

# JJAP/APEX: Instructions for Preparation of Manuscript

---

These instructions are intended for users of a standard word processor. If you use  $\text{\LaTeX}$  for preparing your manuscript, please refer to the template file attached to our  $\text{\LaTeX}$  class file.

---

## 1 General Instructions

**Paper:** A4- ( $21 \times 29 \text{ cm}^2$ ) or letter-sized ( $8.5 \times 11 \text{ in.}$ ) white paper

**Font:** Times New Roman or Times-Roman (larger than 12 pt)

**Line space:** Larger than 1.5 times

**Page layout:**

**title**  $\rightarrow$  **author(s)**  $\rightarrow$  **affiliation**  $\rightarrow$  one blank line  $\rightarrow$  **abstract**  $\rightarrow$  page break  $\rightarrow$  **main text**  $\rightarrow$  acknowledgment(s)  $\rightarrow$  (Appendix)  $\rightarrow$  page break  $\rightarrow$  **reference list**  $\rightarrow$  page break  $\rightarrow$  **figure caption(s)**  $\rightarrow$  page break  $\rightarrow$  **table(s)**  $\rightarrow$  page break  $\rightarrow$  **figure(s)**

**Pagination:** Page numbers should be given consecutively throughout the manuscript including pages for tables and figures.

## 2 Estimation of the Size of the Paper

The size of the paper can be estimated using the following approximations. In particular, be sure to estimate the size of the paper submitted as Rapid Communication, Brief Note, and APEX, which are limited to a maximum of three and two printed pages each.

### Rules

**Text:** One line equals approximately 8.3 words  $\rightarrow L_1$  (excluding from the title to abstract and figure captions)

**Math:** One equation equals approximately two lines. If the equation contains fractions, sum or integrals, etc., it is estimated to be three lines.  $\rightarrow L_2$

**Table:** Numbers of rows and horizontal lines plus two lines  $\rightarrow L_3$

**Figure:** Divide the height of the figure by 4 mm to obtain the number of lines and add two more lines  $\rightarrow L_4$

☞ Maximum size of Rapid Communication and APEX

$$3 \text{ pages} \cong 326 \text{ lines} \geq L_1 + L_2 + L_3 + L_4$$

☞ Maximum size of Brief Note

$$2 \text{ pages} \cong 214 \text{ lines} \geq L_1 + L_2 + L_3 + L_4$$

## 3 First Page (Title Page)

### Title:

- Abbreviations other than those listed in §11 are not acceptable in the title, since there are many readers who are not familiar with such terms.
- Capitalize the initial letter of each word except articles, prepositions, and conjunctions.

### Author's Names:

- The authors' first names should preferably be spelled out.
- If the authors are from different institutions, a superscript Arabic numeral, i.e., 1, 2,  $\dots$ ,  $n$ , which corresponds to the appropriate listed institution(s), should follow each author's name, except author(s) belonging to the first-listed affiliation, which should be unnumbered.

### Author's Affiliations:

- Use no abbreviations.
- Give adequate postal addresses including the ZIP or other postal code and the name of the country.
- If the author's present or permanent addresses differ from this, they should be given as footnotes beginning with "Present address:" or "On leave from," which are cited with symbols (sequence: \*, †, ‡, §, ¶, ||, \*\*, ††, ‡‡).

- The corresponding author's E-mail address can be given as a footnote beginning with "E-mail address:"

**Author's Abstract:**

- No more than 150 words for Regular Paper and Review Paper.
- No more than 100 words for Rapid Communication, Brief Note, and APEX.
- Figures, tables, and references should not be cited in the abstract.

**4 Main Body of the Text****Section:**

- Each section should be numbered consecutively with an Arabic numeral.

Section: **1. Section Title**

Subsection: 1.1 Subsection title

Subsubsection: 1.1.1 Subsubsection title

- Capitalize the initial letter of each word in the heading except articles, prepositions, and conjunctions for sections.
- For the subsections and subsubsections, capitalize only the first letter of the first word of the title.
- Up to three orders of sections (i.e., up to subsubsection) are allowed.
- There are no sections in Rapid Communication, Brief Note, and APEX.

