |
| Wayneburnhamite | $\text{Pb}_9\text{Ca}_6(\text{Si}_2\text{O}_7)_3(\text{SiO}_4)_3$  | A  | 2015-124  | USA                 | <i>American Mineralogist</i> <b>101</b> (2016), 2423  |  |
| Weberite        | $\text{Na}_2\text{MgAlF}_7$  | G  | 1938      | Denmark (Greenland) | <i>Meddelelser om Grønland</i> <b>119</b> (1938), 1   | <i>Journal of Solid State Chemistry</i> <b>43</b> (1982), 213  |
| Weddellite      | $\text{Ca}(\text{C}_2\text{O}_4) \cdot 2\text{H}_2\text{O}$  | G  | 1942      | Antarctica          | <i>Science</i> <b>95</b> (1942), 431  | <i>American Mineralogist</i> <b>99</b> (2014), 2               |
| Weeksite        | $(\text{K})_2(\text{UO}_2)_2(\text{Si}_5\text{O}_{13}) \cdot 4\text{H}_2\text{O}$                                    | A  | 1962 s.p. | USA                 | <i>American Mineralogist</i> <b>45</b> (1960), 39   | <i>American Mineralogist</i> <b>97</b> (2012), 750             |
| Wegscheiderite  | $\text{Na}_5\text{H}_3(\text{CO}_3)_4$   | A  | 1967 s.p. | USA                 | <i>American Mineralogist</i> <b>48</b> (1963), 800  | <i>Acta Crystallographica</i> <b>B46</b> (1990), 466           |
| Weibullite      | $\text{Ag}_{0.33}\text{Pb}_{5.33}\text{Bi}_{8.33}(\text{S},\text{Se})_{18}$  | Rd | 1980 s.p. | Sweden              | <i>Arkiv för Kemi, Mineralogi och Geologi</i> <b>3</b> (1910), 4                                    | <i>Canadian Mineralogist</i> <b>18</b> (1980), 1               |
| Weilerite       | $\text{BaAl}_3(\text{SO}_4)(\text{AsO}_4)(\text{OH})_6$  | Rd | 1987 s.p. | Germany             | <i>Jahreshefte des Geologischen Landesamtes in Baden-Württemberg</i> <b>4</b> (1961), 7             | <i>American Mineralogist</i> <b>72</b> (1987), 178             |
| Weilite         | $\text{Ca}(\text{AsO}_3\text{OH})$   | A  | 1963-006  | France / Germany    | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>86</b> (1963), 368 | <i>Acta Crystallographica</i> <b>B26</b> (1970), 403           |
| Weinebeneite    | $\text{CaBe}_3(\text{PO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$  | A  | 1990-049  | Austria             | <i>European Journal of Mineralogy</i> <b>4</b> (1992), 1275   |  |
| Weishanite      | $(\text{Au},\text{Ag})_{1.2}\text{Hg}_{0.8}$   | A  | 1982-076  | China               | <i>Acta Mineralogica Sinica</i> <b>4</b> (1984), 102  | <i>Journal of the Less-Common Metals</i> <b>13</b> (1967), 1   |
| Weissbergite    | $\text{TlSbS}_2$   | A  | 1975-040  | USA                 | <i>American Mineralogist</i> <b>63</b> (1978), 720  | <i>Acta Crystallographica</i> <b>C39</b> (1983), 971           |
| Weissite        | $\text{Cu}_{2-x}\text{Te}$   | G  | 1927      | USA                 | <i>American Journal of Science</i> <b>13</b> (1927), 345  | <i>Mineralogical Magazine</i> <b>77</b> (2013), 475            |
| Welinite        | $\text{Mn}^{2+}_6(\text{W}^{6+}\square)_2(\text{SiO}_4)_2\text{O}_4(\text{OH})_2$                                    | Rd | 1966-002  | Sweden              | <i>Arkiv för Mineralogi och Geologi</i> <b>4</b> (1967), 407  | <i>American Mineralogist</i> <b>71</b> (1986), 1522            |
| Weloganite      | $\text{Na}_2\text{Sr}_3\text{Zr}(\text{CO}_3)_6 \cdot 3\text{H}_2\text{O}$   | A  | 1967-042  | Canada              | <i>Canadian Mineralogist</i> <b>9</b> (1968), 468   | <i>Canadian Mineralogist</i> <b>13</b> (1975), 209             |
| Welshite        | $\text{Ca}_4[\text{Mg}_9\text{Sb}^{5+}_3]\text{O}_4[\text{Si}_6\text{Be}_3\text{AlFe}^{3+}_2\text{O}_{36}]$          | A  | 1973-019  | Sweden              | <i>Mineralogical Magazine</i> <b>42</b> (1978), 129   | <i>American Mineralogist</i> <b>92</b> (2007), 80              |
| Wendwilsonite   | $\text{Ca}_2\text{Mg}(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$   | A  | 1985-047  | Morocco             | <i>American Mineralogist</i> <b>72</b> (1987), 217  | <i>European Journal of Mineralogy</i> <b>18</b> (2006), 471    |
| Wenkite         | $\text{Ba}_4\text{Ca}_6(\text{Si},\text{Al})_{20}\text{O}_{41}(\text{OH})_2(\text{SO}_4)_3 \cdot \text{H}_2\text{O}$ | A  | 1967 s.p. | Italy               | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>42</b> (1962), 269         | <i>Acta Crystallographica</i> <b>B30</b> (1974), 1262          |
| Weringite       | $\text{Mg}_2\text{Al}_{14}\text{Si}_4\text{B}_4\text{O}_{37}$  | A  | 1988-023  | South Africa        | <i>American Mineralogist</i> <b>75</b> (1990), 415  | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 577    |
| Wermlandite     | $\text{Mg}_7\text{Al}_2(\text{OH})_{18}[\text{Ca}(\text{H}_2\text{O})_6](\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$   | A  | 1970-007  | Sweden              | <i>Lithos</i> <b>4</b> (1971), 213  | <i>Zeitschrift für Kristallographie</i> <b>168</b> (1984), 133 |
| Wernerbaurite   | $\{(\text{NH}_4)_2[\text{Ca}_2(\text{H}_2\text{O})_{14}](\text{H}_2\text{O})_2\}\{\text{V}_{10}\text{O}_{28}\}$      | Rd | 2015 s.p. | USA                 | <i>Canadian Mineralogist</i> <b>51</b> (2013), 297  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 555             |
| Wernerkrauseite | $\text{CaFe}^{3+}_2\text{Mn}^{4+}\text{O}_6$   | A  | 2014-008  | Germany             | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 485   |  |
| Wesselsite      | $\text{SrCuSi}_4\text{O}_{10}$   | A  | 1994-055  | South Africa        | <i>Mineralogical Magazine</i> <b>60</b> (1996), 795   | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1769           |
| Westerveldite   | $\text{FeAs}$  | A  | 1971-017  | Spain               | <i>American Mineralogist</i> <b>57</b> (1972), 354  | <i>Acta Crystallographica</i> <b>B40</b> (1984), 14            |
| Wetherillite    | $\text{Na}_2\text{Mg}(\text{UO}_2)_2(\text{SO}_4)_4 \cdot 18\text{H}_2\text{O}$                                      | A  | 2014-044  | USA                 | <i>Mineralogical Magazine</i> <b>79</b> (2015), 695   |  |
| Wheatleyite     | $\text{Na}_2\text{Cu}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$   | A  | 1984-040  | USA                 | <i>American Mineralogist</i> <b>71</b> (1986), 1240   | <i>Acta Crystallographica</i> <b>B36</b> (1980), 2145          |
| Whelanite       | $\text{Cu}_2\text{Ca}_6[\text{Si}_6\text{O}_{17}(\text{OH})](\text{CO}_3)(\text{OH})_3(\text{H}_2\text{O})_2$        | A  | 1977-006  | USA                 | <i>American Mineralogist</i> <b>97</b> (2012), 2007   |  |

|                    |   |   |           |              |   |   |
|--------------------|---|---|-----------|--------------|---|---|
| Wherryite          | $Pb_7Cu_2(SO_4)_4(SiO_4)_2(OH)_2$   | G | 1950      | USA          | <i>American Mineralogist</i> <b>35</b> (1950), 93   | <i>Canadian Mineralogist</i> <b>32</b> (1994), 373                                      |
| Whewellite         | $Ca(C_2O_4) \cdot H_2O$   | A | 1967 s.p. | unknown      | An Elementary Introduction to Mineralogy. Longmans, London (1852), 523  | <i>Mineralogical Magazine</i> <b>69</b> (2005), 77                                      |
| Whitecapsite       | $H_{16}Fe^{2+}_5Fe^{3+}_{14}Sb^{3+}_6(AsO_4)_{18}O_{16} \cdot 120H_2O$                                      | A | 2012-030  | USA          | <i>European Journal of Mineralogy</i> <b>26</b> (2014), 577   |   |
