

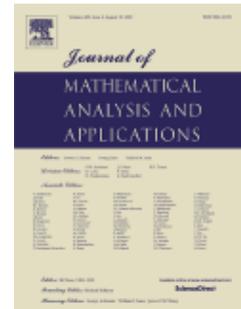


JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

•	Description	p.1
•	Audience	p.1
•	Impact Factor	p.1
•	Abstracting and Indexing	p.2
•	Editorial Board	p.2
•	Guide for Authors	p.6



ISSN: 0022-247X

DESCRIPTION

The *Journal of Mathematical Analysis and Applications* presents papers that treat **mathematical analysis** and its numerous applications. The journal emphasizes articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, and engineering, particularly those that stress analytical aspects and novel problems and their solutions.

Papers are sought which employ one or more of the following areas of classical analysis:

- **Analytic number theory**
- **Functional analysis** and **operator theory**
- **Real** and **harmonic analysis**
- **Complex analysis**
- **Numerical analysis**
- **Applied mathematics**
- **Partial differential equations**
- **Dynamical systems**
- **Control** and **Optimization**
- **Probability**
- **Mathematical biology**
- **Combinatorics**
- **Mathematical physics**

Prospective authors are strongly encouraged to read the [Guide for Authors](#).

AUDIENCE

Pure mathematicians, applied mathematicians, numerical analysts

IMPACT FACTOR

2013: 1.119 © Thomson Reuters Journal Citation Reports 2014

ABSTRACTING AND INDEXING

BioEngineering Abstracts
Current Contents/Physics, Chemical, & Earth Sciences
Mathematical Reviews
Engineering Index
Research Alert
Science Abstracts
Science Citation Index
Zentralblatt MATH
CompuMath Citation Index
Scopus

EDITORIAL BOARD

Editors-in-Chief:

Richard M. Aron, Kent State University, Kent, Ohio, USA

Functional analysis, Infinite-dimensional function theory. Fax: 330 672 2209

Goong Chen, Texas A&M University, College Station, Texas, USA

Applied and computational PDE's, Vibration control, nonlinear and chaotic systems, Engineering mechanics, molecular quantum mechanics and quantum computing. Fax: 979 862 4190.

Steven G. Krantz, Washington University in St. Louis, St. Louis, Missouri, USA

Real and complex analysis, Partial differential equations. Fax: 314 935 6839

Honorary Editors:

George Leitmann

William F. Ames †

James S.W. Wong

Division Editors

David Ambrose, Drexel University, Philadelphia, Pennsylvania, USA

Partial differential equations and fluid dynamics

Raúl Curto, University of Iowa, Iowa City, Iowa, USA

Single and multivariable operator theory C-algebras; Classical theory of moments

Hélène Frankowska, Université Pierre et Marie Curie, Sorbonne Universités, Paris, France

Set-valued, nonsmooth, convex and nonlinear analysis; Viability theory; Differential inclusions, control problems, and differential games with state constraints; Regulation of systems evolving under nonstochastic uncertainty

Juan Nieto, Universidade de Santiago de Compostela, Santiago de Compostela, Spain

Nonlinear Differential Equations; Biomedical Applications

Paul Sacks, Iowa State University, Ames, Iowa, USA

Differential equations

Ulrich Stadtmueller, Universität Ulm, Ulm, Germany

Probability; Statistics; Classical analysis

Rodolfo Torres, University of Kansas, Lawrence, Kansas, USA

Fourier analysis

Associate Editors

V. Andrievskii, Kent State University, Kent, Ohio, USA

Approximation theory; Potential theory

J.A. Ball, Virginia Polytechnic Institute & State University, Blacksburg, Virginia, USA

Operator and control theory

J. Bastero, Universidad de Zaragoza, Zaragoza, Spain

Asymptotic geometric analysis; Geometry of Banach spaces; Function spaces

B.C. Berndt, University of Illinois at Urbana-Champaign, Urbana, USA

Analytic number theory; Classical analysis; Special functions

D. Blecher, University of Houston, Houston, Texas, USA

Functional analysis; Operator theory; Operator algebras

G. Bluman, University of British Columbia, Vancouver, British Columbia, Canada

Differential equations

J. Bonet, Universitat Politècnica de València, Valencia, Spain

Functional analysis; Operator theory

B. Bongiorno, Università degli Studi di Palermo, Palermo, Italy
Real analysis

M.J. Carro, University of Barcelona, Barcelona, Spain
Real analysis; Harmonic analysis