**Paragraph:** Indent the beginning of each paragraph

**Period:** Only one period is required when a sentence ends with an omitted word.

**Comments and Notes:** Footnotes cannot be used in the main text. List comments and notes, if any, as references (refer to §9 "Literature, Comments, and Notes").

**5 Maths**

- Equation editor must be used.
- Use the Symbol Font for Greek letters and other symbols.
- Each equation should end with a period or comma.
- Label equations with parenthesized numerals such as (1), (2) or (1.1), (1.2), ..., (2.1), (2.2).
- If an equation extends over more than one line, break the equation before an operator such that the operator will be placed at the start of the new line.
- Braces, parentheses, etc., should be used in the following order:  $\{[(\cdot\cdot)]\}$ .

**6 Units****6.1 Rules of units**

- Use SI units.
- Present units in Roman type.
- Do not add "s" to indicate plural of units.
- Do not confuse the symbol for the unit (s, V,  $\Omega$ , etc.) and the name of the unit (second, volt, ohm, etc.).
- Arbitrary unit must be "arb. unit" (cf. "a.u." stands for atomic unit).

**6.2 Examples of units**

	SI unit	Sanctioned unit
Length	m	Å
Mass	kg	t, u
Time	s	min, h, d
Angle	rad, sr	°, ', "
Thermodynamic temperature	K	
Amount of substance	mol	
Frequency	Hz	
Force	N	

*Continued on next page*

*Continued from previous page*

	SI unit	Sanctioned unit
Pressure	Pa	bar, atm, Torr
Energy	J	eV
Heat quantity	J	cal
Power	W	
Electric current	A	
Electric charge	C	
Electric potential	V	
Capacitance	F	
Electric resistance	$\Omega$	
Conductance	S	
Magnetic field	(A/m)	
Magnetic flux	Wb	
Magnetic flux density	T	
Inductance	H	
Luminous intensity	cd	
Luminous flux	lm	
Illumination	lx	
Volume	(m <sup>3</sup> )	l or L
Viscosity	(Pa·s)	
Effective cross section	(m <sup>2</sup> )	b
Gravitational acceleration	(m/s <sup>2</sup> )	Gal
Radioactivity	Bq	Ci
Exposure	(C/kg)	R
Absorbed dose	Gy	rad
Dose equivalent	Sv	

- Use cm<sup>3</sup> and cm<sup>2</sup> instead of cc and sc cm, respectively.
- Use  $\mu\text{m}$  and nm instead of  $\mu$  and  $m\mu$ , respectively.

### 6.3 Products and quotients of units

- The product of two units must be indicated as follows.  
m·N *or* Nm
- The quotient of two units must be indicated as follows.  
m·s<sup>-1</sup> *or* m/s
- Do not use more than one slash unless units are parenthesized.  
m/s<sup>2</sup> *or* m·s<sup>-2</sup>  
m·kg/(s<sup>3</sup>·A) *or* m·kg·s<sup>-3</sup>·A<sup>-1</sup>  
m/(V·s) *or* m·V<sup>-1</sup>·s<sup>-1</sup>  
[Note] Do not write as “m/s/s,” “m·kg/s<sup>3</sup>/A,” or “m/V·s.”

## 7 Acknowledgment

- Use the section title (without section number) “Acknowledgment(s)”.
- Thanks for grants, equipment, samples, etc. should be expressed in the acknowledgment section.

## 8 Appendices

**Heading:** “Appendix” if there is only one appendix. “Appendix A”, “Appendix B” ... if there are more than one appendices. “Appendix: Title” is also acceptable.

**Equations:** Number equations as (A·1), (A·2), (B·1), (B·2), ...

**Figures:** Label as Fig. A·1, Fig. A·2, Fig. B·1, Fig. B·2, ...

**Tables:** Label as Table A·I, Table A·II, Table B·I, Table B·II, ...

[Note] There are no appendices in Rapid Communication, Brief Note, and APEX.