| Whiteite-(CaFeMg)  | $CaFe^{2+}Mg_2Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$   | A | 1975-001  | Brazil       | <i>Mineralogical Magazine</i> <b>42</b> (1978), 309   | <i>Zeitschrift für Kristallographie</i> <b>226</b> (2011), 731                          |
| Whiteite-(CaMgMg)  | $CaMg_3Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$  | A | 2016-001  | USA          | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1513   |   |
| Whiteite-(CaMnMg)  | $CaMn^{2+}Mg_2Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$   | A | 1986-012  | USA          | <i>Canadian Mineralogist</i> <b>27</b> (1989), 699  |   |
| Whiteite-(CaMnMn)  | $CaMn^{2+}Mn^{2+}_2Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$  | A | 2011-002  | Germany      | <i>Mineralogical Magazine</i> <b>76</b> (2012), 2761  |   |
| Whiteite-(MnFeMg)  | $Mn^{2+}Fe^{2+}Mg_2Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$  | A | 1978 s.p. | Brazil       | <i>Mineralogical Magazine</i> <b>42</b> (1978), 309   |   |
| Whiteite-(MnMnMg)  | $Mn^{2+}Mn^{2+}Mg_2Al_2(PO_4)_4(OH)_2 \cdot 8H_2O$  | A | 2015-092  | Australia    | CNMNC Newsletter 29 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 199   |   |
| Whitlockite        | $Ca_9Mg(PO_3OH)(PO_4)_6$  | G | 1941      | USA          | <i>American Mineralogist</i> <b>26</b> (1941), 145  | <i>American Mineralogist</i> <b>93</b> (2008), 1300                                     |
| Whitmoreite        | $Fe^{2+}Fe^{3+}_2(PO_4)_2(OH)_2 \cdot 4H_2O$  | A | 1974-009  | USA          | <i>American Mineralogist</i> <b>59</b> (1974), 900  |   |
| Wickenburgite      | $Pb_3CaAl_2Si_{10}O_{27} \cdot 4H_2O$   | A | 1968-006  | USA          | <i>American Mineralogist</i> <b>53</b> (1968), 1433   | <i>Canadian Mineralogist</i> <b>32</b> (1994), 525                                      |
| Wickmanite         | $Mn^{2+}Sn^{4+}(OH)_6$  | A | 1965-024  | Sweden       | Arkiv för Mineralogi och Geologi <b>4</b> (1967), 395   | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1203                                     |
| Wicksite           | $NaCa_2Fe^{2+}_2(Fe^{3+}, Mn^{2+}, Fe^{2+})_4(PO_4)_6 \cdot 2H_2O$  | A | 1979-019  | Canada       | <i>Canadian Mineralogist</i> <b>19</b> (1981), 377  | <i>Canadian Mineralogist</i> <b>35</b> (1997), 777                                      |
| Widenmannite       | $Pb_2(OH)_2[(UO_2)(CO_3)_2]$  | A | 1974-008  | Germany      | Schweizerische Mineralogische und Petrographische Mitteilungen <b>56</b> (1976), 167  | <i>American Mineralogist</i> <b>99</b> (2014), 276                                      |
| Widgiemoolthalite  | $Ni_5(CO_3)_4(OH)_2 \cdot 4 \cdot 5H_2O$  | A | 1992-006  | Australia    | <i>American Mineralogist</i> <b>78</b> (1993), 819  |   |
| Wightmanite        | $Mg_5O(BO_3)(OH)_5 \cdot 2H_2O$   | A | 1967 s.p. | USA          | <i>American Mineralogist</i> <b>47</b> (1962), 718  | <i>Nature Physical Science</i> <b>236</b> (1972), 25                                    |
| Wiklundite         | $Pb_2(Mn^{2+}, Zn)_3(Fe^{3+}, Mn^{2+})_2(Mn^{2+}, Mg)_{19}(As^{3+}O_3)_2 [(Si, As^{5+})O_4]_6(OH)_{18}Cl_6$ | A | 2015-057  | Sweden       | <i>Mineralogical Magazine</i> <b>81</b> (2017), 841   |   |
| Wilancookite       | $(Ba, K, Na)_8(Ba, Li, \square)_6Be_{24}P_{24}O_{96} \cdot 32H_2O$  | A | 2015-034  | Brazil       | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 923   |   |
| Wilcoxite          | $MgAl(SO_4)_2F \cdot 17H_2O$  | A | 1979-070  | USA          | <i>Mineralogical Magazine</i> <b>47</b> (1983), 37  | <i>Canadian Mineralogist</i> <b>51</b> (2013), 107                                      |
| Wildenauerite      | $Zn(Fe^{3+}, Mn^{2+})_2MnFe^{3+}(PO_4)_3(OH)_3(H_2O)_6 \cdot 2H_2O$   | A | 2017-058  | Germany      | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931 | <a href="https://doi.org/10.1180/mgm.2018.123">https://doi.org/10.1180/mgm.2018.123</a> |
| Wilhelmgümbelite   | $[ZnFe^{2+}Fe^{3+}_3(PO_4)_3(OH)_4(H_2O)_5] \cdot 2H_2O$  | A | 2015-072  | Germany      | <i>Mineralogical Magazine</i> <b>81</b> (2017), 287   |   |
| Wilhelmkleinite    | $ZnFe^{3+}_2(AsO_4)_2(OH)_2$  | A | 1997-034  | Namibia      | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1998), 558   | <i>Zeitschrift für Kristallographie</i> <b>215</b> (2000), 96                           |
| Wilhelmramsayite   | $Cu_3FeS_3 \cdot 2H_2O$   | A | 2004-033  | Russia       | <i>Proceedings of the Russian Mineralogical Society</i> <b>135(1)</b> (2006), 38  |   |
| Wilhelmvierlingite | $CaMn^{2+}Fe^{3+}(PO_4)_2(OH) \cdot 2H_2O$  | A | 1982-025  | Germany      | <i>Aufschluss</i> <b>34</b> (1983), 267   |   |
| Wilkinsonite       | $Na_4[Fe^{2+}_8Fe^{3+}_4]O_4[Si_{12}O_{36}]$  | A | 1988-053  | Australia    | <i>American Mineralogist</i> <b>75</b> (1990), 694  | <i>Acta Crystallographica</i> <b>E63</b> (2007), i122                                   |
| Wilkmanite         | $Ni_3Se_4$  | A | 1967 s.p. | Finland      | <i>Comptes Rendus de la Société Géologique de Finlande</i> <b>36</b> (1964), 113  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>94</b> (1960), 1147               |
| Willemite          | $Zn_2SiO_4$   | G | 1830      | Belgium      | <i>Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefaktenkunde</i> <b>1</b> (1830), 71   | <i>Acta Crystallographica</i> <b>B34</b> (1978), 3324                                   |
| Willemseite        | $Ni_3Si_4O_{10}(OH)_2$  | A | 1971 s.p. | South Africa | <i>National Institute for Metallurgy, Research Report</i> <b>352</b> (1968), 1  |   |

|                  |   |    |           |                |   |   |
|------------------|---|----|-----------|----------------|---|---|
| Willhendersonite | $\text{KCa}(\text{Si}_3\text{Al}_3)\text{O}_{12}\cdot 5\text{H}_2\text{O}$  | A  | 1981-030  | Italy          | <i>American Mineralogist</i> <b>69</b> (1984), 186  | <i>Zeolites</i> <b>19</b> (1997), 75  |
| Willyamite       | $\text{CoSbS}$  | Rd | 1970 s.p. | Australia      | <i>Proceedings of the Royal Society of New South Wales</i> <b>27</b> (1893), 366  | <i>Proceedings of the Australasian Institute of Mining and Metallurgy</i> <b>233</b> (1970), 95       |
| Wiluite          | $\text{Ca}_{19}(\text{Al},\text{Mg})_{13}(\text{B},\square,\text{Al})_5(\text{SiO}_4)_{10}(\text{Si}_2\text{O}_7)_4(\text{O},\text{OH})_{10}$ | A  | 1997-026  | Russia         | <i>Canadian Mineralogist</i> <b>36</b> (1998), 1301   | <i>Canadian Mineralogist</i> <b>43</b> (2005), 1457   |
| Winchite         | $\square(\text{NaCa})(\text{Mg}_4\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$   | Rd | 2012 s.p. | India          | <i>Transactions of the Mining and Geological Institute of India</i> <b>1</b> (1906), 69                                 | <i>Mineralogical Magazine</i> <b>50</b> (1986), 173   |
| Windhoekite      | $\text{Ca}_2\text{Fe}^{3+}_{3-x}[\text{Si}_8\text{O}_{20}](\text{OH})_4\cdot 10\text{H}_2\text{O}$  | A  | 2010-083  | Namibia        | <i>European Journal of Mineralogy</i> <b>24</b> (2012), 171   |   |
| Winstanleyite    | $\text{TiTe}^{4+}_3\text{O}_8$  | A  | 1979-001  | USA            | <i>Mineralogical Magazine</i> <b>43</b> (1979), 453   | <i>Canadian Mineralogist</i> <b>41</b> (2004), 1469   |
