

1. Submission of articles

1.1. General

When submitting an article, authors are asked to suggest when applicable, which of the Senior Editors (or Editor)

of the Journal they believe is most appropriate to take charge of the reviewing procedure of that article.

They are also

asked to supply the name and address/email of four potential referees.

They should also include a brief CV with their submission. This will not be published with the article, but it may

assist the Journal Editors in selecting appropriate reviewers.

1.2. 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the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in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.

1.3. On-line submission

Submission to this journal proceeds totally online. Use the following guidelines to prepare your article. Via 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.

1.4. Copyright

Upon acceptance of an article, Authors will be asked to transfer copyright (for more information on copyright see <http://www.elsevier.com/copyright>

. 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 facilitating transfer of copyright will

be provided.

0378-4754/\$30.00

doi:10.1016/j.matcom.2005.09.001

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 singlecolumn 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 Guide to Publishing with Elsevier: <http://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 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/](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.

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. Present figure captions, tables and figures on separate pages at the end of the manuscript. 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

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://www.elsevier.com/artworkinstructions>

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

When your manuscript is received by the Publisher it is considered to be in its final form. Proofs are not to be regarded as “drafts”.

One set of page proofs in PDF format will be sent by e-mail to the corresponding Author, to be checked for typesetting/editing. No changes in, or additions to, the accepted (and subsequently edited) manuscript will be allowed at this stage. Proofreading is solely your responsibility. A form with queries from the copyeditor may accompany your proofs. Please answer all queries and make any corrections or additions required. The Publisher will do everything possible to get your article corrected and published as quickly and accurately as possible. In order to do this we need your help. When you receive the (PDF) proof of your article for correction, it is important to ensure that all of your corrections are sent back to us in one communication. Subsequent corrections will not be possible, so please ensure your first sending is complete. Note that this does not mean you have any less time to make your corrections, just that only one set of corrections will be accepted.

7. Reprints

At the time the issue which includes your article is about to be printed you will receive your offprint in an electronic format, i.e. a pdf via e-mail.