## 9 Literature, Comments, and Notes

### 9.1 Citation

- List all the literature, comments, notes, etc., cited in the main text, using consecutive numbers.
- Footnotes are not allowed in the main text.
- Place numbers with a closing parenthesis in superscript to cite literature in the main text, e.g., <sup>1)</sup>, <sup>2,3)</sup>, <sup>4-7,11)</sup> after any punctuation mark.
- Give only the family name(s) to cite the author(s) of literature in the main text. If the number of authors is two, give both authors' family names. If there are more than two authors, write only the first author's family name followed by "*et al.*"

The phenomenon of spiking in solid state lasers is very well known.<sup>1-3)</sup> It was first reported in the very early paper of Collins *et al.*<sup>2,4)</sup> The detailed experimental setup is described in ref. 5

### 9.2 Format of literature

- Each reference number should correspond to only one reference. Different papers by the same authors should be listed separately in the reference list under different numbers (excluding errata).
- The term "*ibid.*" should not be used even if the same journal or book is cited with different page numbers.
- The term "*et al.*" should not be used. List all the authors (excluding names of software).

#### A. Journals

- 1) T. Hashimoto, K. Fujito, K. Samonji, J. S. Speck, and S. Nakamura: Jpn. J. Appl. Phys. **44** (2005) 869.
- 2) R. H. Bruce: Solid State Technol. **48** (2005) No. 1, 5.
- 3) G. Asano, T. Oikawa, H. Funakubo, and K. Saito: Jpn. J. Appl. Phys. **42** (2003) L1083 [Errata; **42** (2003) L1346].

- Sequence of items: authors → colon (:) → journal name → volume number (in boldface) → year (parenthesized) → initial page.
- Abbreviations of the journal names are based on ISO (refer to §15).
- No "p." is required with the initial page number.
- Provide the issue number for journals which begin with page 1 in each issue.
- Only errata can be listed under the same reference number.

#### B. Non-English journals

- 4) H. Sakurai, K. Takada, and E. Takayama-Muromachi: Oyo Buturi **74** (2005) 22 [in Japanese].
- 5) Ju. V. Tsekhmistrenko: Zh. Exsp. Teor. Fiz. **26** (1959) 1546 [Sov. Phys. JETP **9** (1959) 1097].

- Write the original title of the journal in Roman letters.
- Write the name of the language at the end of the item, for example, [in Japanese] and [in Russian].
- Write both the original title and the English-translated title if only the English-translated literature has been consulted.

#### C. Books

- 6) S. M. Sze: *Physics of Semiconductor Devices* (Wiley, New York, 1981) 2nd ed., p. 55.
- 7) D. Edwards: in *Handbook of Optical Constants of Solids*, ed. E. Palik (Academic Press, New York, 1985) p. 547.
- 8) N. M. Amer and W. B. Jackson: in *Semiconductors and Semimetals*, ed. A. C. Beer (Academic Press, Orlando, 1984) Vol. 21, Part B, Chap. 3, p. 85.

- Sequence of items: author(s) → colon (:) → title → editor(s) if any → name of publisher, city of publication, year of publication (parenthesized) → chapter or initial page.
- Abbreviation of the title is not acceptable.

- Publishers name can be shortened, for example, “Springer” and “Wiley.”
- Only one city of publication should be given. If the book is published in the U.S.A., the state code, such as NJ, can be given after the city name.
- Providing the initial page is sufficient (if plural pages must be specified, write “pp.” instead of “p.”)
- Write “in” before the title of the book when both the authors and the editors are provided.
- The title of the series should be provided if the book is part of a series.

#### D. Non-English books

9) T. Takenouchi: *Handotai* (Semiconductor) (Shokabo, Tokyo, 1964) p. 83 [in Japanese].

