

Instructions for authors

The submission stage

The web-based submission (and resubmission), including via a preprint server, is preferred over other methods. The member of the Editorial Board or the Editor-in-Chief to whom the manuscript should be forwarded may be indicated in the submission form. Additionally authors are encouraged to suggest a list of possible referees (not more than 5). The content of the article should not be submitted simultaneously to another journal.

Electronic submission

Global resulting Postscript or PDF files of articles are preferred. They should however be carefully tested for printing and compressed before submission.

• Authors are encouraged to submit their manuscripts electronically through the web (Inquiry System) at:

<https://articlestatus.edpsciences.org/is/epjb/>

• Authors can eventually submit their manuscript via e-mail, but only through the Editorial Office at:

epjb@edpsciences.org

* The LaTeX2e macro package, designed especially for EPJ, is available at www.epj.org or via anonymous ftp from:

[ftp.edpsciences.org](ftp://ftp.edpsciences.org/pub/epj) in the directory `/pub/epj`

[ftp.springer.de](ftp://ftp.springer.de/pub/tex/latex/svjour/epj) in the directory

`/pub/tex/latex/svjour/epj`

[ftp.sif.it](ftp://ftp.sif.it/pub/tex/epj) in the directory `/pub/tex/epj`

Colloquia

Colloquia describe the development of new areas of research or the impact of new and promising

experimental or theoretical methods in the fields that are within the spectrum of topics covered by the respective journals. While not as extensive and complete as reviews in the usual sense, they are intended to suitably introduce new research directions and techniques in their early stages of development, and to a wider audience. There is no explicit constraint regarding the length of such manuscripts, although 20 printed pages would be the most usual length. All invited/submitted manuscripts will undergo the same refereeing procedure as all other contributions submitted to the journal. For accepted colloquium papers, authors will receive an honorarium of EUR 200,-- and colour figures will be free of charge.

Manuscript contents

In general the manuscripts should be written in English; in exceptional cases the Editors-in-Chief may accept submissions in one of the major European languages also. The material presented in all EPJ B papers should be original. Material should be placed in the following order: title, author names, address of author institutions, shortened version of the title, abstract, text, acknowledgments, appendices, references, figure and table captions, figures, tables (unless they are paginated using EPJ macro package).

The acceptance stage

At this stage, the Editorial Office will send an acceptance letter to the corresponding author, and at the same time, will ask for electronic files of text (LaTeX, TeX, Word) and figures matching exactly the accepted version. All portions of the manuscript available in electronic form should be sent to the production department either by the Editorial Office, if

the source files of the accepted version have been provided previously, or by the author according to the instructions mentioned in the acceptance letter from the Editorial Office or to be found on our web servers.

Authors are informed that any missing element in an accepted article (electronic file of the text or of the figures or—in case of proper e-files of the figures not available— good quality laser printed figures) will delay the publication date. The Editorial Office will keep the paper **on a waiting list** until all missing material is received.

The proof correction stage

Authors should keep in mind that reading proofs is **their responsibility**.

Files typeset using Word, Wordperfect, Macwrite, etc., need *heavy retyping* (equations and special characters are lost during the conversion process).

Also, LaTeX files are *slightly modified* by the production department to follow general presentation rules of the journal.

The main aim of proofreading is to correct errors that may have occurred during the production process, and **not to modify the contents of the paper**.

The proofs, once corrected, should be signed and returned to the publisher as soon as possible (by fax or e-mailing a list of corrections, by post).

Offprints

Authors will receive the PDF file (with cover) of their article for free as soon as it is published. Paper reprints can be supplied on request by filling-in the order form sent out with the proofs.

Style guide

Title

Title should be simple, concise and informative. A shortened version of the title consisting of a maximum of 75 characters (including spaces) for running headers should also be provided.

Author(s) name(s) and affiliations

A list of all authors (in full first and last names), as well as corresponding addresses, should be provided. Addresses should contain all information necessary for an effective mail delivery. E-mail, fax and telephone numbers should also be provided to speed up communication between Editorial Office, readers and authors. Only the e-mail address will be published.

Abstract

An abstract should accompany each manuscript; it should be completely self-contained, not exceeding 200 words and written as a single paragraph. Mathematical expressions should be avoided.

Main body of the paper

The body of the paper should be divided into sections (however, in short papers, sections may not be necessary). Sections should be numbered with Arabic (not roman) numerals. Subsections (second level) should be numbered 1.2, 1.3, etc., and sub-subsections (third level) 1.1.1, 1.1.2, etc. Appendices should be numbered A, B, etc. All sections must have a short descriptive title.

Equations, tables, figures, and references should follow a sequential numerical scheme in order to ensure a logical development of subject matter.

Electronic-only material

Electronic-only material is designed to provide supplementary information which is either too voluminous for printing or is designed specifically for the Web. Electronic-only material may include, but is not restricted to: (Large) tables; Appendices; Programmes; Images.

For more information on the submission of this material (file requirements, etc.), please contact the Production Office.

Mathematical material

A standard typesetting procedure is followed by the production staff. For details, see the internationally agreed standards adopted by the International Union of Pure and Applied Physics (IUPAP) or defined by the International Organization of Standardization (ISO). However, authors should observe the following simple rules to help clarify the contents of mathematical material.

• 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 right-hand side of the page and referred to in the text as, e.g. (7).

