

JOURNAL OF SYSTEMS AND SOFTWARE

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

•	Description	p.1
•	Audience	p.2
•	Impact Factor	p.2
•	Abstracting and Indexing	p.3
•	Editorial Board	p.3
•	Guide for Authors	p.5



ISSN: 0164-1212

DESCRIPTION

For JSS's full CfP including information on Special Issues, Industry, Trends, and Journal First tracks please continue to read for further details.

The Journal of Systems and Software publishes papers covering all aspects of software engineering. All articles should provide evidence to support their claims, e.g. through empirical studies, simulation, formal proofs or other types of validation. Topics of interest include, but are not limited to: Methods and tools for software requirements, design, architecture, verification and validation, testing, maintenance and evolution Agile, model-driven, service-oriented, open source and global software development Approaches for cloud/fog/edge computing and virtualized systems Human factors and management concerns of software development Artificial Intelligence, data analytics and big data applied in software engineering Metrics and evaluation of software development resources DevOps, continuous integration, build and test automation Business and economic aspects of software development processes Software Engineering education

The journal welcomes reports of practical experience for all of these topics, as well as replication studies and studies with negative results. The journal appreciates the submission of systematic literature reviews, mapping studies and meta-analyses. However, these should report interesting and important results, rather than merely providing statistics on publication year, venue etc.In addition to regular papers, JSS features two special tracks (In Practice, New Ideas and Trends Papers), as well as special issues."

In Practice is exclusively focused on work that increases knowledge transfer from industry to research. It accepts: (1) Applied Research Reports were we invite submissions that report results (positive or negative) concerning the experience of applying/evaluating systems and software technologies (methods, techniques and tools) in real industrial settings. These comprise empirical studies conducted in industry (e.g., action research, case studies) or experience reports that may help understanding situations in which technologies really work and their impact. Submissions should include information on the industrial setting, provide motivation, explain the events leading to the outcomes, including the challenges faced, summarize the outcomes, and conclude with lessons learned, take-away messages, and practical advice based on the described experience. At least one contributing author must be from industry. (2) Practitioner Insights were we invite experience reports showing what actually happens in practical settings, illustrating the challenges (and pain) that practitioners face, and presenting lessons learned. Problem descriptions with significant details on the context, underlying causes and symptoms, and technical and organizational impact are also welcome. Practitioner insights papers may also comprise invited opinionated views on the evolution of chosen

topic areas in practice. Submissions in this category are limited to four pages and the first author must be from industry. Finally, submissions to this track should be within scope of the journal's above topics of interest and they will be evaluated through industry-appropriate criteria for their merit in reporting useful industrial experience rather than in terms of academic novelty of research results.

New Ideas and Trends Papers

New ideas, especially those related to new research trends, emerge quickly. To accommodate timely dissemination thereof, JSS introduces the New Ideas and Trends Paper (NITP). NITPs should focus on the systems/software engineering aspects of new emerging areas, including: the internet of things, big data, cloud computing, software ecosystems, cyber-physical systems, green/sustainable systems, continuous software engineering, crowdsourcing, and the like. We distinguish two types of NITPs: A short paper that discusses a single contribution to a specific new trend or a new idea. A long paper that provides a survey of a specific trend, as well as a (possibly speculative) outline of a solution.NITPs are not required to be fully validated, but preliminary results that endorse the merit of the proposed ideas are welcomed.

We anticipate revisiting specific new trends periodically, for instance through reflection or progress reports.

New Ideas and Trend Papers warrant speedy publication.

Special Issues proposals

To submit a proposal for a special issue, please contact the Special Issues Editor Prof. W.K. Chan

Journal First Initiative

Authors of JSS accepted papers have the opportunity to present their work in those conferences that offer a Journal First track. Using this track, researchers may take the best from two worlds: ensuring high quality in the JSS publication (thorough, multi-phase review process of a long manuscript), while getting feedback from a community of experts and fostering possible collaborations during a scientific event.

Details may vary from conference to conference, but generally speaking, JSS papers to be presented in a Journal First track must report completely new research results or present novel contributions that significantly extend previous work. The ultimate decision to include a paper in the conference program is up to the conference chairs, not JSS. A JSS paper may be presented only once through a Journal First track.