- Write the original title of the book in Roman letters , followed by the English-translated title in parentheses.
- Write the name of the language at the end of the item, for example, [in Japanese].
- Write the English-translated title only if the English-translated book has been consulted.

#### E. Proceedings and Abstracts

- 10) A. Narazaki, J. Maruyama, T. Kayumi, H. Hamachi, J. Moritani, and S. Hine: Proc. Int. Symp. Power Semiconductor Devices and ICs, 2000, p. 377.
- 11) M. Koyama, A. Kaneko, T. Ino, M. Koike, and Y. Kamata: IEDM Tech. Dig., 2002, p. 849.
- 12) K. Kita, Y. Yamamoto, K. Kyuno, and A. Toriumi: Ext. Abstr. (52nd Spring Meet., 2005); Japan Society of Applied Physics and Related Societies, 30p-ZB-7 [in Japanese].
- 13) M. S. Joo, B. J. Cho, D. Z. Chi, N. Balasubramanian, and D.-L. Kwong: Ext. Abstr. Solid State Devices and Materials, 2004, p. 202.
- 14) T. Wada, T. Negami, and M. Nishitani: Proc. 9th Int. Conf. Ternary and Multinary Compounds, Yokohama, 1993, Jpn. J. Appl. Phys. **32** (1993) Suppl. 32-3, p. 41.

- Proceedings published by publishers is the same as a book.
- Do not italicize conference names.
- Use abbreviations for “Proceedings,” “Symposium,” “International,” etc.
- If the proceedings is published as a supplement to a journal, also provide the title of the journal. In this case, the name of the proceedings should be italicized.
- Some proceedings, such as Proc. SPIE, are the same as journals.

#### F. Presentation

15) K. K. Bhuwarka, M. Born, S. Sedlmaier, J. Schulze, and I. Eisele: presented at ULIS6, 6th Int. Conf. Ultimate Integration of Silicon, 2005.

- Write “presented at” before the name of the conference.

#### G. Technical report

- 16) B. W. Braams: Natl. Bur. Stand. Tech. Note 724 (1972).
- 17) K. Hoh and Y. Yasuda: IEICE Tech. Rep. ED93-89 (1993) [in Japanese].

#### H. Patents

- 18) Y. Takahashi and M. Nawa: Japan Patent 652696 (1971).
- 19) A. C. Smith: U.S. Patent 3390940 (1988).

**I. Unpublished works**

- 20) N. Kunitomi and M. Kaneko: private communication.  
 21) M. Saito: in preparation for publication.

**J. Papers in review**

- 22) A. Tonegawa and S. Hasegawa: submitted to Jpn. J. Appl. Phys.

**K. Accepted papers**

- 23) S. Nakamura and J. S. Speck: to be published in Jpn. J. Appl. Phys.  
 24) Z. Shiu, Z. Hao, and J. Ni: to be published in Thin Solid Films [DOI: 10.1016/j.tsf.2008.09.1xx].

**L. Theses**

- 25) K. Aoki: Dr. Thesis, Faculty of Science, University of Tokyo, Tokyo (1988).

**10 Expressions of Cited Items**

	Section	Equation	Reference	Table	Figure
At the beginning of a sentence	Section 1	Equation (1)	Reference 1	Table I	Figure 1
Within a sentence	§1 §2 and §3	eq. (1) eqs. (2) and (3)	ref. 1 refs. 2 and 3	Table I Tables II and III	Fig. 1, Figs. 2(a) and 2(b) Figs. 3–6

**11 Abbreviations and Acronyms**

The following abbreviations and acronyms can be used without definition.

ac (AC)	alternating current	ESR	electron spin resonance
dc (DC)	direct current	IR	infrared
bcc	body-centered cubic	UV	ultraviolet
fcc	face-centered cubic	FM	frequency modulation
hcp	hexagonal close-packed	AM	amplitude modulation
cw	continuous wave	rf (RF)	radio frequency
emf	electromotive force	IC	integrated circuit
rms	root-mean-square	LSI	large scale integration (or large scale integrated circuit)
NMR	nuclear magnetic resonance	DNA	deoxyribonucleic acid

Abbreviations and acronyms other than those listed above should be defined fully the first time they appear in the text.

