

About your article

We consider for articles which:

- have sound some originality
- are of interest to the community
- have sound motivation and purpose
- have not been published previously
- are not under consideration for publication in any other journal or book available through a library or by purchase

Articles should not:

- present new but trivial and obvious results
- make unsubstantiated conclusions

In addition:

- Articles based on theses for higher degrees may be submitted, although authors should take care that such articles are prepared in the format of a research paper, which is more concise than is appropriate for a thesis.
- Articles presented at conferences may also be submitted.
- Authors of articles are not restricted to being members of any particular institute, society or association.
- All articles offered for publication are given unbiased consideration, each being judged on its merits without regard to the race, gender, religious belief, ethnic origin, citizenship or political philosophy of the author(s).

How to prepare your article

Please read these guidelines carefully and familiarize yourself with the style and editorial policies. It is important to check that your research fits well into the scope of JPS before you submit it. If you have any queries, please contact us.

Your manuscript should be written in English with 12pt single-spaced Times New Roman or Times font. There will be no space between paragraphs, and a new paragraph should have indent. Your manuscript normally consist of the following:

- a title page with title of article, name(s) of author(s) and address(es) of establishment(s) where the work was carried out
- PACS numbers and keywords
- an abstract
- the text
- figures

- a list of references

Title of article

This should be concise but informative.

Authors and addresses

For multiple-authored articles list the names of all the authors first, followed by the full postal addresses, using superscript numeric identifiers to link an author with an address, where necessary. If an author's present address is different from the address at which the work was carried out, this should be given as a footnote to the page. You can also include e-mail addresses, telephone numbers and fax numbers on the title page.

Classification numbers

JPS use the Physics and Astronomy Classification Scheme (**PACS**) (<http://www.aip.org/pacs/pacs.html>), published by the American Institute of Physics to help with the refereeing process. We therefore ask you to supply a list of appropriate classification numbers.

Keywords

Author should give a few keywords about the work. All keywords must be separated with commas.

Abstract

Your abstract should give readers concise information about the content of your article. It should be informative and not only indicate the general scope of the article but also state the main results obtained and conclusions drawn. As the abstract is not part of the text it should be complete in itself; no table numbers, figure numbers, references or displayed mathematical expressions should be included. It should be suitable for direct inclusion in abstracting services and should not normally exceed 200 words.

When readers are searching for information online, an abstract of an article is likely to be the first thing they see. Consequently your abstract needs to be concise but convey as much information as possible about the content of your article.

Text

Articles will be divided into Arabic numbered (e.g. 1. Introduction, 3.1. Iterative Solution) sections and subsections (do not use Roman numbers). Appendices should be numbered as A., B., C. or A.1., A.2., B.1.

You should use tables only to improve conciseness or where the information cannot be given satisfactorily in other ways such as by histograms or graphs. Tables should be numbered serially and referred to in the text by number (table 1, etc). Each table should have an explanatory caption which should be as concise as possible.

If your article consists of a very large amount of tabular material such as long lists of crystallographic results, computer programs and spectrographic results we would not normally publish these in full. Instead these, author may give a related web page URL as a footnote without referencing in text.

In terms of general style, conciseness in writing helps the reader, but clarity is most important. Short sentences and paragraphs make reading easier. You should aim for consistency within your article in matters such as hyphenation and spelling. All acronyms and abbreviations should be clearly explained when they first appear in the text, and all units used should be consistent throughout the article.

If English is not your first language, you should ask an English speaking colleague to read through your article or at least apply a UK/US English spellchecker to your article.

Mathematics

Authors should observe the following simple rules to help clarify the contents of mathematical material.

- Equations must be written with Microsoft Word's Equation Editor or OpenOffice's Math program.
- The text should make clear distinctions between physical variables, mathematical symbols, units of measurement, abbreviations, chemical formulas, etc.
- Equations must be sequentially numbered. The number should appear in parentheses at the righthand side of the page and referred to in the text as, e.g. (7).
- Italic and boldface should be used to identify physical or mathematical variables. Variables and physical constants such as the speed of light or the Boltzmann constant are to be set in normal italic. Vectors and tensors should be set in bold and sans-serif bold, respectively.
- Italic type should be avoided for the following:
 - Units of measurement (e.g., km, g, K, cm⁻², s⁻¹).
 - Mathematical signs such as sin, cos, log, exp, etc.
 - Chemical formulas.
- Equations can be referred in the text like: "Equation 1" or "Eq. 1"

References

It is vitally important to fully acknowledge all relevant work on compiling your reference list.