As of today, the list of conferences with which JSS is collaborating, or has collaborated, through a Journal First track, is: ASE, ICSME, SANER, RE, ESEM, PROFES, and APSEC.

AUDIENCE

Researchers, Scholars and Managers in Software Engineering, Computer Science, Information Systems, Computer Programming, Computer Hardware, and Management Information Systems.

IMPACT FACTOR

2018: 2.559 © Clarivate Analytics Journal Citation Reports 2019

ABSTRACTING AND INDEXING

Science Citation Index Expanded

Current Contents - Engineering, Technology & Applied Sciences

Research Alert

Web of Science

ABI/Inform

Cambridge Scientific Abstracts

Computer Literature Index

Computer Reviews

Engineering Index

Current Contents

Computer Abstracts

CAD/CAM Abstracts

INSPEC

Scopus

EDITORIAL BOARD

Editor-in-Chief

- P. Avgeriou, University of Groningen, Groningen, the Netherlands
- D. Shepherd, Virginia Commonwealth University, Richmond, United States

Emeritus Editor-in-Chief

H. van Vliet, Free University of Amsterdam Department of Computer Science, Amsterdam, Netherlands

Special Issues Editor

W.K. Chan, City University of Hong Kong Department of Computer Science, Kowloon, Hong Kong

R. Mirandola, Polytechnic of Milan, Milano, Italy

In Practice Editors

Marcos Kalinowski, Pontifical Catholic University of Rio de Janeiro, Rio De Janeiro, Brazil

Daniel Méndez, Blekinge Institute of Technology Department of Software Engineering, Karlskrona, Sweden

Senior Associate Editors

D-H. Bae, Korea Advanced Institute of Science and Technology School of Computing, Daejeon, Korea, Republic of

- E. Barr, University College London, London, United Kingdom
- G. Bavota, University of Italian Switzerland, Lugano, Switzerland
- A. Bertolino, Alessandro Faedo Institute of Science and Technology National Research Council, Pisa, Italy
- A. Chatzigeorgiou, University of Macedonia Department of Applied Informatics, Thessaloniki, Greece
- **D. Damian**, University of Victoria Department of Computer Science, Victoria, British Columbia, Canada
- **J.C. Dueñas**, Polytechnic University of Madrid Telematic Systems Engineering Department, Madrid, Spain
- N.A. Ernst, University of Victoria Department of Computer Science, Victoria, British Columbia, Canada
- P. Lago, VU Amsterdam, Amsterdam, Netherlands
- S. Mcintosh, McGill University, Montréal, Quebec, Canada
- B. Turhan, Monash University Faculty of Information Technology, Clayton, Australia
- **W.E. Wong**, University of Texas at Dallas Erik Jonsson School of Engineering and Computer Science, Richardson, Texas, United States

Publicity Chair

P. Leitner, University of Gothenburg, Goteborg, Sweden

http://philippleitner.net

Journal-First Chair

X. Franch, Polytechnic University of Catalonia Department of Service and Information System Engineering, Barcelona, Spain

Editorial Advisor

D. Spinellis, Athens University of Economics and Business Department of Management Science and Technology, Athens, Greece

Associate Editors

- B. Adams, Montreal Polytechnic, Montreal, Quebec, Canada
- E. Almeida, Federal University of Bahia Institute of Mathematics, SALVADOR, Brazil

- S. Beecham, Lero the Irish Software Research Centre, University of Limerick, Limerick, Ireland
- **K. Blincoe**, The University of Auckland Department of Electrical Computer and Software Engineering, Auckland, New Zealand
- **R. Hoda**, The University of Auckland Department of Electrical Computer and Software Engineering, Auckland, New Zealand
- H. Koziolek, ABB Corporate Research United States Raleigh NC, Raleigh, North Carolina, United States
- L.L. Minku, University of Birmingham School of Computer Science, Birmingham, United Kingdom
- M. Nagappan, University of Waterloo David R Cheriton School of Computer Science, Waterloo, Ontario, Canada
- M. Pinzger, Universität Klagenfurt, Software Engineering Research Group, Klagenfurt, Austria
- R. Robbes, University of Chile, Santiago de Chile, Chile
- A. Serebrenik, University of Technology Eindhoven, Eindhoven, Netherlands
- **A Zaidman**, Delft University of Technology Faculty of Electrical Engineering Mathematics and Computer Science, Delft, Netherlands