Metal organic chemical vapor deposition (MOCVD) is one of the most important epitaxial growth techniques for compound semiconductors ...

**12 Tables****Paper:**

- Use the same size of paper as for the main text.
- Print each table separately.
- Provide after the list of figure captions.

**Number:** Number tables with Roman numerals, such as Table I, Table II, ...

**Caption:**

- Type each caption above each table (listing table captions on a separate page is not required).
- Begin with a capital and end with a full stop, as for a sentence.

**Item name:** Capitalize only the first letter of the first word.

Table I. Fermi energy and carrier concentration for each sample.

Sample number	Substrate temperature (°C)	Fermi level $\eta_F$ (eV)	Carrier concentration $n$ ( $10^{20} \text{ cm}^{-3}$ )
560-2	520	0.270	5.67
⋮	⋮	⋮	⋮

**13 Figures**

Figures must be complete so that no editing will be required.

**13.1 General notes****Paper:**

- Use the same size of paper as for the main text.
- Print each figure separately.

**Number:**

- Number each figure consecutively in Arabic numerals, such as Fig. 1, Fig. 2, . . . .
- Label related figures by lower-case letters in parentheses, such as (a), (b), (c), . . . .

**Caption:**

- List captions on a separate sheet.
- Do not separate captions even for multiple related figures such as (a), (b), . . . .
- The list of figure captions should be provided after the reference list.

**Color printing:**

- If color printing is required, write “Color print” in the margin of the sheet.
- There is an additional fee for color printing.
- Color printing in APEX is free of charge.

**13.2 Other notes****Font:**

- Select a standard font such as Times New Roman (*or* Times-Roman) or Arial (*or* Helvetica).
- Consider the font size because most figures will be reduced in size when printed.

**Unit:**

- Select standard units (refer to §6).
- Units should be parenthesized after the label of the axis. A slash is also acceptable.
- Expressions such as  $\emptyset$  and 1.5E16 should be 0 and  $1.5 \times 10^{16}$ , respectively, if possible.

**14 Electronic Figure Files****14.1 Recommended formats**

**EPS:** Particularly for line drawings. EPS files made using conversion software are unacceptable.

**WMF:** Particularly for line drawings. Files of most Windows applications can be saved as WMF.

**PDF:** Do not downsample or compress.

**TIFF:** Photos only. Resolution should be higher than 300 dpi. Line drawings are unacceptable.

**JPEG:** Same as TIFF.

## 14.2 Application files

The following Microsoft application files are acceptable.

**PowerPoint:** Prepare one figure as one slide in one PPT file.

**Word:** Place one figure on one page in one DOC file.

**Excel:** Prepare one figure as one file. Printed and on-screen sizes sometimes differ. In such cases, the on-screen size will be chosen.

## 14.3 Other notes

**Size:** Prepare each figure in the actual size. Enlarge for submission if necessary.

**Font:**

- Select a standard font such as Times New Roman (*or* Times-Roman) or Arial (*or* Helvetica).
- Do not use two-bite codes such as Chinese and Korean fonts.
- Use the Symbol Font for Greek letters and symbols such as °.