| Wiserite         | $\text{Mn}^{2+}_{14}(\text{B}_2\text{O}_5)_4(\text{OH})_8\cdot (\text{Si},\text{Mg})(\text{O},\text{OH})_4\text{Cl}$                          | G  | 1845      | Switzerland    | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 493  | <i>American Mineralogist</i> <b>74</b> (1989), 1351   |
| Witherite        | $\text{Ba}(\text{CO}_3)$  | G  | 1789      | United Kingdom | <i>Bergmannisches Journal</i> <b>1</b> (1789), 369  | <i>Physics and Chemistry of Minerals</i> <b>34</b> (2007), 573  |
| Wittichenite     | $\text{Cu}_3\text{BiS}_3$   | G  | 1853      | Germany        | Das Mohs'sche Mineralsystem, dem gegenwärtigen Standpunkte der Wissenschaft gemäss bearbeitet. Gerold, Wien (1853), 118 | <i>Acta Crystallographica</i> <b>B29</b> (1973), 2528   |
| Wittite          | $\text{Pb}_8\text{Bi}_{10}(\text{S},\text{Se})_{23}$  | Q  | 1924      | Sweden         | <i>Arkiv för Kemi, Mineralogi och Geologi</i> <b>9</b> (1924), 2  | <i>American Mineralogist</i> <b>65</b> (1980), 789  |
| Witzkeite        | $\text{Na}_4\text{K}_4\text{Ca}(\text{NO}_3)_2(\text{SO}_4)_4\cdot 2\text{H}_2\text{O}$   | A  | 2011-084  | Chile          | <i>American Mineralogist</i> <b>97</b> (2012), 1783   |   |
| Wodginite        | $\text{Mn}^{2+}\text{Sn}^{4+}\text{Ta}_2\text{O}_8$   | A  | 1967 s.p. | Australia      | <i>Canadian Mineralogist</i> <b>7</b> (1963), 390   | <i>Canadian Mineralogist</i> <b>30</b> (1992), 597  |
| Wöhlerite        | $\text{Na}_2\text{Ca}_4\text{Zr}(\text{Nb},\text{Ti})(\text{Si}_2\text{O}_7)_2(\text{O},\text{F})_4$  | G  | 1843      | Norway         | <i>Annalen der Physik und Chemie</i> <b>59</b> (1843), 327  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>26</b> (1979), 109               |
| Wolfeite         | $\text{Fe}^{2+}_2(\text{PO}_4)(\text{OH})$  | G  | 1949      | USA            | <i>American Mineralogist</i> <b>34</b> (1949), 692  | <i>Acta Crystallographica</i> <b>C63</b> (2007), i119   |
| Wollastonite     | $\text{CaSiO}_3$  | A  | 1962 s.p. | Romania        | <i>Nouveau Dictionnaire d'Histoire Naturelle</i> <b>20</b> (1818), 28   | <i>Zeitschrift für Kristallographie</i> <b>168</b> (1984), 93   |
| Wölsendorfite    | $\text{Pb}_7(\text{UO}_2)_{14}\text{O}_{19}(\text{OH})_4\cdot 12\text{H}_2\text{O}$   | G  | 1957      | Germany        | <i>Comptes Rendus de l'Académie des Sciences de Paris</i> <b>244</b> (1957), 2942                                       | <i>American Mineralogist</i> <b>84</b> (1999), 1661   |
| Wonesite         | $(\text{Na},\text{K},\square)(\text{Mg},\text{Fe},\text{Al})_6(\text{Si},\text{Al})_8\text{O}_{20}(\text{OH},\text{F})_4$                     | A  | 1979-007a | USA            | <i>American Mineralogist</i> <b>66</b> (1981), 100  | <i>American Mineralogist</i> <b>90</b> (2005), 725  |
| Woodallite       | $\text{Mg}_6\text{Cr}_2(\text{OH})_{16}\text{Cl}_2\cdot 4\text{H}_2\text{O}$  | A  | 2000-042  | Australia      | <i>Mineralogical Magazine</i> <b>65</b> (2001), 427   |   |
| Woodhouseite     | $\text{CaAl}_3(\text{SO}_4)(\text{PO}_4)(\text{OH})_6$  | Rd | 1987 s.p. | USA            | <i>American Mineralogist</i> <b>22</b> (1937), 939  | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>185</b> (2009), 313                             |
| Woodruffite      | $\text{Zn}_2(\text{Mn}^{4+},\text{Mn}^{3+})_5\text{O}_{10}\cdot 4\text{H}_2\text{O}$  | G  | 1953      | USA            | <i>American Mineralogist</i> <b>38</b> (1953), 761  | <i>American Mineralogist</i> <b>88</b> (2003), 1697   |
| Woodwardite      | $(\text{Cu}_{1-x}\text{Al}_x)(\text{SO}_4)_{x/2}(\text{OH})_2\cdot n\text{H}_2\text{O}$ ( $x < 0.5$ , $n < 3x/2$ )                            | G  | 1866      | United Kingdom | <i>Journal of the Chemical Society</i> <b>19</b> (1866), 130  | <i>Doklady Akademii Nauk SSSR</i> <b>256</b> (1981), 1221   |
| Wooldridgeite    | $\text{Na}_2\text{CaCu}^{2+}_2(\text{P}_2\text{O}_7)_2\cdot 10\text{H}_2\text{O}$   | A  | 1997-037  | United Kingdom | <i>Mineralogical Magazine</i> <b>63</b> (1999), 13  | <i>Canadian Mineralogist</i> <b>37</b> (1999), 73   |
| Wopmayite        | $\text{Ca}_6\text{Na}_3\square\text{Mn}(\text{PO}_4)_3(\text{PO}_3\text{OH})_4$   | A  | 2011-093  | Canada         | <i>Canadian Mineralogist</i> <b>51</b> (2013), 93   |   |
| Wrightite        | $\text{K}_2\text{Al}_2\text{O}(\text{AsO}_4)_2$   | A  | 2015-120  | Russia         | CNMNC Newsletter 31 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 691   | <a href="https://doi.org/10.1180/minmag.2017.081.091">https://doi.org/10.1180/minmag.2017.081.091</a> |
| Wroewolfeite     | $\text{Cu}_4(\text{SO}_4)(\text{OH})_6\cdot 2\text{H}_2\text{O}$  | A  | 1973-064  | USA            | <i>Mineralogical Magazine</i> <b>40</b> (1975), 1   | <i>American Mineralogist</i> <b>70</b> (1985), 1050   |
| Wulfenite        | $\text{PbMoO}_4$  | G  | 1845      | Austria        | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 504  | <i>Mineralogical Magazine</i> <b>72</b> (2008), 987   |
| Wulfite          | $\text{K}_3\text{NaCu}_4\text{O}_2(\text{SO}_4)_4$  | A  | 2013-035  | Russia         | <i>Canadian Mineralogist</i> <b>52</b> (2014), 699  |   |

|               |  |    |           |                                  |  |   |
|---------------|--|----|-----------|----------------------------------|--|---|
| Wülfingite    | Zn(OH) <sub>2</sub>  | A  | 1983-070  | Germany                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1985), 145  | <i>Zeitschrift für Anorganische und Allgemeine Chemie</i> <b>631</b> (2005), 1247 |
| Wumuite       | KAl <sub>0.33</sub> W <sub>2.67</sub> O <sub>9</sub>   | A  | 2017-067a | China                            | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879  |   |
| Wupatkiite    | CoAl <sub>2</sub> (SO <sub>4</sub> ) <sub>4</sub> ·22H <sub>2</sub> O  | A  | 1994-019  | USA                              | <i>Mineralogical Magazine</i> <b>59</b> (1995), 553  |   |
| Wurtzite      | ZnS  | G  | 1861      | Bolivia                          | <i>Comptes Rendus de L'Académie des Sciences de Paris</i> <b>52</b> (1861), 983  | <i>Acta Crystallographica</i> <b>C45</b> (1989), 1867                             |
| Wüstite       | FeO  | G  | 1927      | Germany                          | <i>Zeitschrift für anorganische und allgemeine Chemie</i> <b>166</b> (1927), 113   | <i>Acta Crystallographica</i> <b>B38</b> (1982), 1451                             |
| Wuyanzhiite   | Cu <sub>2</sub> S  | A  | 2017-081  | China                            | CNMNC Newsletter 40 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1577; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 1083 |   |
| Wyartite      | CaU <sup>5+</sup> (UO <sub>2</sub> ) <sub>2</sub> (CO <sub>3</sub> )O <sub>4</sub> (OH)·7H <sub>2</sub> O                                | A  | 1962 s.p. | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>82</b> (1959), 80                                       | <i>American Mineralogist</i> <b>84</b> (1999), 1456                               |
| Wycheproofite | NaAlZr(PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> ·H <sub>2</sub> O  | A  | 1993-024  | Australia                        | <i>Mineralogical Magazine</i> <b>58</b> (1994), 635  | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 1029                      |