Editorial Board

- L. Abeni, Sant'Anna School of Advanced Studies, Pisa, Italy
- A. Aleti, Monash University Faculty of Information Technology, Clayton, Australia
- **J. Bosch**, Chalmers University of Technology, Gothenburg, Sweden
- **A. Bosu**, Wayne State University, Detroit, Michigan, United States
- M. Bruntink, Software Improvement Group, Amsterdam, Netherlands
- Y. Cai, Chinese Academy of Sciences, Beijing, China
- Y.F. Cai, Drexel University, Philadelphia, Pennsylvania, United States
- M. Cataldo, Robert Bosch LLC Pittsburgh, Pittsburgh, Pennsylvania, United States
- S. Cha, Korea University Department of Computer Science and Engineering, Seongbuk-gu, Korea, Republic of
- V. Chandrasekhar, Facebook Inc, Menlo Park, California, United States
- Y. Chen, Arizona State University, Tempe, Arizona, United States
- F. Chicano, University of Málaga, Malaga, Spain
- M. Ciolkowski, QAware GmbH, München, Germany
- I. Crnkovic, Chalmers University of Technology Department of Computer Science and Engineering, Göteborg, Sweden
- F. Cuadrado, Queen Mary University of London, London, United Kingdom
- K. Damevski, Virginia Commonwealth University, Richmond, Virginia, United States
- M. Daneva, University of Twente, Enschede, Netherlands
- S. Dash, University of Surrey, Guildford, United Kingdom
- C. Ebert, Vector Software GmbH, Stuttgart, Germany
- **A.R. Fasolino**, University of Naples Federico II Department of Electrical Engineering and Information Technology, Napoli, Italy
- A. Garcia, Pontifical Catholic University of Rio de Janeiro Department of Information Technology, RIO DE JANEIRO, Brazil
- I. Gorton, Khoury College of Computer Sciences Seattle, Seattle, Washington, United States
- L. Guan, Loughborough University, Loughborough, United Kingdom
- M. Harman, Facebook London, London, United Kingdom
- J.-M. Jézéquel, Institute for Research in Computer Science and Random Systems, Rennes, France
- H.D. Karatza, Aristotle University of Thessaloniki School of Informatics, Thessaloniki, Greece
- K. Kritikos, Foundation of Research and Technology Hellas, Irakleio, Greece
- P.B. Kruchten, The University of British Columbia, Vancouver, British Columbia, Canada
- M. Linares-Vásquez, University of the Andes, Bogota, Colombia
- X. Liu, Deakin University School of Information Technology Burwood Campus, Burwood, Australia
- J. Lu, Nanjing University, Nanjing, China
- H. Mei, Peking University, Beijing, China
- T. Menzies, North Carolina State University, Raleigh, North Carolina, United States
- M. Mirakhorli, Rochester Institute of Technology, Rochester, New York, United States
- TV Nguyen, University of Nebraska-Lincoln, Lincoln, Nebraska, United States
- F. Palomba, University of Salerno Department of Informatics, Fisciano, Italy
- C. Roy, University of Saskatchewan Department of Computer Science, Saskatoon, Canada
- H. Sharp, The Open University, Milton Keynes, United Kingdom
- I. Stamelos, Aristotle University of Thessaloniki, Thessaloniki, Greece
- K. J. Stol, University College Cork and Lero, Cork, Ireland
- Ö. Ulusoy, Bilkent University, Ankara, Turkey
- J. Wang, National Laboratory for Parallel and Distributed Processing, China
- D. Weyns, KU Leuven Association, Belgium and Linnaeus University Sweden, Belgium
- U. Zdun, University of Vienna, Wien, Austria
- H. Zhang, The University of Newcastle School of Electrical Engineering and Computing, Australia
- T. Zimmermann, Microsoft Research, Redmond, Washington, United States
- A. Zisman, The Open University Computing and Communications Department, Milton Keynes, United Kingdom

GUIDE FOR AUTHORS

Your Paper Your Way

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.

To find out more, please visit the Preparation section below.