**Line width:** Lines should be thicker than 0.25 pt in actual size.

**Other:** Files scanned by the author are unacceptable.

## 15 Abbreviations of Journal Titles

Acc. Chem. Res.	Astrophys. J.	ECS Trans.
Acta Crystallogr.	At. Data Nucl. Data Tables	Electrochem. Solid-State Lett.
Acta Crystallogr., Sect. A	At. Energ.	Electron. Lett.
Acta Metall.	Aust. J. Phys.	Eur. J. Phys.
Acta Phys.	Bell Syst. Tech. J.	Eur. Phys. J. A
Acta Phys. Pol.	Ber. Bunsen-Ges. Phys. Chem.	Eur. Phys. J.: Appl. Phys.
Acoust. Sci. Technol.	Biochemistry	Eur. Polym. J.
Acustica	Biometrika	Europhys. Lett.
Adv. Appl. Mech.	Biophys. J.	Ferroelectrics
Adv. At. Mol. Opt. Phys.	Br. J. Appl. Phys.	Fiz. Tverd. Tela
Adv. Chem. Phys.	Bull. Am. Phys. Soc.	Fortschr. Phys.
Adv. Colloid Interface Sci.	Bull. Chem. Soc. Jpn.	Geochim. Cosmochim. Acta
Adv. Mater.	Butsuri	Geophys. Res. Lett.
Adv. Phys.	C. R. Acad. Sci.	Helv. Chim. Acta
Adv. Quantum Chem.	C. R. Acad. Sci., Ser. A	Helv. Phys. Acta
AIAA J.	Can. J. Phys.	Hyomen Kagaku
AIChE J.	Catal. Today	Hyperfine Interactions
AIP Conf. Proc.	ChemPhysChem	IBM J. Res. Dev.
Akust. Zh.	Chem. Commun.	IEE Proc.—Circuits Devices Syst.
Am. J. Phys.	Chem.—Asian J.	IEE Proc.—Optoelectron.
Anal. Chem.	Chem.—Eur. J.	IEE Proc.—Sci. Meas. Technol.
Angew. Chem., Int. Ed.	Chem. Lett.	IEEE Electron Device Lett.
Ann. Chim. Phys.	Chem. Phys.	IEEE J. Quantum Electron.
Ann. Geophys.	Chem. Phys. Lett.	IEEE J. Sel. Top. Quantum Electron.
Ann. Fluid Dyn.	Chem. Rev.	IEEE J. Solid-State Circuits
Ann. Math.	Chin. Phys.	IEEE Photonics Technol. Lett.
Ann. Phys. (Leipzig)	Chin. Phys. Lett.	IEEE Trans. Antennas Propag.
Ann. Phys. (N.Y.)	Commun. Math. Phys.	IEEE Trans. Electron Devices
Ann. Phys. (Paris)	Commun. Pure Appl. Phys.	IEEE Trans. Inf. Theory
Annu. Rev. Nucl. Sci.	Comput. Mater. Sci.	IEEE Trans. Instrum. Meas.
Appl. Catal. A	Comput. Phys.	IEEE Trans. Magn.
Appl. Opt.	Cryogenics	IEEE Trans. Microwave Theory Tech.
Appl. Phys. A	Curr. Appl. Phys.	IEEE Trans. Nucl. Sci.
<b>Appl. Phys. Express</b>	Czech. J. Phys.	IEEE Trans. Plasma. Sci.
Appl. Phys. Lett.	Denki Gakkai Ronbunshi A	IEEE Trans. Sonics Ultrason.
Appl. Spectrosc.	Denshi Joho Tsushin Gakkai Ronbunshi A	IEEE Trans. Ultrason.
Appl. Supercond.	Diamond Relat. Mater.	IEEE Trans. Ultrason. Ferroelectr. Freq. Control
Appl. Surf. Phys.	Discuss. Faraday Soc.	IEEJ Trans. Electr. Electron. Eng.
Appl. Surf. Sci.	Dokl. Akad. Nauk SSSR	
Astron. J.		