| Wyllieite     | (Na,Ca,Mn <sup>2+</sup> ,□) <sub>2</sub> Mn <sup>2+</sup> Al(PO <sub>4</sub> ) <sub>3</sub>  | A  | 1972-015  | USA                              | <i>Mineralogical Record</i> <b>4</b> (1973), 131   |   |
| Xanthiosite   | Ni <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub>   | Rd | 1965 s.p. | Germany                          | <i>Annales des Mines</i> <b>15</b> (1869), 405   | <i>Acta Crystallographica</i> <b>B47</b> (1991), 457                              |
| Xanthoconite  | Ag <sub>3</sub> AsS <sub>3</sub>   | G  | 1840      | Germany                          | <i>Journal für Praktische Chemie</i> <b>20</b> (1840), 67  | <i>Acta Crystallographica</i> <b>B24</b> (1968), 77                               |
| Xanthoxenite  | Ca <sub>4</sub> Fe <sup>3+</sup> <sub>2</sub> (PO <sub>4</sub> ) <sub>4</sub> (OH) <sub>2</sub> ·3H <sub>2</sub> O                       | Rd | 1975-004a | USA                              | <i>Mineralogical Magazine</i> <b>42</b> (1978), 309  |   |
| Xenophyllite  | Na <sub>4</sub> Fe <sub>7</sub> (PO <sub>4</sub> ) <sub>6</sub>  | A  | 2006-006  | Ukraine (meteorite)              | nyp  |   |
| Xenotime-(Y)  | Y(PO <sub>4</sub> )  | A  | 1987 s.p. | Norway                           | Traité Élémentaire de Minéralogie, 2nd ed. Verdière, Paris (1832), 552   | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Xenotime-(Yb) | Yb(PO <sub>4</sub> )   | A  | 1998-049  | Canada                           | <i>Canadian Mineralogist</i> <b>37</b> (1999), 1303  | <i>American Mineralogist</i> <b>80</b> (1995), 21                                 |
| Xiangjiangite | Fe <sup>3+</sup> (UO <sub>2</sub> ) <sub>4</sub> (PO <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH)·22H <sub>2</sub> O | A  | 1982 s.p. | China                            | <i>Scientia Geologica Sinica</i> <b>2</b> (1978), 183  |   |
| Xieite        | FeCr <sub>2</sub> O <sub>4</sub>   | A  | 2007-056  | China (meteorite)                | <i>Chinese Science Bulletin</i> <b>53</b> (2008), 3341   | <i>Geochimica et Cosmochimica Acta</i> <b>67</b> (2003), 3937                     |
| Xifengite     | Fe <sub>5</sub> Si <sub>3</sub>  | A  | 1983-086  | China                            | <i>Acta Petrologica Mineralogica et Analytica</i> <b>3</b> (1984), 231   | <i>Nature</i> <b>152</b> (1943), 413  |
| Xilingolite   | Pb <sub>3</sub> Bi <sub>2</sub> S <sub>6</sub>   | A  | 1982-024  | China                            | <i>Acta Petrologica Mineralogica et Analytica</i> <b>1</b> (1982), 14  | <i>Canadian Mineralogist</i> <b>39</b> (2001), 1653                               |
| Ximengite     | Bi(PO <sub>4</sub> )   | A  | 1985-004  | China                            | <i>Acta Mineralogica Sinica</i> <b>9</b> (1989), 15  | <i>Zeitschrift für Kristallographie</i> <b>117</b> (1962), 371                    |
| Xingzhongite  | Pb <sup>2+</sup> Ir <sup>3+</sup> <sub>2</sub> S <sub>4</sub>  | Q  | 1980 s.p. | China                            | <i>Acta Geologica Sinica</i> <b>2</b> (1974), 202  | <i>Acta Geologica Sinica</i> <b>4</b> (1978), 326                                 |
| Xitieshanite  | Fe <sup>3+</sup> (SO <sub>4</sub> )Cl·6H <sub>2</sub> O  | A  | 1982-044  | China                            | <i>Acta Mineralogica Sinica</i> <b>2</b> (1982), 241   | <i>Kexue Tongbao</i> <b>33</b> (1988), 502  |
| Xocolatlite   | Ca <sub>2</sub> Mn <sup>4+</sup> <sub>2</sub> Te <sup>6+</sup> <sub>2</sub> O <sub>12</sub> ·H <sub>2</sub> O                            | A  | 2007-020  | Mexico                           | <i>American Mineralogist</i> <b>93</b> (2008), 1911  |   |
| Xocomecatlite | Cu <sub>3</sub> (Te <sup>6+</sup> O <sub>4</sub> )(OH) <sub>4</sub>  | A  | 1974-048  | Mexico                           | <i>Mineralogical Magazine</i> <b>40</b> (1975), 221  |   |
| Xonotlite     | Ca <sub>6</sub> Si <sub>6</sub> O <sub>17</sub> (OH) <sub>2</sub>  | G  | 1866      | Mexico                           | <i>Zeitschrift der Deutschen Geologischen Gesellschaft</i> <b>18</b> (1866), 33  | <i>Zeitschrift für Kristallographie</i> <b>216</b> (2001), 396                    |
| Yafsoanite    | Ca <sub>3</sub> Te <sup>6+</sup> <sub>2</sub> (ZnO <sub>4</sub> ) <sub>3</sub>   | A  | 1981-022  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 118  | <i>Mineralogy and Petrology</i> <b>40</b> (1989), 111                             |
| Yagiite       | NaMg <sub>2</sub> (AlMg <sub>2</sub> Si <sub>12</sub> )O <sub>30</sub>   | A  | 1968-020  | Spain                            | <i>American Mineralogist</i> <b>54</b> (1969), 14  |   |



|                    |   |    |           |                |   |   |
|--------------------|---|----|-----------|----------------|---|---|
| Yakhontovite       | $(Ca,Na,K)_{0.2}(Cu,Fe,Mg)_2Si_4O_{10}(OH)_2 \cdot 3H_2O$ | A  | 1984-032a | Russia         | <i>Mineralogicheskii Zhurnal</i> <b>8</b> (1986), 80  |   |
| Yakovenchukite-(Y) | $K_3NaCaY_2Si_{12}O_{30} \cdot 4H_2O$                     | A  | 2006-002  | Russia         | <i>American Mineralogist</i> <b>92</b> (2007), 1525   |   |
| Yancowinnaite      | $PbCuAl(AsO_4)_2OH \cdot H_2O$                            | A  | 2010-030  | Australia      | <i>Australian Journal of Mineralogy</i> <b>17</b> (2015), 73  |   |
| Yangite            | $PbMnSi_3O_8 \cdot H_2O$                                  | A  | 2012-052  | Namibia        | <i>American Mineralogist</i> <b>101</b> (2016), 2539  |   |
| Yangzhumingite     | $KMg_{2.5}Si_4O_{10}F_2$                                  | A  | 2009-017  | China          | <i>European Journal of Mineralogy</i> <b>23</b> (2011), 467   |   |
| Yanomamite         | $In(AsO_4) \cdot 2H_2O$                                   | A  | 1990-052  | Brazil         | <i>European Journal of Mineralogy</i> <b>6</b> (1994), 245  | <i>Journal of Chemical Crystallography</i> <b>31</b> (2002), 45                             |
| Yarlongite         | $(Cr_4Fe_4Ni)C_4$   | A  | 2007-035  | China          | <i>Acta Geologica Sinica</i> <b>83</b> (2008), 52   | <i>Science in China, Ser. D</i> <b>48</b> (2005), 338                                       |
| Yaroshevskite      | $Cu_9O_2(VO_4)_4Cl_2$                                     | A  | 2012-003  | Russia         | <i>Mineralogical Magazine</i> <b>77</b> (2013), 107   |   |
| Yaroslavite        | $Ca_3Al_2F_{10}(OH)_2 \cdot H_2O$                         | A  | 1968 s.p. | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>95</b> (1966), 39   |   |
| Yarrowite          | $Cu_9S_8$   | A  | 1978-022  | Canada         | <i>Canadian Mineralogist</i> <b>18</b> (1980), 511  |   |
| Yarzhemskiite      | $K[B_5O_7(OH)_2] \cdot H_2O$                              | A  | 2018-019  | Kazakhstan     | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Yavapaiite         | $KFe^{3+}(SO_4)_2$  | A  | 1962 s.p. | USA            | <i>American Mineralogist</i> <b>44</b> (1959), 1105   | <i>American Mineralogist</i> <b>56</b> (1971), 1917   |
| Yazganite          | $NaMgFe^{3+}_2(AsO_4)_3 \cdot H_2O$                       | A  | 2003-033  | Turkey         | <i>European Journal of Mineralogy</i> <b>17</b> (2005), 367   |   |