B. Cascales, Universidad de Murcia, Murcia, Spain
Measure and integration; Functional analysis

A. Cianchi, Università degli Studi di Firenze, Firenze, Italy
Function spaces; Partial differential equations

P.L. Combettes, Université Pierre et Marie Curie, Sorbonne Universités, Paris, France
Convex optimization, Inverse problems, Nonlinear functional analysis

G. Corach, Instituto Argentino de Matematica, Buenos Aires, Argentina
Functional analysis; Operator theory; Harmonic analysis

A. Daniilidis, Universitat Autònoma de Barcelona (UAB), Bellaterra, Spain
Variational analysis; Optimization

M. del Pino, Universidad de Chile, Santiago, Chile
Concentration phenomena in nonlinear elliptic equations; Blow-up and asymptotic behavior in nonlinear parabolic equations

T. Domínguez Benavides, Universidad de Sevilla, Sevilla, Spain
Nonlinear function analysis

K. Driver, University of Cape Town, Rondebosch, South Africa
Special functions (including trigonometric functions); Approximations and expansions

Y. Du, University of New England, Armidale, New South Wales, Australia
Nonlinear elliptic and parabolic equations; Nonlinear analysis

R. G. Durán, Universidad de Buenos Aires, Buenos Aires, Argentina
Finite element methods; Harmonic analysis

P. Exner, Doppler Institute for Mathematical Physics and Applied Mathematics, Prague 1, Czech Republic
Spectral and scattering theory of differential operators

L.A. Fialkow, State University of New York (SUNY) at New Paltz, New Paltz, New York, USA
Functions of a complex variable; Integral transforms; Oatinal calculus; Operator theory

J.A. Filar, Flinders University, Adelaide, South Australia, Australia
Optimization; Operations research; Markov decision processes; Game theory; Singular perturbations; Application

S.A. Fulling, Texas A&M University, College Station, Texas, USA
Theoretical physics; Spectral and asymptotic theory of differential operators

R. Gornet, University of Texas at Arlington, Arlington, Texas, USA
Spectral geometry

J.L. Guermond, Texas A&M University, College Station, TX, USA
Fluid mechanics, Partial differential equations, Numerical analysis

C. Gutierrez, Temple University, Philadelphia, Pennsylvania, USA
Partial differential equations; Harmonic analysis

Y. Huang, Zhongshan University, Guangzhou, China
Dynamical systems; Chaos; Control theory

A.V. Isaev, Australian National University, Canberra, Australian Capital Territory, Australia
Complex analysis and geometry

K. Jarosz, Southern Illinois University at Carbondale, Edwardsville, Illinois, USA
Functional analysis, Spaces of analytic functions of a single variable

A. Jentzen, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, Switzerland
Stochastic ordinary differential equations; Stochastic partial differential equations

B. Kaltenbacher, Universität Klagenfurt, Klagenfurt, Austria
Partial differential equations; Calculus of variations and optimal control; Optimization; Numerical analysis

H. Kang, Inha University, Incheon, South Korea
Inverse problems; Partial differential equations

D. Khavinson, University of South Florida, Tampa, Florida, USA
Classical analysis

P. Koskela, University of Jyväskylä, Jyväskylä, Finland
Quasiconformal mappings; Sobolev spaces; Analysis on metric spaces

M. Laczkovich, Eötvös Lorand University, V. Kerület, Budapest, Hungary
Real functions; Measure theory

W.J. Layton, University of Pittsburgh, Pittsburgh, Pennsylvania, USA
Differential equations; Fluid mechanics; Turbulence

P.G. Lemarie-Rieusset, Université d'Evry-Val-d'Essonne, Evry, France
Harmonic analysis; Nonlinear PDEs; Wavelets