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

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:

Manuscript:

- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations

- Manuscript has been 'spell checked' and 'grammar checked'
- 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)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

BEFORE YOU BEGIN

Ethics in publishing

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Declaration of interest

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/ registrations, and grants or other funding. Authors should complete the declaration of interest statement using this template and upload to the submission system at the Attach/Upload Files step. If there are no interests to declare, please choose: 'Declarations of interest: none' in the template. This statement will be published within the article if accepted. More information.

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, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), 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 Crossref Similarity Check.

Preprints

Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

Use of inclusive language

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

Author contributions

For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

Changes to authorship

Authors are expected to consider carefully the list and order of authors **before** submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only **before** the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the **corresponding author**: (a) the reason for the change in author list and (b) written confirmation (e-mail, 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.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors **after** the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Article transfer service

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). 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. 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.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing

Find out how you can share your research published in Elsevier journals.

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.

Open access

Please visit our Open Access page for more information.

Elsevier Researcher Academy

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

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 Author Services.

Submission

Submission to this journal proceeds totally online. Use the following guidelines to prepare your article. Via the homepage of this journal (http://ees.elsevier.com/jss) 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.

PREPARATION

NEW SUBMISSIONS

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.

As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

In addition to regular papers, JSS features two special tracks (In Practice, New Ideas and Trends Papers), as well as special issues.

In Practice

In Practice is exclusively focused on work that increases knowledge transfer from industry to research. It accepts: (1) Applied Research Reports were we invite submissions that report results (positive or negative) concerning the experience of applying/evaluating systems and software technologies (methods, techniques and tools) in real industrial settings. These comprise empirical studies conducted in industry (e.g., action research, case studies) or experience reports that may help understanding situations in which technologies really work and their impact. Submissions should include information on the industrial setting, provide motivation, explain the events leading to the

outcomes, including the challenges faced, summarize the outcomes, and conclude with lessons learned, take-away messages, and practical advice based on the described experience. At least one contributing author must be from industry. (2) Practitioner Insights were we invite experience reports showing what actually happens in practical settings, illustrating the challenges (and pain) that practitioners face, and presenting lessons learned. Problem descriptions with significant details on the context, underlying causes and symptoms, and technical and organizational impact are also welcome. Practitioner insights papers may also comprise invited opinionated views on the evolution of chosen topic areas in practice. Submissions in this category are limited to four pages and the first author must be from industry. Finally, submissions to this track should be within scope of the journal's above topics of interest and they will be evaluated through industry-appropriate criteria for their merit in reporting useful industrial experience rather than in terms of academic novelty of research results.

New Trends and Ideas Papers

New ideas, especially those related to new research trends, emerge quickly. To accommodate timely dissemination thereof, JSS introduces the New Ideas and Trends Paper (NITP). NITPs should focus on the systems/software engineering aspects of new emerging areas, including: the internet of things, big data, cloud computing, software ecosystems, cyber-physical systems, green/sustainable systems, continuous software engineering, crowdsourcing, and the like. We distinguish two types of NITPs: A short paper that discusses a single contribution to a specific new trend or a new idea. A long paper that provides a survey of a specific trend, as well as a (possibly speculative) outline of a solution.

NITPs are not required to be fully validated, but preliminary results that endorse the merit of the proposed ideas are welcome.

We anticipate revisiting specific new trends periodically, for instance through reflection or progress reports.

New Ideas and Trend Papers warrant speedy publication.

References

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 article number or 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.

Length

It is encouraged that authors submit full-length papers of less than 36 pages single-column or 18 pages double-column. If your manuscript is longer, please include an explanation in your submission as to why the length is justified. For review articles, while there is no page count, authors should ensure that the length of the paper is justified by its content.

Formatting requirements

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.

If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Divide the article into clearly defined sections.

Figures and tables embedded in text

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file. The corresponding caption should be placed directly below the figure or table.

Peer review

This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

REVISED SUBMISSIONS

Use of word processing software

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

LaTeX

You are recommended to use the Elsevier article class elsarticle.cls to prepare your manuscript and BibTeX to generate your bibliography.

Our LaTeX site has detailed submission instructions, templates and other information.

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.

Results

Results should be clear and concise.

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.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Vitae

Submit a short (maximum 100 words) biography of each author. Please provide this in an editable format (e.g. Word), not in PDF format.