A complete reference should provide your reader with enough information to locate the article concerned and should consist of: initials and name(s), title of journal or book, volume number, editors (if any) and, for books, town of publication and publisher (in parentheses), the page numbers and finally date published,. Where there are up to ten authors, all authors' names should be given in the reference list. Where there are more than ten authors, only the first name should appear followed by *et al.* Material which is really a footnote to the text should not be included in the reference list, which should contain only references to bibliographic data.

Copies of cited publications not yet available publicly should be submitted for the benefit of the referees. Unpublished results and lectures should be cited for exceptional reasons only. Before submitting your article, please ensure you have done a literature search to check for any relevant references you may have missed.

You must use Vancouver numerical referencing system. In the Vancouver numerical system you should number your references sequentially through the text. The numbers should be given in square brackets and one number can be used to refer to several instances of the same reference. The reference list at the end of the article lists the references in numerical order, not alphabetically. Examples:

Journals

- [1] R. K. Barrett et al., J. Phys. Stu **0**, 65 (2007).
- [2] N. Mason, D. Gilmour, R. Waters, and R. Wright, J. Phys. Stu. **0**, 68 (2007).
- [3] B. Klose, J. Phys. Stu. (to be published)

Books

- [4] C. Sagan, *The Demon-Haunted World: Science as a Candle in the Dark*, 1st edition (Random House, New York, 1996).
- [5] K. P. O'Donnell, in *Group III Nitride Semiconductor Compounds: Physics and Applications*, edited by B. Gil, 1st edition (Clarendon Press, Oxford, 1998).

Proceedings

- [6] R. K. Barrett, in *Proceedings of the International Conference on Chemical Physics, Bethel, 1970*, edited by M. Yasgur, p201 (Bethel Publications, New York, 1970).

Reports and Theses

- [7] A. Einstein, Ph.D. thesis, University of Zurich, 1905.

Figures

Carefully chosen and well-prepared figures, such as diagrams and photos, can greatly enhance your article. We encourage you to prepare figures that are clear, easy to read and of the best possible quality. Characters should appear as they would be set in the main body of the article. We will normally use figures as submitted; it is therefore your responsibility to ensure that they are legible and technically correct.

Note: If you are intending to use previously published figures, you must obtain written permission from the copyright holder before using them in your article.

To get the best possible results in personal prints and online, please consider the following points when preparing your figure files:

- Shading and fill patterns should be avoided wherever possible because diagrams containing them have to be printed as half-tones and undesirable interference patterns may be produced on printing.
- Readers of your online article will probably download and print it on a black and white printer which may make coloured lines difficult to distinguish. To avoid this problem, please consider identifying curves by methods other than colour, for example: by letters (upper case Roman), by the symbols used for the data points (e.g. *) or by the type of line (e.g. --, full curve; - - -, broken curve; - · - · -, chain curve).
- When producing figures using colours, light colours such as yellow, light green, light blue, light grey, etc should be avoided because they generally reproduce poorly during the black and white printing process.

- Wherever possible electronic figures should be tightly cropped to minimize superfluous white space surrounding them. This reduces file sizes and helps the alignment of figures on the printed page.

Colour figures

The use of colour in figures can enhance the effective presentation of results, and there are no restrictions on the use of colour in your article.

Figure captions

Your figures should be numbered in the order in which they are referred to in the text. If there is more than one part to a figure (e.g. figure 1(a), figure 1(b) etc), the parts should be identified by a lower-case letter in parentheses close to or within the area of the figure. Captions should be included in the text and not in the graphics files.

Multimedia

We can not use multimedia files in your articles. You can refer a web page “without” a reference. You can include a web page URL in a parenthesis in a proper place.

Length of submissions

The length of an article can be calculated by 700 words per page in A4-sized JPS. Figures and tables usually occupy the equivalent of 200-300 words each, and you should allow for this in your total. A JPS article must be minimum of 3500 words and a maximum of 7000 words with counting figures and tables (5-10 pages).

What files to submit

We encourage you to send us your article in Microsoft Word or OpenOffice format so it can be refereed without delays and be published more quickly.

Naming your files

Our system automatically renames your file. But in first submission, please name your file according to the following guidelines:

- use only characters from the set a to z, A to Z, 0 to 9 and underscore (_);
- do not use spaces in file names;
- include an extension to indicate the file type (e.g., .doc);
- do not use any accented characters; for example, à, ê, ñ, ö, ý, etc because these can cause difficulties when processing your files.

Article text files

- We are able to receive articles prepared using Microsoft Word or OpenOffice.
- Fonts used should be restricted to the standard font families (Times, Helvetica, Courier or Symbol)
- If special symbols are needed (e.g. Greek characters, accented characters or mathematical symbols) these should be typed using the appropriate TrueType font. Do not use the Symbol facility on the 'Insert' menu as this often results in font conversion problems.
- Equations must be prepared using only Microsoft Word Equation Editor or the OpenOffice word equation program.