H. Lin, University of Oregon, Eugene, Oregon, USA
Operator Algebras

H. Liu, Iowa State University, Ames, Iowa, USA
Hyperbolic partial differential equations; Numerical analysis

A. Lunardi, Università degli Studi di Parma, Parma, Italy
Elliptic and parabolic partial differential equations; Abstract evolution equations

M. Mathieu, Queen's University Belfast, Belfast, UK
Functional analysis; Operator theory

P.J. McKenna, University of Connecticut, Storrs, Connecticut, USA
Nonlinear boundary value problems

J. Morgan, University of Houston, Houston, Texas, USA
Reaction diffusion systems

P. Nevai, King Abdulaziz University, Jeddah, Saudi Arabia
Approximation theory; Orthogonal polynomials

K. Nishihara, Waseda University, Tokyo, Japan
Partial differential equations; Asymptotic analysis

D. O'Regan, National University of Ireland, Galway, Ireland
Nonlinear analysis

H.R. Parks, Oregon State University, Corvallis, Oregon, USA
Geometric analysis; Calculus of variations

M. Peligrad, University of Cincinnati, Cincinnati, Ohio, USA
Probability theory; Inequalities and limit theory for stochastic processes

M.M. Peloso, Università degli Studi di Milano, Milano, Italy
Harmonic analysis; Several complex variables

R. Popovych, University of Vienna, Vienna, Austria
Ordinary differential equations; Partial differential equations

V. Pozdnyakov, University of Connecticut, Storrs, Connecticut, USA
Probability theory; Mathematical statistics

M. Quincampoix, Université de Bretagne Occidentale, Brest, France
Deterministic and stochastic control; Differential equations and inclusions; Nonsmooth optimization; Differential games

V. Radulescu, Romanian Academy, Bucharest, Romania
Nonlinear elliptic partial differential equations; Critical point theory; Nonlinear analysis; Variational and hemivariational inequalities

T. Ransford, Université Laval, Quebec City, Quebec, Canada
Complex analysis; Potential theory; Operator theory

D.L. Russell, Virginia Polytechnic Institute & State University, Blacksburg, Virginia, USA
Applied theory of partial differential equations; Control theory of ordinary and partial differential equations; Elasticity theory

E. Saksman, University of Helsinki, Helsinki, Finland
Functions of a complex variable; Partial differential equations; Fourier analysis; Stochastic processes; Operator theory

W. Sarlet, Universiteit Gent, Ghent, Belgium
Ordinary differential equations; Differential geometry; Mechanics of particles and systems

M. Schlosser, University of Vienna, Wien, Austria
Special functions; Difference and functional equations

J. Shi, College of William and Mary, Williamsburg, Virginia, USA
Partial differential equations; Nonlinear analysis; Mathematical biology

R. Stelzer, Universität Ulm, Ulm, Germany
Probability theory and stochastic processes; Statistics; Game theory, economics, social and behavioral sciences

E.J. Straube, Texas A&M University, College Station, Texas, USA
Several complex variables

A. Sulem, INRIA-Rocquencourt, Le Chesnay cedex, France
Stochastic control; Financial mathematics

B.S. Thomson, Simon Fraser University, Burnaby, British Columbia, Canada
Real variables

S. Tikhonov, ICREA, Barcelona, Spain
Approximation theory; Fourier analysis

R.M. Timoney, Trinity College, Dublin 2, Ireland
Several complex variables and analytic spaces; Functional analysis

D. Wang, University of Pittsburgh, Pittsburgh, Pennsylvania, USA
Partial differential equations

D. Waterman, Florida Atlantic University, Boca Raton, FL, USA
C.E. Wayne, Boston University, Boston, Massachusetts, USA
Dynamical systems; Partial differential equations
W.L. Wendland, Universität Stuttgart, Stuttgart, Germany
Integral equations; Partial differential equations; Numerical analysis
M. Winkler, Universität Paderborn, Paderborn, Germany
Parabolic PDEs, Formation of Singularities
J.D.M. Wright, University of Aberdeen, Aberdeen, UK
Measure theory; Operator algebras
J. Xiao, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, Canada
Partial differential equations; Harmonic and complex analysis
Y. Yamada, Waseda University, Shinjuku-Ku, Japan
Parabolic PDEs, Population Biology
P.F. Yao, Chinese Academy of Sciences (CAS), Beijing, China
Partial differential equations; Systems and control; Nonlinear elasticity
H.-M. Yin, Washington State University, Pullman, Washington, USA
Partial differential equations and applications; Financial engineering and portfolio management;
Electromagnetic fields
N. Young, Leeds University and Newcastle University, UK
Mathematical analysis, particularly operators on Hilbert space; complex analysis; H infinity control
X. Zhang, Sichuan University, Chengdu, China
Control theory; Partial differential equations; Stochastic analysis
H.J. Zwart, University of Twente, Enschede, Netherlands
Control theory