| Yeatmanite         | $Zn_8Mn^{2+}_9Sb^{5+}_2O_{12}(SiO_4)_4$                   | G  | 1938      | USA            | <i>American Mineralogist</i> <b>23</b> (1938), 527  | <i>Mineralogical Journal</i> <b>13</b> (1986), 53   |
| Yecoraite          | $Fe^{3+}_3Bi_5O_9(Te^{4+}O_3)(Te^{6+}O_4)_2 \cdot 9H_2O$  | A  | 1983-062  | Mexico         | <i>Boletín de la Sociedad Mexicana de Mineralogía</i> <b>1</b> (1985), 10   |   |
| Yedlinite          | $Pb_6Cr(Cl,OH)_6(OH,O)_8$                                 | A  | 1974-001  | USA            | <i>American Mineralogist</i> <b>59</b> (1974), 1157   | <i>American Mineralogist</i> <b>59</b> (1974), 1160   |
| Ye'elimite         | $Ca_4Al_6O_{12}(SO_4)$                                    | A  | 1984-052  | Israel         | <i>Geological Survey of Israel, Current Research</i> (1984), 1  | <i>Kristall und Technik</i> <b>7</b> (1972), 229  |
| Yegorovite         | $Na_4[Si_2O_4(OH)_2]_2 \cdot 7H_2O$                       | A  | 2008-033  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>138(3)</b> (2009), 82  | <i>Doklady Earth Sciences</i> <b>427</b> (2009), 814  |
| Yeomanite          | $Pb_2O(OH)Cl$   | A  | 2013-024  | United Kingdom | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1203  |   |
| Yimengite          | $K(Cr, Ti, Fe, Mg)_{12}O_{19}$                            | A  | 1982-046  | China          | <i>Chinese Science Bulletin [Kexue Tongbao]</i> <b>28</b> (1983), 932   |   |
| Yingjiangite       | $K_2Ca(UO_2)_7(PO_4)_4(OH)_6 \cdot 6H_2O$                 | A  | 1989-001  | China          | <i>Acta Mineralogica Sinica</i> <b>10</b> (1990), 102   | <i>Journal of Raman Spectroscopy</i> <b>39</b> (2008), 495                                  |
| Yixunite           | $Pt_3In$  | A  | 1995-042  | China          | <i>Acta Geologica Sinica</i> <b>71</b> (1997), 332  | <i>Acta Geologica Sinica</i> <b>48</b> (1974), 202  |
| Yoderite           | $(MgAl_3)(MgAl)Al_2O_2(SiO_4)_4(OH)_2$                    | A  | 1962 s.p. | Tanzania       | <i>Mineralogical Magazine</i> <b>32</b> (1959), 282   | <i>American Mineralogist</i> <b>67</b> (1982), 76   |
| Yofortierite       | $Mn^{2+}_5Si_8O_{20}(OH)_2 \cdot 7H_2O$                   | A  | 1974-045  | Canada         | <i>Canadian Mineralogist</i> <b>13</b> (1975), 68   | <i>Canadian Mineralogist</i> <b>51</b> (2013), 243  |
| Yoshimuraite       | $Ba_4Mn^{2+}_4Ti_2(Si_2O_7)_2(PO_4)_2O_2(OH)_2$           | Rd | 2016 s.p. | Japan          | <i>Mineralogical Journal</i> <b>3</b> (1961), 156   | <i>Canadian Mineralogist</i> <b>52</b> (2014), 569  |
| Yoshiokaite        | $Ca_{1-x}(Al, Si)_2O_4$                                   | A  | 1989-043  | Moon           | <i>American Mineralogist</i> <b>75</b> (1990), 676  | <i>American Mineralogist</i> <b>75</b> (1990), 1186   |
| Yttriaite-(Y)      | $Y_2O_3$  | A  | 2010-039  | Russia         | <i>American Mineralogist</i> <b>96</b> (2011), 1166   |   |
| Yttrialite-(Y)     | $Y_2Si_2O_7$  | A  | 1987 s.p. | USA            | <i>American Journal of Science</i> <b>138</b> (1889), 477   | <i>Kristallografiya</i> <b>16</b> (1971), 905   |
| Yttrocolumbite-(Y) | $(Y, U, Fe^{2+})(Nb, Ta)O_4$                              | Q  | 1987 s.p. | Mozambique     | A System of Mineralogy. Durrie & Peck and Herrick & Noyes, New Haven (1837), 370  | <i>Memorias da Academia das Ciencias de Lisboa, Classe de Ciencias</i> <b>1</b> (1937), 369 |

|                     |   |    |           |                                  |  |   |
|---------------------|---|----|-----------|----------------------------------|--|---|
| Yttrocrasite-(Y)    | (Y,Th,Ca,U)(Ti,Fe) <sub>2</sub> (O,OH) <sub>6</sub>   | Q  | 1987 s.p. | USA                              | <i>American Journal of Science</i> <b>22</b> (1906), 515   |   |
| Yttrotantalite-(Y)  | (Y,U,Fe <sup>2+</sup> )(Ta,Nb)(O,OH) <sub>4</sub>   | Rn | 1987 s.p. | Sweden                           | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> <b>23</b> (1802), 63  | <i>Acta Crystallographica</i> <b>23</b> (1967), 939                                     |
| Yttrotungstite-(Ce) | CeW <sub>2</sub> O <sub>6</sub> (OH) <sub>3</sub>   | Rn | 1970-008  | Uganda                           | <i>Bulletin de la Société Géologique de Finlande</i> <b>42</b> (1970), 223   |   |
| Yttrotungstite-(Y)  | Y(W,Fe,Si,Al,Ti) <sub>2</sub> (O,OH,H <sub>2</sub> O) <sub>9</sub>  | A  | 1987 s.p. | Malaysia                         | <i>Colonial Geology and Mineral Resources</i> <b>1</b> (1950), 50  | <i>Mineralogical Magazine</i> <b>38</b> (1971), 261                                     |
| Yuanfullite         | Mg(Fe <sup>3+</sup> ,Al)O(BO <sub>3</sub> )   | A  | 1994-001  | China                            | <i>Acta Petrologica et Mineralogica</i> <b>13</b> (1994), 328  | <i>European Journal of Mineralogy</i> <b>11</b> (1999), 483                             |
| Yuanjiangite        | AuSn  | A  | 1993-028  | China                            | <i>Acta Petrologica et Mineralogica</i> <b>13</b> (1994), 232  |   |
| Yugawaralite        | Ca(Si <sub>6</sub> Al <sub>2</sub> )O <sub>16</sub> ·4H <sub>2</sub> O  | A  | 1997 s.p. | Japan                            | <i>Science Reports of the Yokohama National University, ser. II</i> <b>1</b> (1952), 69  | <i>Zeitschrift für Kristallographie</i> <b>174</b> (1986), 265                          |
| Yukonite            | Ca <sub>2</sub> Fe <sup>3+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>3</sub> (OH) <sub>4</sub> ·4H <sub>2</sub> O   | G  | 1913      | Canada                           | <i>Transactions of the Royal Society of Canada, Ser. III</i> <b>7</b> (1913), 13   | <i>Canadian Mineralogist</i> <b>47</b> (2009), 39                                       |
| Yuksporite          | K <sub>4</sub> (Ca,Na) <sub>14</sub> (Sr,Ba) <sub>2</sub> (□,Mn,Fe)(Ti,Nb) <sub>4</sub> (O,OH) <sub>4</sub> (Si <sub>6</sub> O <sub>17</sub> ) <sub>2</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>3</sub> (H <sub>2</sub> O,OH) <sub>3</sub> | G  | 1923      | Russia                           | <i>Transactions of the Northern Scientific and Economic Expedition</i> <b>16</b> (1923), 16  | <i>American Mineralogist</i> <b>89</b> (2004), 1561                                     |
| Yurmarinite         | Na <sub>7</sub> (Fe <sup>3+</sup> ,Mg,Cu) <sub>4</sub> (AsO <sub>4</sub> ) <sub>6</sub>   | A  | 2013-033  | Russia                           | <i>Mineralogical Magazine</i> <b>78</b> (2014), 905  |   |
| Yushkinite          | (Mg,Al)(OH) <sub>2</sub> VS <sub>2</sub>  | A  | 1983-050  | Russia                           | <i>Mineralogicheskii Zhurnal</i> <b>6</b> (1984), 91   | <i>Mineralogical Magazine</i> <b>63</b> (1999), 879                                     |
| Yusupovite          | Na <sub>2</sub> Zr(Si <sub>6</sub> O <sub>15</sub> )(H <sub>2</sub> O) <sub>3</sub>   | A  | 2014-022  | Tajikistan                       | <i>American Mineralogist</i> <b>100</b> (2015), 1502   |   |
| Yvonite             | Cu(AsO <sub>3</sub> OH)·2H <sub>2</sub> O   | A  | 1995-012  | France                           | <i>American Mineralogist</i> <b>83</b> (1998), 383   |   |
| Zabińskiite         | Ca[Al <sub>0.5</sub> (Ta,Nb) <sub>0.5</sub> ](SiO <sub>4</sub> )O   | A  | 2015-033  | Poland                           | <i>Mineralogical Magazine</i> <b>81</b> (2017), 591  |   |