Caution: Mathematical expressions often need to be displayed on two or more lines (“broken”) because of the line length limitation of the two-column layout. There are situations where breaking an equation is not *possible or appropriate* (long fractions or matrices). The production department reserves the possibility to place unbroken equations at the bottom

or at the top of the concerned page(s), according to the page layout to be defined by the production staff, with an appropriate citation in the text. For example:

See equation (8) below(above)

- 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.

Footnotes

- There are introductory footnotes (referring to authors new addresses, address of corresponding author, ...). These footnotes should appear at the bottom of the relevant page, indicated with the following symbols as superscripts: ^a, ^b, ^c, etc.
- There are footnotes to text material, which should be restricted as far as possible, and which should be designated by numerical superscripts: ¹, ², ³, etc. They should be placed at the foot the relevant page.

Acknowledgements and appendices

The acknowledgment section should follow the main body of the paper and should precede any appendix. Appendices should be numbered with A, B, etc. if there are more than one appendix (**Appendix A** or **Appendix A: Complex developments**, when there is a title). The appendix equations should be numbered consecutively, but separately from those in the main body of the paper ((A.1), (A.2), etc.). In each appendix, equations will be numbered separately ((B.1), (B.2), etc.).

Figures

Each figure should be cited in the text. They must comply with the following usual quality criteria.

- Parts of diagrams, graphs... should be clearly indicated by different types of hatching. Grey scales, which might get difficult to distinguish after reducing, or which often disappear during the printing process, should be avoided.
- Standard symbols which should be used inside a figure are: □, △, ○, +, •, ★, ■, ◆, ×.
- Labeling should be uniform in size throughout all figures.
- After reduction, all details of the figures should still be visible and all labeling legible.

• Scaling of artwork

Figures should be intended for the column width (8.8 cm) of the journal. If the detail shown requires it, 1.5 or 2 columns may be used. The final size of capital letters or numerals in a figure usually lies within the range 1.6–2.3 mm to avoid any disproportion between figure/text character sizes.

• Colour figures

By default, figures appear in colour in the electronic version but they are published in black and white in the paper version of the journal. If figures were submitted in colour, and intended for b/w printing, authors should control at proof-reading stage that quality of the b/w version is satisfactory and that no (ambiguous) reference is made to colour coding in the figure captions or in the main text. Colour printing is available on request: the charge for one article is 600 euros tax free (whatever the number of figures).

References

It is important to confirm the accuracy of bibliographic information in references. If your refer-

ence citations are incorrect or incomplete (e.g., missing author name, or an incorrect volume number or page), the associated hyperlinks may fail, and the usefulness of your paper in the online environment may be diminished.

References should be cited in the text by placing sequential numbers in brackets (for example, [1], [2,5,7], [8–10]). They should be numbered in the order in which they are cited. Authors may be cited in the text by name, but without initials. References section should be organized according to the following examples. Note that journal names should be abbreviated according to the list of serial title word abbreviation of the ISDS (International Serial Data System) if available, otherwise full journal names are preferable.

Journals

1. C. Green, Eur. Phys. J. D **30**, 123 (2004)

Books

2. J.M. Smith, in *Molecular Dynamics*, edited by C. Brown, 2nd edn. (EDP Sciences, Les Ulis, 1998)

Proceedings

3. J.M. Smith, in *Proceedings of the International Conference on Low Temperature Physics, Madison, 1975*, edited by C. Brown (EDP Sciences, Les Ulis, 1998), p. 201

Reports and Theses

4. J.M. Smith, Brookhaven National Laboratory Report No. 110, 1982 (unpublished)
5. J.M. Smith, Ph.D. thesis, University of Paris XI, 1990

If available the DOI (Digital Object Identifier) of the cited literature should be added at the end of the reference. **IMPORTANT:** To ensure that the CrossRef facility can hyper-link to the articles quoted in the bibliography, multiple references must not be used. I.e., a list of references under the same number is not allowed: each reference has to be singly numbered.

Technical Instructions for preparing and delivering a paper accepted in EPJ B

TEXT

Preferred format	L ^A T _E X 2 _ε with EPJ class	macro package available by ftp at ftp.edpsciences.org in /pub/epj/ ftp.springer.de in /pub/tex/latex/svjour/epj/ ftp.sif.it in /pub/tex/epj/
Also possible	L ^A T _E X 2 _ε (standard, article style) A _M S-L ^A T _E X-L ^A T _E X 2 _ε	<ul style="list-style-type: none"> • no customized or personal style files, no particular fonts • A_MS-L^AT_EX package may be used to create equations
	Word (in the last resort)	<ul style="list-style-type: none"> • symbols and equations will be typed in L^AT_EX by publisher staff

FIGURES

Preferred format	Encapsulated Postscript (EPS) Postscript (PS) also accepted	<ul style="list-style-type: none"> • only standard Adobe fonts • no TIFF preview • ASCII format (not binary) • line strength greater than 1 pt
	Windows Postscript drivers	<ul style="list-style-type: none"> • check that the Postscript option is set to Encapsulated Postscript (EPS)
Also possible	TIFF, GIF, JPEG, PDF, Word	<ul style="list-style-type: none"> • black and white graphics: resolution of at least 300 dpi • grayscale graphics: resolution of at least 200 dpi

- Material should be delivered according to the instructions of the editorial office.