Founding Editor:

Richard Bellman †

Publisher

Laura Schmidt, Elsevier BV, Amsterdam, Netherlands

GUIDE FOR AUTHORS

INTRODUCTION

The *Journal of Mathematical Analysis and Applications* will publish carefully selected mathematical papers treating classical analysis and its manifold applications. Papers devoted to the mathematical treatment of questions arising in physical, biological, and social sciences and engineering will be considered, particularly those in which analytical aspects and the novelty of the solution of a nontrivial application are emphasized.

Submission Limitations

Due to publishing constraints, only two submissions per author per year will be considered, at the discretion of the Editors-in-Chief. Cognate papers by the same author will not be published in the same issue; such series of papers will be considered only with the understanding that, if accepted, they will not appear in the same issue.

Contact details for submission

Authors may suggest an associate editor appropriate for the paper; however, assignment to that associate editor is not assured. Consult the list of associate editors and their specializations on the journal webpage or on a print copy of the journal.

BEFORE YOU BEGIN

Ethics in publishing

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Conflict of interest

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also <http://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: http://help.elsevier.com/app/answers/detail/a_id/286/p/7923.

Submission declaration and verification

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 or as an electronic preprint, see <http://www.elsevier.com/sharingpolicy>), 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, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service CrossCheck <http://www.elsevier.com/editors/plagdetect>.

Authorship

All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

Changes to authorship

This policy concerns the addition, deletion, or rearrangement of author names in the authorship of accepted manuscripts:

Before the accepted manuscript is published in an online issue: Requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author of the accepted manuscript and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (e-mail, fax, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until authorship has been agreed.

After the accepted manuscript is published in an online issue: Any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum.

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (for more information on this and copyright, see <http://www.elsevier.com/copyright>). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations (please consult <http://www.elsevier.com/permissions>). 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: please consult <http://www.elsevier.com/permissions>.

For open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (for more information see <http://www.elsevier.com/OAauthoragreement>). Permitted third party reuse of open access articles is determined by the author's choice of user license (see <http://www.elsevier.com/openaccesslicenses>).

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. For more information see <http://www.elsevier.com/copyright>.

Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Funding body agreements and policies

Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some authors may also be reimbursed for associated publication fees. To learn more about existing agreements please visit <http://www.elsevier.com/fundingbodies>.

Open access

This journal offers authors a choice in publishing their research:

Open access

- Articles are freely available to both subscribers and the wider public with permitted reuse
- An open access publication fee is payable by authors or on their behalf e.g. by their research funder or institution

Subscription

- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs (<http://www.elsevier.com/access>).
- No open access publication fee payable by authors.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

Creative Commons Attribution (CC BY)

Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The open access publication fee for this journal is **\$1500**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

The open access publication fee for this journal is **USD 1500**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

Language (usage and editing services)

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (<http://webshop.elsevier.com/languageediting/>) or visit our customer support site (<http://support.elsevier.com>) for more information.

Submission

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

PREPARATION

LaTeX

You are recommended to use the Elsevier article class *elsarticle.cls* (<http://www.ctan.org/tex-archive/macros/latex/contrib/elsarticle>) to prepare your manuscript and BibTeX (<http://www.bibtex.org>) to generate your bibliography.

For detailed submission instructions, templates and other information on LaTeX, see <http://www.elsevier.com/latex>.

Article structure

Subdivision - numbered sections

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.

Introduction

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Theory/calculation

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

Discussion

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Glossary

Please supply, as a separate list, the definitions of field-specific terms used in your article.