| Zabuyelite          | Li <sub>2</sub> (CO <sub>3</sub> )  | A  | 1985-018  | China                            | <i>Acta Mineralogica Sinica</i> <b>7</b> (1987), 221   | <i>Zeitschrift für Kristallographie</i> <b>150</b> (1979), 133                          |
| Zaccagnaite         | Zn <sub>4</sub> Al <sub>2</sub> (OH) <sub>12</sub> (CO <sub>3</sub> ) <sub>3</sub> ·3H <sub>2</sub> O   | A  | 1997-019  | Italy                            | <i>American Mineralogist</i> <b>86</b> (2001), 1293  | <i>American Mineralogist</i> <b>97</b> (2012), 513                                      |
| Zaccariniite        | RhNiAs  | A  | 2011-086  | Dominican Republic               | <i>Canadian Mineralogist</i> <b>50</b> (2012), 1321  |   |
| Zadovite            | BaCa <sub>6</sub> [(SiO <sub>4</sub> )(PO <sub>4</sub> )](PO <sub>4</sub> ) <sub>2</sub> F  | A  | 2013-031  | Israel                           | <i>Mineralogical Magazine</i> <b>79</b> (2015), 1073   |   |
| Zagamiite           | CaAl <sub>2</sub> Si <sub>3.5</sub> O <sub>11</sub>   | A  | 2015-022a | Morocco (meteorite)              | CNMNC Newsletter 36 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 403; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 339 |   |
| Zaherite            | Al <sub>12</sub> (SO <sub>4</sub> ) <sub>5</sub> (OH) <sub>26</sub> ·20H <sub>2</sub> O   | A  | 1977-002  | Pakistan                         | <i>American Mineralogist</i> <b>62</b> (1977), 1125  | <i>Mineralogical Magazine</i> <b>48</b> (1984), 131                                     |
| Zäirite             | BiFe <sup>3+</sup> <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub>   | A  | 1975-018  | Democratic Republic of the Congo | <i>Bulletin de la Société Française de Minéralogie et de Cristallographie</i> <b>98</b> (1975), 351                                    |   |
| Zakharovite         | Na <sub>4</sub> Mn <sup>2+</sup> <sub>5</sub> Si <sub>10</sub> O <sub>24</sub> (OH) <sub>6</sub> ·6H <sub>2</sub> O   | A  | 1981-049  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>111</b> (1982), 491  |   |
| Zálesiite           | CaCu <sub>6</sub> (AsO <sub>4</sub> ) <sub>2</sub> (AsO <sub>3</sub> OH)(OH) <sub>6</sub> ·3H <sub>2</sub> O  | A  | 1997-009  | Czech Republic                   | <i>Neues Jahrbuch für Mineralogie Abhandlungen</i> <b>175</b> (1999), 105  | <i>Acta Crystallographica</i> <b>C41</b> (1985), 161                                    |
| Zanazziite          | Ca <sub>2</sub> Be <sub>4</sub> Mg <sub>5</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>4</sub> ·6H <sub>2</sub> O  | A  | 1986-054  | Brazil                           | <i>Mineralogical Record</i> <b>21</b> (1990), 413  | <i>Tschermaks Mineralogische und Petrographische Mitteilungen</i> <b>22</b> (1975), 266 |
| Zangboite           | TiFeSi <sub>2</sub>   | A  | 2007-036  | China                            | <i>Canadian Mineralogist</i> <b>47</b> (2009), 1265  |   |
| Zapatalite          | Cu <sub>3</sub> Al <sub>4</sub> (PO <sub>4</sub> ) <sub>3</sub> (OH) <sub>9</sub> ·4H <sub>2</sub> O  | A  | 1971-023  | Mexico                           | <i>Mineralogical Magazine</i> <b>38</b> (1972), 541  |   |
| Zaratite            | Ni <sub>3</sub> (CO <sub>3</sub> )(OH) <sub>4</sub> ·4H <sub>2</sub> O  | Q  | 1851      | Spain                            | <i>Revista Minera</i> <b>1</b> (1851), 302   | <i>European Journal of Mineralogy</i> <b>25</b> (2013), 995                             |

|                   |   |   |           |                |  |   |
|-------------------|---|---|-----------|----------------|--|---|
| Zavaliáite        | $Mn^{2+}_3(PO_4)_2$   | A | 2011-012  | Argentina      | <i>Canadian Mineralogist</i> <b>50</b> (2012), 1445  |   |
| Zavaritskite      | BiOF  | A | 1967 s.p. | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>146</b> (1962), 680   | <i>Acta Chemica Scandinavica</i> <b>18</b> (1964), 1823                           |
| Zdeněkite         | $NaPbCu_5(AsO_4)_4Cl \cdot 5H_2O$   | A | 1992-037  | France         | <i>European Journal of Mineralogy</i> <b>7</b> (1995), 553   | <i>Crystallography Reports</i> <b>48</b> (2003), 939                              |
| Zektzerite        | $NaLiZrSi_6O_{15}$  | A | 1976-034  | USA            | <i>American Mineralogist</i> <b>62</b> (1977), 416   | <i>American Mineralogist</i> <b>63</b> (1978), 304                                |
| Zellerite         | $Ca(UO_2)(CO_3)_2 \cdot 5H_2O$  | A | 1965-031  | USA            | <i>American Mineralogist</i> <b>51</b> (1966), 1567  |   |
| Zemannite         | $Mg_{0.5}ZnFe^{3+}(Te^{4+}O_3)_3 \cdot 4.5H_2O$                           | A | 1968-009  | Mexico         | <i>Canadian Mineralogist</i> <b>10</b> (1969), 139   | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 53                        |
| Zemkorite         | $Na_2Ca(CO_3)_2$  | A | 1985-041  | Russia         | <i>Doklady Akademii Nauk SSSR</i> <b>301</b> (1988), 188   | <i>American Mineralogist</i> <b>87</b> (2002), 1384                               |
| Zenzénite         | $Pb_3Fe^{3+}_4Mn^{4+}_3O_{15}$  | A | 1990-031  | Sweden         | <i>Canadian Mineralogist</i> <b>29</b> (1991), 347   |   |
| Zeophyllite       | $Ca_{13}Si_{10}O_{28}(OH)_2F_8 \cdot 6H_2O$                               | G | 1902      | Czech Republic | <i>Sitzungsberichte der Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Klasse</i> <b>111</b> (1902), 334 | <i>Acta Crystallographica</i> <b>B28</b> (1972), 2726                             |
| Zeravshanite      | $Na_2Cs_4Zr_3Si_{18}O_{45} \cdot 2H_2O$                                   | A | 2003-034  | Tajikistan     | <i>New Data on Minerals</i> <b>39</b> (2004), 21   | <i>Canadian Mineralogist</i> <b>42</b> (2004), 125                                |
| Zeunerite         | $Cu(UO_2)_2(AsO_4)_2 \cdot 12H_2O$  | G | 1872      | Germany        | <i>Neues Jahrbuch für Mineralogie</i> (1872), 207  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 489                                |
| Zhanghengite      | CuZn  | A | 1985-049  | China          | <i>Acta Mineralogica Sinica</i> <b>6</b> (1986), 220   |   |
| Zhanghuifenite    | $Na_3Mn^{2+}_4Mg_2Al(PO_4)_6$   | A | 2016-074  | Argentina      | CNMNC Newsletter 34 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1315   |   |
| Zhangpeishanite   | BaFCl   | A | 2006-045  | China          | <i>European Journal of Mineralogy</i> <b>20</b> (2008), 1141   | <i>Acta Crystallographica</i> <b>B30</b> (1974), 2786                             |
| Zharchikhite      | Al(OH) <sub>2</sub> F   | A | 1986-059  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>117</b> (1988), 79   |   |
| Zhemchuzhnikovite | $NaMgAl(C_2O_4)_3 \cdot 8H_2O$  | A | 1967 s.p. | Russia         | <i>Trudy Vsesouznogo Nauchno-Issledovatel'skovo Geologicheskogo Instituta</i> <b>96</b> (1963), 131                                |   |
| Ziesite           | $Cu_2V^{5+}_2O_7$   | A | 1979-055  | El Salvador    | <i>American Mineralogist</i> <b>65</b> (1980), 1146  | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1989), 41                      |
| Zigrasite         | $MgZr(PO_4)_2 \cdot 4H_2O$  | A | 2008-046  | USA            | <i>Mineralogical Magazine</i> <b>73</b> (2009), 415  | <i>Mineralogical Magazine</i> <b>74</b> (2010), 567                               |