- IEEEJ Trans. Fundam. Mater.  
 IEICE Electron. Express  
 IEICE Trans. Electron.  
 IET Circuits Devices Syst.  
 IET Optoelectron.  
 IET Sci. Meas. Technol.  
 Infrared Phys.  
 Inorg. Chem.  
 Int. J. Mass Spectrom. Ion Phys.  
 Int. J. Mod. Phys. A  
 Int. J. Quantum Chem.  
 Integrated Ferroelectr.  
 Izv. Akad. Nauk SSSR, Ser. Fiz.  
 J. Acoust. Soc. Am.  
 J. Adv. Mech. Des. Syst. Manuf.  
 J. Alloys Compd.  
 J. Am. Ceram. Soc.  
 J. Am. Chem. Soc.  
 J. Appl. Crystallogr.  
 J. Appl. Phys.  
 J. Biomech. Sci. Eng.  
 J. Br. Nucl. Energy Soc.  
 J. Catal.  
 J. Ceram. Soc. Jpn.  
 J. Chem. Phys.  
 J. Chem. Soc.  
 J. Chem. Soc., Chem. Commun.  
 J. Chem. Soc., Faraday Trans.  
 J. Chim. Phys. Phys.-Chim. Biol.  
 J. Comput. Sci. Technol.  
 J. Cryst. Growth  
 J. Disp. Technol.  
 J. Electrochem. Soc.  
 J. Electron. Mater.  
 J. Electron Spectrosc. Relat. Phenom.  
 J. Environ. Eng.  
 J. Eur. Ceram. Soc.  
 J. Fluid Mech.  
 J. Fluid Sci. Technol.  
 J. Korean Phys. Soc.  
 J. Less-Common Met.  
 J. Lightwave Technol.  
 J. Low Temp. Phys.  
 J. Lumin.  
 J. Magn. Magn. Mater.  
 J. Mater. Sci.  
 J. Mater. Sci.: Mater. Electron.  
 J. Mater. Res.  
 J. Math. Phys. (Cambridge, Mass.)  
 J. Math. Phys. (N.Y.)  
 J. Mech. Syst. Transp. Logist.  
 J. Mod. Phys.  
 J. Mol. Spectrosc.  
 J. Mol. Struct.: THEOCHEM  
 J. Non-Cryst. Solids  
 J. Nucl. Energy  
 J. Nucl. Energy, Part A  
 J. Nucl. Mater.  
 J. Nucl. Sci. Technol.  
 J. Opt. A  
 J. Opt. Soc. Am. A  
 J. Photochem. Photobiol. A
- J. Photopolym. Sci. Technol.  
 J. Phys. A  
 J. Phys. (Paris)  
 J. Phys. Colloq.  
 J. Phys. I  
 J. Phys. Chem.  
 J. Phys. Chem. Ref. Data  
 J. Phys. Chem. Solids  
 J. Phys.: Condens. Matter  
 J. Phys. Soc. Jpn.  
 J. Plasma Phys.  
 J. Polym. Sci.  
 J. Polym. Sci., Polym. Lett. Ed.  
 J. Polym. Sci., Polym. Phys. Ed.  
 J. Polym. Sci., Part A  
 J. Power Energy Syst.  
 J. Quant. Spectrosc. Radiat. Transfer  
 J. Res. Natl. Bur. Stand.  
 J. Res. Natl. Bur. Stand., Sect. A  
 J. Rheol.  
 J. Soc. Inf. Disp.  
 J. Solid Mech. Mater. Eng.  
 J. Solid State. Chem.  
 J. Sound Vib.  
 J. Space Eng.  
 J. Stat. Phys.  
 J. Syst. Des. Dyn.  
 J. Therm. Sci. Technol.  
 J. Vac. Sci. Technol.  
 J. Vac. Sci. Technol. A  
 J. Vac. Soc. Jpn.  
 JETP Lett.  
**Jpn. J. Appl. Phys.**  
 K. Dan. Vidensk. Vidensk. Selsk. Mat.-Fys. Medd.  
 Kotai Butsuri  
 Kristallografia  
 Langmuir  
 Liq. Cryst.  
 Low Temp. Phys.  
 Mater. Res. Bull.  
 Mater. Res. Soc. Symp. Proc.  
 Mater. Sci. Eng. A  
 Mater. Trans.  
 Mater. Trans., JIM  
 Microelectron. Eng.  
 Microelectron. J.  
 Microelectron. Reliab.  
 Mol. Cryst. Liq. Cryst.  
 Mol. Phys.  
 MRS Bull.  
 Nano Lett.  
 Nanotechnology  
 Nature  
 Nat. Mater.  
 Nat. Photonics  
 Nat. Phys.  
 New J. Phys.  
 Nihon Kikai Gakkai Ronbunshu A  
 Nonlinearity  
 Nucl. Eng. Des.  
 Nucl. Fusion
- Nucl. Instrum. Methods  
 Nucl. Instrum. Methods Phys. Res., Sect. A  
 Nucl. Phys.  
 Nucl. Phys. A  
 Nuovo Cimento  
 Nuovo Cimento A  
 Opt. Acta  
 Opt. Commun.  
 Opt. Eng.  
 Opt. Express  
 Opt. Lett.  
 Opt. Rev.  
 Opt. Spectrosc.  
 Optik  
 Opto-Electron. Rev.  
 Oyo Buturi  
 Philips Res. Rep.  
 Philos. Mag.  
 Philos. Mag. A  
 Philos. Trans. R. Soc. London, Ser. A  
 Phys. Chem.  
 Phys. Chem. Chem. Phys.  
 Phys. Fluids  
 Phys. Lett.  
 Phys. Lett. A  
 Phys. Met. Metall.  
 Phys. Plasmas  
 Phys. Rev.  
 Phys. Rev. A  
 Phys. Rev. Lett.  
 Phys. Rev. ST Accel. Beams  
 Phys. Scr.  
 Phys. Semicond.  
 Phys. Status Solidi  
 Phys. Status Solidi A  
 Phys. Status Solidi: Rapid Res. Lett.  
 Phys. Today  
 Physica  
 Physica A  
 Physics (N.Y.)  
 Plasma Phys. Control. Fusion  
 Plasma Sci. Technol.  
 Polymer  
 Polym. J.  
 Proc. IEEE  
 Proc. IEEE  
 Proc. IRE  
 Proc. Natl. Acad. Sci. U.S.A.  
 Proc. Phys. Soc., Sect. A  
 Proc. Phys. Soc. London  
 Proc. R. Soc. A  
 Proc. R. Soc. London  
 Proc. R. Soc. London, Ser. A  
 Proc. SPIE  
 Prog. Photovoltaics  
 Prog. Theor. Phys.  
 Radiat. Eff.  
 Rep. Prog. Phys.  
 Rev. Mod. Phys.  
 Rev. Sci. Instrum.  
 Sci. Am.

