



Guide for Authors

1. Submission of articles

1.1. Content

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all Authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, without the written consent of the copyright-holder.

1.2. On-line submission

Submission to this journal proceeds totally online. Use the following guidelines to prepare your article. Via the “Author Gateway” page of this journal, <http://authors.elsevier.com>, or the website <http://ees.elsevier.com/matcom>, you will be guided stepwise through the creation and uploading of the various files. The system automatically converts source files to a single Adobe Acrobat PDF version of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the Editor’s decision and requests for revision, takes place by e-mail and via the Author’s homepage, removing the need for a hard-copy paper trail.

The above represents a very brief outline of this form of submission. It can be advantageous to print this “Guide for Authors” section from the site for reference in the subsequent stages of article preparation.

1.3. Copyright

Upon acceptance of an article, Authors will be asked to transfer copyright (for more information on copyright see <http://authors.elsevier.com>). This transfer will ensure the widest possible dissemination of information. A letter will be sent to the corresponding Author confirming receipt of the manuscript. A form facilitation transfer of copyright will be provided.

If excerpts from other copyrighted works are included, the Author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by Authors in these cases: contact Elsevier’s Rights Department, Oxford, UK; phone: (+44) 1865 843830, fax: (+44) 1865 853333, e-mail: permissions@elsevier.com. Requests may also be completed on-line via the Elsevier homepage (<http://www.elsevier.com/locate/permissions>).

2. Electronic format requirements for accepted articles

We accept most wordprocessing formats, but Word, WordPerfect or LaTeX is preferred. Always keep a backup copy of the electronic file for reference and safety. Save your files using the default extension of the program used.

2.1. Wordprocessor documents

It is important that the file be saved in the native format of the wordprocessor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the wordprocessor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts, etc. Do not embed “graphically designed” equations or tables, but prepare these using the wordprocessor's facility. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Author Gateway's Guide to Publishing with Elsevier: <http://authors.elsevier.com>). Do not import the figures into the text file but, instead, indicate their approximate locations directly in the electronic text and on the manuscript. See also the section on *Preparation of electronic illustrations*.

To avoid unnecessary errors you are strongly advised to use the “spellchecker” function of your wordprocessor.

2.2. LaTeX documents

If the LaTeX file is suitable, proofs will be produced without rekeying the text. The article should preferably be written using Elsevier's document class “elsart”, or alternatively the standard document class “article”.

The Elsevier LaTeX package (including detailed instructions for LaTeX preparation) can be obtained from the Author Gateway's Quickguide: <http://authors.elsevier.com/latex> or from the Comprehensive TeX Archive Network (CTAN): see below, in the directory `/tex-archive/macros/latex/contrib/supported/elsevier`. It consists of the files: `elsart.cls`, guidelines for users of `elsart`, a template file for quick start, and the instruction booklet “Preparing articles with LaTeX”.

CTAN is an archive with up-to-date copies of all the public-domain versions of TeX, LaTeX, Metafont and ancillary programs, which is made available via a mirrored network of FTP servers. You can enter the CTAN archive via a Web interface in the UK (<http://www.tex.ac.uk>), in the USA (<http://www.ctan.org>), or in Germany (<http://www.dante.de/software/ctan> in German). You can search for a package on CTAN via <http://www.ucc.ie/cgi-bin/ctan/>. You can also enter the archive via FTP at <ftp.tex.ac.uk>, at <ftp.dante.de>, at <ctan.tug.org>, or at one of the many mirror servers; see for a list the UK or USA CTAN Web pages. When a CTAN server does not respond, please try another one.

Note that CTAN is not related to Elsevier, and that Elsevier's author support cannot accept complaints or answer questions about the availability of any CTAN server.

Figures may be inserted in the usual way using an `include graphics` command, at the position in the article where they are cited.

Your LaTeX file will be most useful as input for the printed article if you obey the following rules of thumb:

1. Be consistent. If you use a macro for a phrase, use it throughout.
2. Use standard LaTeX mark-up. Do not hardcode your own layout for, e.g., section headings, but use the usual LaTeX macro for this purpose.
3. Keep it simple. Do not define macros that accomplish complicated layout. They will also make the input process complicated.
4. Use `elsart.cls` as class file and `elsart-num-sort.bst` as bibliographic style file.

3. Preparation of text

3.1. Presentation of manuscript

3.1.1. General

If possible, please consult a recent issue of the journal to become familiar with the layout and conventions. Ensure that each new paragraph is clearly indicated. Number all pages consecutively. Please write your text in good English (American or British usage is accepted, but not a mixture of these). Italics are not to be used for expressions of Latin origin, for example, *in vivo*, *et al.*, *per se*. Use decimal points (not commas); use a space for thousands (10 000 and above).

3.1.2. Text about the title page

Provide the following data on the title page (in the order given).

Title: Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

Author names and affiliations: Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the Authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the Author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each Author.

Corresponding Author: Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.