| Zimbabweite       | $Na(Pb,Na,K)_2(Ta,Nb,Ti)_4As_4O_{18}$                                     | A | 1984-034  | Zimbabwe       | <i>Bulletin de Minéralogie</i> <b>109</b> (1986), 331  | <i>American Mineralogist</i> <b>73</b> (1988), 1186                               |
| Ziminaite         | $Fe^{3+}(VO_4)$   | A | 2014-062  | Russia         | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 371   |   |
| Zinc              | Zn  | G | ?         | Chile          | original paper?  | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>110</b> (1981), 186 |
| Zincalstibite     | $Zn_2Al(OH)_6[Sb(OH)_6]$  | A | 1998-033  | Italy          | <i>American Mineralogist</i> <b>92</b> (2007), 198   |   |
| Zincaluminite     | $(Zn_{1-x}Al_x)(SO_4)_{x/2}(OH)_2 \cdot nH_2O$ ( $x < 0.5$ , $n > 3x/2$ ) | Q | 1881      | Greece         | <i>Bulletin de la Société Minéralogique de France</i> <b>4</b> (1881), 135   |   |
| Zincgartrellite   | $PbZn_2(AsO_4)_2(H_2O,OH)_2$  | A | 1998-014  | Namibia        | <i>Mineralogical Magazine</i> <b>64</b> (2000), 1109   |   |
| Zincite           | ZnO   | G | 1845      | USA            | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 548   | <i>Canadian Mineralogist</i> <b>23</b> (1985), 647                                |
| Zinlipscombite    | $ZnFe^{3+}_2(PO_4)_2(OH)_2$   | A | 2006-008  | USA            | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>135(6)</b> (2006), 13   |   |

|                     |   |    |           |                                  |   |   |
|---------------------|---|----|-----------|----------------------------------|---|---|
| Zincmelanterite     | $Zn(SO_4) \cdot 7H_2O$  | Rn | 2007 s.p. | USA                              | <i>American Journal of Science</i> <b>50</b> (1920), 225  | <i>Acta Mineralogica Sinica</i> <b>15</b> (1995), 286                                       |
| Zincoberaunite      | $ZnFe^{3+}_5(PO_4)_4(OH)_5 \cdot 6H_2O$                                   | A  | 2015-117  | Germany                          | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 351  |   |
| Zincobotryogen      | $ZnFe^{3+}(SO_4)_2(OH) \cdot 7H_2O$                                       | A  | 2015-107  | China                            | <i>Mineralogy and Petrology</i> <b>111</b> (2017), 363  |   |
| Zincobradaczekite   | $NaZn_2Cu_2(AsO_4)_3$   | A  | 2016-041  | Russia                           | CNMNC Newsletter 33 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 1135  |   |
| Zincobriartite      | $Cu_2(Zn,Fe)(Ge,Ga)S_4$   | A  | 2015-094  | Democratic Republic of the Congo | CNMNC Newsletter 29 - <i>Mineralogical Magazine</i> <b>80</b> (2016), 199   |   |
| Zincochromite       | $ZnCr_2O_4$   | A  | 1986-015  | Russia                           | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>116</b> (1987), 367   | <i>American Mineralogist</i> <b>90</b> (2005), 1157   |
| Zincocopiapite      | $ZnFe^{3+}_4(SO_4)_6(OH)_2 \cdot 20H_2O$                                  | G  | 1964      | China                            | <i>Acta Geologica Sinica</i> <b>44</b> (1964), 99   | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>67</b> (1987), 115 |
| Zincohögbomite-2N2S | $(Zn,Al,Fe)_3(Al,Fe,Ti)_8O_{15}(OH)$                                      | Rn | 1994-016  | Greece                           | <i>European Journal of Mineralogy</i> <b>10</b> (1998), 1361  |   |
| Zincohögbomite-2N6S | $(Zn,Al)_7(Al,Fe^{3+},Ti,Mg)_{16}O_{31}(OH)$                              | Rn | 2001 s.p. | Greece                           | <i>Schweizerische Mineralogische und Petrographische Mitteilungen</i> <b>78</b> (1998), 461   |   |
| Zincolibethenite    | $CuZn(PO_4)(OH)$  | A  | 2003-010  | Zambia                           | <i>Mineralogical Magazine</i> <b>69</b> (2005), 145   | <i>Australian Journal of Mineralogy</i> <b>12</b> (2006), 3                                 |
| Zincolivenite       | $CuZn(AsO_4)(OH)$   | A  | 2006-047  | Greece                           | <i>Doklady Earth Sciences</i> <b>415A</b> (2007), 841   |   |
| Zincomenite         | $ZnSeO_3$   | A  | 2014-014  | Russia                           | <i>European Journal of Mineralogy</i> <b>28</b> (2016), 997   |   |
| Zinconigerite-2N1S  | $ZnSn_2Al_{12}O_{22}(OH)_2$   | A  | 2018-037  | China                            | CNMNC Newsletter 44 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 1015; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 879 |   |
| Zincospiroffite     | $Zn_2Te_3O_8$   | A  | 2002-047  | China                            | <i>Canadian Mineralogist</i> <b>42</b> (2004), 763  |   |
| Zincostaurolite     | $Zn_2Al_9Si_4O_{23}(OH)$  | A  | 1992-036  | Switzerland                      | <i>European Journal of Mineralogy</i> <b>15</b> (2003), 167   | <i>American Mineralogist</i> <b>88</b> (2003), 789  |
| Zincostrunzite      | $ZnFe^{3+}_2(PO_4)_2(OH)_2 \cdot 6.5H_2O$                                 | A  | 2016-023  | Portugal / Germany               | <i>European Journal of Mineralogy</i> <b>29</b> (2017), 315   |   |
| Zincovelesite-6N6S  | $Zn_3(Fe^{3+},Mn^{3+},Al,Ti)_8O_{15}(OH)$                                 | A  | 2017-034  | Macedonia                        | <i>Mineralogy and Petrology</i> <b>112</b> (2018), 733  |   |
| Zincovoltaite       | $K_2Zn_5Fe^{3+}_3Al(SO_4)_{12} \cdot 18H_2O$                              | A  | 1985-059  | China                            | <i>Acta Mineralogica Sinica</i> <b>4</b> (1987), 307  |   |
| Zincowoodwardite    | $(Zn_{1-x}Al_x)(SO_4)_{x/2}(OH)_2 \cdot nH_2O$ ( $x < 0.5$ , $n < 3x/2$ ) | A  | 1998-026  | Greece                           | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (2000), 455   |   |
| Zincrosasite        | $(Zn,Cu)_2(CO_3)(OH)_2$   | Q  | 1959      | Namibia                          | <i>Fortschritte der Mineralogie</i> <b>37</b> (1959), 87  |   |
| Zincroselite        | $Ca_2Zn(AsO_4)_2 \cdot 2H_2O$   | A  | 1985-055  | Namibia                          | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 523   | <i>European Journal of Mineralogy</i> <b>16</b> (2004), 353                                 |
| Zincsilite          | $Zn_3Si_4O_{10}(OH)_2 \cdot 4H_2O$ (?)                                    | Q  | 1962 s.p. | Kazakhstan                       | Report of the Meeting of the International Committee for the Study of Clays (1960), 45  |   |
| Zinczippeite        | $Zn(UO_2)_2(SO_4)O_2 \cdot 3.5H_2O$                                       | Rn | 1971-008  | USA                              | <i>Canadian Mineralogist</i> <b>14</b> (1976), 429  | <i>Canadian Mineralogist</i> <b>41</b> (2003), 687  |
| Zinkenite           | $Pb_9Sb_{22}S_{42}$   | G  | 1826      | Germany                          | <i>Annalen der Physik und Chemie</i> <b>7</b> (1826), 91  | <i>American Mineralogist</i> <b>71</b> (1986), 194  |

|                    |  |    |           |                |  |  |
|--------------------|--|----|-----------|----------------|--|--|
| Zinkosite          | Zn(SO <sub>4</sub> )   | G  | 1852      | Spain          | <i>Berg- und Hüttenmännische Zeitung</i> <b>11</b> (1852), 100   | <i>Mineralogy and Petrology</i> <b>39</b> (1988), 201          |
