

ALEXANDRA RALUCA IORDAN



(b.1957)

Competences:

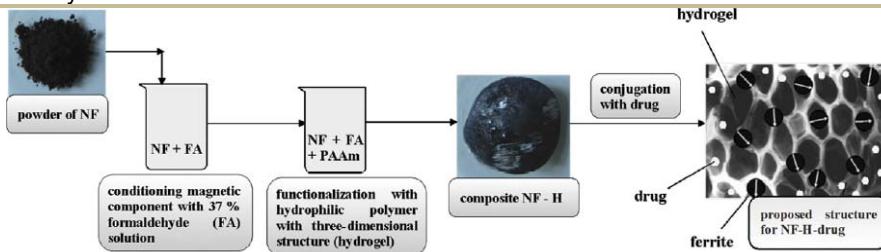
- Inorganic Chemistry: metals, non-metals, coordination compounds;
- Oxide materials: synthesis, characterization;
- Heterogeneous catalysis;
- Environment protection;
- Bioinorganic chemistry.

Research themes:

- Polymetallic oxides: synthesis, characterization and applications in catalysis;
- Polymetallic oxides in environment protection;
- Inorganic-inorganic composites;
- Inorganic-organic composites for drug delivery.

Keywords:

modified alumina, XPS, XRD, *in situ* infrared spectroscopic, SEM, polymetallic oxides, ferrites, sol-gel methods, controlled drug delivery, coating, heterogeneous catalysis, photocatalyst.



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Inorganic chemistry
Solid state chemistry

Publications (selection)

Iordan, A.R., Kappenstein, C., Interfacial chemistry in the preparation of catalytic potassium-modified Aluminas, *J. Chem. Soc., Faraday Trans.*, **89** (14), 2527, **1993**.

Iordan, A.R., Kappenstein, C., Colnay, E., Zaki, M.I., Surface contribution to the interfacial chemistry of potassium-modified oxide catalysts. Silica-alumina versus silica and alumina, *J. Chem. Soc., Faraday Trans.*, **94**(8), 1149, **1998**.

Fournaud, B., Iordan, A.R., Rossignol, S., Tatibouet, J.-M., Thollon, S., Processing and characterization of spherical alumina pellets coated with BaTiO₃ and Li_{0.10}Ti_{0.02}Ni_{0.88}O dielectric materials, *European Journal of Inorganic Chemistry*, **33**, 5263, **2008**.

Ciomaga, C.E., Galassi, C., Prihor, F., Dumitru, I., Mitoseriu, L., A. R. Iordan, Airimioaei, M., Palamaru, M.N., Preparation and properties of the CoFe₂O₄-Nb-Pb(Zr,Ti)O₃ multiferroic composites prepared *in situ* by gel-combustion method, *Journal of Alloys and Compounds*, **485**, 372, **2009**.

Druc, A.C., Borhan, A.I., Nedelcu, G.G., Leontie, L., A. R. Iordan, Palamaru, M.N., Structure-dielectric properties relationships in copper-substituted magnesium ferrites, *Materials Research Bulletin*, **48**(11), 4647-4654, **2013**.

Slatineanu, T., Iordan, A.R., Oancea, V., Palamaru, M.N., Dumitru, I., Constantin, C.P., Caltun, O.F., Magnetic and dielectric properties of Co-Zn ferrite, *Materials Science and Engineering B*, **178**, 1040– 1047, **2013**.

Druc, A., Borhan, A.I., Diaconu, A., Iordan, A.R., Nedelcu, G.G., Leontie, L., Palamaru, M.N., How cobalt ions substitution changes the structure and dielectric properties of magnesium ferrite?, *Ceramics International*, **40**, 13573, **2014**.

Borhan, A.I., Samoila, P., Gherca, D., Iordan, A.R., Palamaru, M.N., Is it possible the substitution of Cr cations from spinel-type oxides with bulky rare-earth cations by sol-gel auto-combustion method?, *Journal of Alloys and Compounds*, **651**, 200, **2015**.

Feraru, S., Borhan, A.I., Samoila, P., Mita, C., Cucu-Man, S., Iordan, A.R., Palamaru, M.N., Development of visible-light-driven Ca₂Fe_{1-x}Sm_xBiO₆ double perovskites for decomposition of Rhodamine 6G dye, *Journal of Photochemistry and Photobiology A: Chemistry*, **307**, 1, **2015**.

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