Essential title page information

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. 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 will handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **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. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

Highlights

Highlights are a short collection of bullet points that convey the core findings of the article. Highlights are optional and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See <http://www.elsevier.com/highlights> for examples.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Math formulae

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

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.

Formats

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, 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 (or PDF): Vector drawings, embed all used fonts.

TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.

TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.

TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Color artwork

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. For further information on the preparation of electronic artwork, please see <http://www.elsevier.com/artworkinstructions>.

Please note: Because of technical complications that can arise by converting color figures to 'gray scale' (for the printed version should you not opt for color in print) please submit in addition usable black and white versions of all the color illustrations.

Figure captions

Ensure that each illustration has a caption. Supply captions separately, 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.

Tables

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.

References

Citation in text

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.

Reference links

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is encouraged.

Web references

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, 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.

References in a special issue

Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software

Most Elsevier journals have a standard template available in key reference management packages. This covers packages using the Citation Style Language, such as Mendeley (<http://www.mendeley.com/features/reference-manager>) and also others like EndNote (<http://www.endnote.com/support/enstyles.asp>) and Reference Manager (<http://refman.com/support/rmstyles.asp>). Using plug-ins to word processing packages which are available from the above sites, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style as described in this Guide. The process of including templates in these packages is constantly ongoing. If the journal you are looking for does not have a template available yet, please see the list of sample references and citations provided in this Guide to help you format these according to the journal style.

Reference formatting

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

Reference style

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'

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

Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] 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, 2009, pp. 281–304.

Journal abbreviations source

Journal names should be abbreviated according to the List of Title Word Abbreviations: <http://www.issn.org/services/online-services/access-to-the-ltwa/>.

Video data

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at <http://www.elsevier.com/artworkinstructions>. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

AudioSlides

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available at <http://www.elsevier.com/audioslides>. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Supplementary material

Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, high-resolution images, background datasets, sound clips and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>. In order to ensure that your submitted material is directly usable, please provide the data in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our artwork instruction pages at <http://www.elsevier.com/artworkinstructions>.

Interactive plots

This journal encourages you to include data and quantitative results as interactive plots with your publication. To make use of this feature, please include your data as a CSV (comma-separated values) file when you submit your manuscript. Please refer to <http://www.elsevier.com/interactiveplots> for further details and formatting instructions.

Submission checklist

The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address

All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- References are in the correct format for this journal
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)

Printed version of figures (if applicable) in color or black-and-white

- Indicate clearly whether or not color or black-and-white in print is required.

- For reproduction in black-and-white, please supply black-and-white versions of the figures for printing purposes.

For any further information please visit our customer support site at <http://support.elsevier.com>.

AFTER ACCEPTANCE

Use of the Digital Object Identifier

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal *Physics Letters B*):

<http://dx.doi.org/10.1016/j.physletb.2010.09.059>

When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

Proofs

One set of page proofs (as PDF files) 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) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download Adobe Reader version 9 (or higher) available free from <http://get.adobe.com/reader>. Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site: <http://www.adobe.com/products/reader/tech-specs.html>.

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them 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. It is important to ensure that all 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.

Free copy of article

The corresponding author, at no cost, will be provided with a PDF file of the article via e-mail. The PDF file is a watermarked version of the published article and includes a cover sheet with the journal cover image and a disclaimer outlining the terms and conditions of use.

Offprints

The corresponding author, at no cost, will be provided with 25 free paper offprints, or, alternatively, a personalized link providing 50 days free access to the final published version of the article on [ScienceDirect](http://www.sciencedirect.com). This link can also be used for sharing via email and social networks. For an extra charge, more paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (<http://webshop.elsevier.com/myarticleservices/offprints>). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (<http://webshop.elsevier.com/myarticleservices/booklets>).

AUTHOR INQUIRIES

You can track your submitted article at http://help.elsevier.com/app/answers/detail/a_id/89/p/8045/. You can track your accepted article at <http://www.elsevier.com/trackarticle>. You are also welcome to contact Customer Support via <http://support.elsevier.com>.

© Copyright 2014 Elsevier | <http://www.elsevier.com>