| Zippeite           | K <sub>3</sub> (UO <sub>2</sub> ) <sub>4</sub> (SO <sub>4</sub> ) <sub>2</sub> O <sub>3</sub> (OH)·3H <sub>2</sub> O   | Rd | 1971-029a | Czech Republic | Handbuch der Bestimmenden Mineralogie. Braumüller and Seidel, Wien (1845), 510   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 687             |
| Zircon             | Zr(SiO <sub>4</sub> )  | G  | ?         | unknown        | Cristallographie, ou Description des formes propres a tous le corps du regne minéral, Vol. II. Paris, Imprimerie de Monsieur (1783), 229 | <i>American Mineralogist</i> <b>64</b> (1979), 196             |
| Zirconolite        | (Ca,Y)Zr(Ti,Mg,Al) <sub>2</sub> O <sub>7</sub>   | Rd | 1989 s.p. | Norway         | <i>Kongliga Svenska Vetenskaps-Akademiens Handlingar</i> (1824), 334   | <i>Journal of Solid State Chemistry</i> <b>174</b> (2003), 285 |
| Zircophyllite      | K <sub>2</sub> NaFe <sup>2+</sup> <sub>7</sub> Zr <sub>2</sub> (Si <sub>4</sub> O <sub>12</sub> ) <sub>2</sub> O <sub>2</sub> (OH) <sub>4</sub> F                                  | Rd | 1971-047  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>101</b> (1972), 459  | <i>Canadian Mineralogist</i> <b>54</b> (2016), 1539            |
| Zircosulfate       | Zr(SO <sub>4</sub> ) <sub>2</sub> ·4H <sub>2</sub> O   | A  | 1968 s.p. | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>94</b> (1965), 530   | <i>Acta Crystallographica</i> <b>12</b> (1959), 719            |
| Zirkelite          | (Ti,Ca,Zr)O <sub>2-x</sub>   | Rd | 1989 s.p. | Brazil         | <i>Mineralogical Magazine</i> <b>11</b> (1895), 80   | <i>American Mineralogist</i> <b>68</b> (1983), 262             |
| Zirklerite         | (Fe,Mg) <sub>9</sub> Al <sub>4</sub> Cl <sub>18</sub> (OH) <sub>12</sub> ·14H <sub>2</sub> O (?)   | Q  | 1928      | Germany        | <i>Kali und Verwandte Salze</i> <b>22</b> (1928), 157  |  |
| Zirsilite-(Ce)     | (Na,□) <sub>12</sub> (Ce,Na) <sub>3</sub> Ca <sub>6</sub> Mn <sub>3</sub> Zr <sub>3</sub> NbSi <sub>25</sub> O <sub>73</sub> (OH) <sub>3</sub> (CO <sub>3</sub> )·H <sub>2</sub> O | A  | 2002-057  | Tajikistan     | <i>Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva</i> <b>132(5)</b> (2003), 40  |  |
| Zirsinalite        | Na <sub>6</sub> CaZrSi <sub>6</sub> O <sub>18</sub>  | A  | 1973-025  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>103</b> (1974), 551  | <i>Doklady Akademii Nauk SSSR</i> <b>250</b> (1980), 865       |
| Zlatogorite        | CuNiSb <sub>2</sub>  | A  | 1994-014  | Russia         | <i>Vestnik Moskovskogo Universiteta, Geologiya Seriya</i> <b>50</b> (1995), 57   | <i>Doklady Akademii Nauk</i> <b>335</b> (1994), 709            |
| Znamenskyite       | Pb <sub>4</sub> In <sub>2</sub> Bi <sub>4</sub> S <sub>13</sub>  | A  | 2014-026  | Russia         | CNMNC Newsletter 21 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 797  |  |
| Znucalite          | CaZn <sub>11</sub> (UO <sub>2</sub> )(CO <sub>3</sub> ) <sub>3</sub> (OH) <sub>20</sub> ·4H <sub>2</sub> O   | A  | 1989-033  | Czech Republic | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1990), 393  | <i>Archives des Sciences de Genève</i> <b>46</b> (1993), 291   |
| Zodacite           | Ca <sub>4</sub> Mn <sup>2+</sup> Fe <sup>3+</sup> <sub>4</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>4</sub> ·12H <sub>2</sub> O   | A  | 1987-014  | Portugal       | <i>American Mineralogist</i> <b>73</b> (1988), 1179  |  |
| Zoharite           | (Ba,K) <sub>6</sub> (Fe,Cu,Ni) <sub>25</sub> S <sub>27</sub>   | A  | 2017-049  | Israel         | CNMNC Newsletter 39 - <i>Mineralogical Magazine</i> <b>81</b> (2017), 1279; <i>European Journal of Mineralogy</i> <b>29</b> (2017), 931  |  |
| Zoisite            | Ca <sub>2</sub> Al <sub>3</sub> [Si <sub>2</sub> O <sub>7</sub> ][SiO <sub>4</sub> ]O(OH)  | G  | 1805      | Austria        | System of Mineralogy, Vol. 2. Bell and Bradfute, Edinburgh (1805), 597   | <i>American Mineralogist</i> <b>92</b> (2007), 1133            |
| Zoltaiite          | BaV <sup>4+</sup> <sub>2</sub> V <sup>3+</sup> <sub>12</sub> Si <sub>2</sub> O <sub>27</sub>   | A  | 2003-006  | Canada         | <i>American Mineralogist</i> <b>90</b> (2005), 1655  |  |
| Zorite             | Na <sub>6</sub> Ti <sub>5</sub> Si <sub>12</sub> O <sub>34</sub> (O,OH) <sub>5</sub> ·11H <sub>2</sub> O   | A  | 1972-011  | Russia         | <i>Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva</i> <b>102</b> (1973), 54   | <i>Soviet Physics - Crystallography</i> <b>24</b> (1979), 686  |
| Zoubekite          | AgPb <sub>4</sub> Sb <sub>4</sub> S <sub>10</sub>  | A  | 1983-032  | Czech Republic | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1986), 1  |  |
| Zubkovaite         | Ca <sub>3</sub> Cu <sub>3</sub> (AsO <sub>4</sub> ) <sub>4</sub>   | A  | 2018-008  | Russia         | CNMNC Newsletter 43 - <i>Mineralogical Magazine</i> <b>82</b> (2018), 779; <i>European Journal of Mineralogy</i> <b>30</b> (2018), 647   |  |
| Zugshunstiite-(Ce) | CeAl(SO <sub>4</sub> ) <sub>2</sub> (C <sub>2</sub> O <sub>4</sub> )·12H <sub>2</sub> O  | A  | 1996-055  | USA            | <i>Geochimica et Cosmochimica Acta</i> <b>65</b> (2001), 1101  |  |

|                |   |    |           |                |  |  |
|----------------|---|----|-----------|----------------|--|--|
| Zuktamrurite   | $\text{FeP}_2$  | A  | 2013-107  | Israel         | CNMNC Newsletter 19 - <i>Mineralogical Magazine</i> <b>78</b> (2014), 165                    |  |
| Zunyite        | $\text{Al}_{13}\text{Si}_5\text{O}_{20}(\text{OH},\text{F})_{18}\text{Cl}$                            | G  | 1884      | USA            | <i>Proceedings of the Colorado Scientific Society</i> <b>1</b> (1884), 124                   | <i>Canadian Mineralogist</i> <b>41</b> (2003), 891       |
| Zussmanite     | $\text{K}(\text{Fe},\text{Mg},\text{Mn})_{13}(\text{Si},\text{Al})_{18}\text{O}_{42}(\text{OH})_{14}$ | A  | 1964-018  | USA            | <i>American Mineralogist</i> <b>50</b> (1965), 278   | <i>Mineralogical Magazine</i> <b>37</b> (1969), 49       |
| Zvyaginite     | $\text{Na}_2\text{ZnTiNb}_2(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_4$    | Rd | 2013-071  | Russia         | <i>Zapiski Rossiyskogo Mineralogicheskogo Obshchestva</i> <b>143(2)</b> (2014), 45           | <i>Mineralogical Magazine</i> <b>81</b> (2017), 1533     |
| Zvyagintsevite | $\text{Pd}_3\text{Pb}$  | A  | 1966-006  | Russia         | <i>Geologiya Rudnykh Mestorozhdeniy</i> <b>8</b> (1966), 94                                  | <i>Canadian Mineralogist</i> <b>35</b> (1997), 773       |
| Zwieselite     | $\text{Fe}^{2+}\text{Mn}^{2+}(\text{PO}_4)\text{F}$   | Rd | 2003 s.p. | Germany        | Vollständiges Handbuch der Mineralogie, Vol. 2. Arnoldische, Dresden und Leipzig (1849), 299 | <i>Doklady Akademii Nauk SSSR</i> <b>238</b> (1978), 576 |
| Zýkaite        | $\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{SO}_4)(\text{OH})\cdot 15\text{H}_2\text{O}$                  | A  | 1976-039  | Czech Republic | <i>Neues Jahrbuch für Mineralogie Monatshefte</i> (1978), 134                                |  |

All cells modified after the preceding release (September 2018) are highlighted in yellow