Science	Sov. Phys. Acoust.	Trans. Metall. Soc. AIME
Semicond. Sci. Technol.	Sov. Phys. Crystallogr.	Thin Solid Films
Sens. Actuators	Sov. Phys. Dokl.	Usp. Fiz. Nauk
Sens. Actuators A	Sov. Phys. JETP	Vacuum
Shinku	Sov. Phys. Semicond.	Z. Angew. Math. Phys.
SID Int. Symp. Dig. Tech. Pap.	Sov. Phys. Solid State	Z. Angew. Phys.
Sol. Energy Mater.	Sov. Phys. Usp.	Z. Kristallogr.
Sol. Energy Mater. Sol. Cells	Supercond. Sci. Technol.	Z. Naturforsch.
Solid State Commun.	Superlattices Microstruct.	Z. Naturforsch. A
Solid-State Electron.	Surf. Coat. Technol.	Z. Phys. A
Solid State Ionics	Surf. Sci.	Z. Phys. Chem. (Leipzig)
Solid State Phys.	Synth. Met.	Zh. Eksp. Teor. Fiz.
Solid State Technol.	Trans. Faraday Soc.	Zh. Tekh. Fiz.

---

## Contact Information

### JJAP/APEX Editorial Division Institute of Pure and Applied Physics

**Mail:** 2-31-22-5F Yushima, Bunkyo-ku, Tokyo 113-0034, Japan  
**Phone:** +81-3-5844-3291      **FAX:** +81-3-5844-3290  
**E-mail:** jjap\_edit@ipap.jp      **Web site:** <http://jjap.ipap.jp/>  
apex@ipap.jp      <http://apex.ipap.jp/>