Present/permanent address: If an Author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that Author's name. The address at which the Author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract: A concise and factual abstract is required (10–20 typed lines). The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

Keywords: Immediately after the abstract provide a maximum of five keywords, avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of", etc.). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

N.B. Acknowledgements: Collate acknowledgements in a separate section at the end of the article and do *not*, therefore, include them on the title page, as a footnote to the title or otherwise.

3.2. Specific remarks

Subdivision of the article: Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, . . .), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to "the text." Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Acknowledgements: Place acknowledgements, including information on grants received, before the references, in a separate section, and not as a footnote on the title page.

Abbreviations: Define abbreviations that are not standard in this field at their first occurrence in the article: in the abstract but also in the main text after it. Ensure consistency of abbreviations throughout the article.

Figure captions, tables, figures, schemes: Present these, in this order, at the end of the article. They are described in more detail below. If you are working with LaTeX and have such features embedded in the text, these can be left, but such embedding should not be done specifically for publishing purposes. Further, high-resolution graphics files must be provided separately (see *Preparation of illustrations*).

Mathematical formulae: Present simple formulae in the line of normal text where possible. In principle, variables are to be presented in italics. Use the solidus (*/*) instead of a horizontal line,

e.g., X_p/Y_m rather than $\frac{X_p}{Y_m}$

Powers of e are often more conveniently denoted by exp.

Number consecutively any equations that have to be displayed separate from the text (if referred to explicitly in the text).

Footnotes: Footnotes should be used sparingly. Number them consecutively throughout the article, using superscript Arabic numbers. Many wordprocessors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves on a separate sheet at the end of the article. Do not include footnotes in the Reference list.

Table footnotes: Indicate each footnote in a table with a superscript lowercase letter.

Tables: Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

4. Preparation of electronic illustrations

4.1. General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Save text in illustrations as “graphics” or enclose the font.
- Only use the following fonts in your illustrations: Arial, Courier, Helvetica, Times, Symbol.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide all illustrations as separate files and as hardcopy printouts on separate sheets.
- Provide captions to illustrations separately.
- Produce images near to the desired size of the printed version.

A detailed guide on electronic artwork is available on our website: <http://authors.elsevier.com/artwork>

You are urged to visit this site; some excerpts from the detailed information are given here.

4.2. Formats

Regardless of the application used, when your electronic artwork is finalised, please “save as” or convert the images to one of the following formats (Note the resolution requirements for line drawings, halftones, and line/halftone combinations given below.):

EPS: Vector drawings. Embed the font or save the text as “graphics”.

TIFF: Colour or greyscale photographs (halftones): always use a minimum of 300 dpi.

TIFF: Bitmapped line drawings: use a minimum of 1000 dpi.

TIFF: Combinations bitmapped line/half-tone (colour or greyscale): a minimum of 500 dpi is required.

DOC, XLS or PPT: If your electronic artwork is created in any of these Microsoft Office applications please supply “as is”.

Please do not:

- Supply embedded graphics in your wordprocessor (spreadsheet, presentation) document;
- Supply files that are optimised for screen use (like GIF, BMP, PICT, WPG); the resolution is too low;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

4.3. Captions

Ensure that each illustration has a caption. Supply captions on a separate page, not attached to the figure. A caption should comprise a brief title (*not* on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

4.4. Line drawings

The lettering and symbols, as well as other details, should have proportionate dimensions, so as not to become illegible or unclear after/possible reduction; in general, the figures should be designed for a reduction factor of two to three. The degree of reduction will be determined by the Publisher. Illustrations will not be enlarged. Consider the page format of the journal when designing the illustrations.

Do not use any type of shading on computer-generated illustrations.

5. References

Responsibility for the accuracy of bibliographic citations lies entirely with the Authors.

5.1. Citations in the text

Indicate references by number(s) in square brackets in line with the text. The actual Authors can be referred to, but the reference number(s) must always be given.

Example: "... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ..."

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either "Unpublished results" or "Personal communication" Citation of a reference as "in press" implies that the item has been accepted for publication.

5.2. Citing and listing of Web references

As a minimum, the full URL should be given. Any further information, if known (Author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

5.3. Reference list

The list of references is arranged alphabetically and then numbered (numbers in square brackets).

Examples:

Reference to a journal publication:

J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2000) 51–59.

Reference to a book:

W. Strunk Jr., E.B. White, *The Elements of Style*, third ed., Macmillan, New York, 1979.

Reference to a chapter in an edited book:

G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 1999, pp. 281–304.

6. Proofs

One set of page proofs in PDF format will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post). Elsevier now sends PDF

proofs which can be annotated; for this you will need to download Adobe Reader version 7 (or higher) available free from <http://www.adobe.com/products/acrobat/readstep2.html>. Instructions on how to annotate PDF files will accompany the proofs. The exact system requirements are given at the Adobe site: <http://www.adobe.com/products/acrobat/acrrsystemreqs.html#70win>. If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and return by fax, or scan the pages and e-mail, or by post. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. Therefore, it is important to ensure that all of your corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. Note that Elsevier may proceed with the publication of your article if no response is received.

7. Offprints

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