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. You can add your name between parentheses in your own script behind the English transliteration. 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. This responsibility includes answering any future queries about Methodology and Materials. **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.

Highlights

Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights 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).

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.

Graphical abstract

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531×1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5×13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Authors can make use of Elsevier's <u>Illustration Services</u> to ensure the best presentation of their images and in accordance with all technical requirements.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using British 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.

To maximize the consistency with which such keywords are assigned by different authors, the following guidelines have been drawn up.

- Each keyword (which can be a phrase of more than one word) should describe one single concept. Often words like "and" or "of" should be avoided.
- Avoid very general keywords which become meaningless once in a keyword list. Examples to avoid are "action", "computer", "mathematics". Check whether the keywords as a whole describe the outlines of the article.
- Use natural language: for instance "automatic error recovery" rather than "error recovery, automatic".
- Try to use nouns and adjectives as much as possible (i.e. use "automatic error recovery" rather than "recovering errors automatically"). Do not use nouns in the plural form.
- Use English rather than American spelling (regardless of the spelling used for the article itself).
- Avoid the use of abbreviations as much as possible, unless an abbreviation is so well-established that the full term is rarely used (e.g. use "laser" instead of "Light Amplification by Stimulated Emission of Radiation", but use "computer aided design" instead of "CAD").

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.).

Formatting of funding sources

List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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 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 separately at the end of the article.

Artwork

Image manipulation

Whilst it is accepted that authors sometimes need to manipulate images for clarity, manipulation for purposes of deception or fraud will be seen as scientific ethical abuse and will be dealt with accordingly. For graphical images, this journal is applying the following policy: no specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, or color balance are acceptable if and as long as they do not obscure or eliminate any information present in the original. Nonlinear adjustments (e.g. changes to gamma settings) must be disclosed in the figure legend.

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Indicate per figure if it is a single, 1.5 or 2-column fitting image.
- For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
- Please note that individual figure files larger than 10 MB must be provided in separate source files.

A detailed guide on electronic artwork is available.

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

Regardless of the application used, 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 the font or save the text as 'graphics'.

TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.

TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.

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

Please do not:

- Supply files that are optimized for screen use (e.g., 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.

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. Further information on the preparation of electronic artwork.

Figure captions

Ensure that each illustration has a caption. 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 and shading in table cells.

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 highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

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.

Data references

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

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 their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Mendeley Data is a free-to-use open research data repository, which allows you to share the data associated to your article. To make your data available, please create a dataset at Mendeley Data, and publish it (under embargo if you wish). Your dataset will receive a DOI. Please cite your dataset in the References section. Once your article is accepted, we will place links between your article and the dataset, making your data easily accessible with one click for your article readers. Here is the link to create a dataset: :

https://data.mendeley.com/datasets/create

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 article number or 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: All citations in the text should refer to:

- 1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
- 2. Two authors: both authors' names and the year of publication;
- 3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references can be listed either first alphabetically, then chronologically, or vice versa.

Examples: 'as demonstrated (Allan, 2000a, 2000b, 1999; Allan and Jones, 1999).... Or, as demonstrated (Jones, 1999; Allan, 2000)... Kramer et al. (2010) have recently shown ...'

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

Examples:

Reference to a journal publication:

Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2010. The art of writing a scientific article. J. Sci. Commun. 163, 51–59. https://doi.org/10.1016/j.Sc.2010.00372.

Reference to a journal publication with an article number:

Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2018. The art of writing a scientific article. Heliyon. 19, e00205. https://doi.org/10.1016/j.heliyon.2018.e00205.

Reference to a book:

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

Reference to a chapter in an edited book:

Mettam, G.R., Adams, L.B., 2009. How to prepare an electronic version of your article, in: Jones, B.S., Smith, R.Z. (Eds.), Introduction to the Electronic Age. E-Publishing Inc., New York, pp. 281–304. Reference to a website:

Cancer Research UK, 1975. Cancer statistics reports for the UK. http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/ (accessed 13 March 2003).

Reference to a dataset:

[dataset] Oguro, M., Imahiro, S., Saito, S., Nakashizuka, T., 2015. Mortality data for Japanese oak wilt disease and surrounding forest compositions. Mendeley Data, v1. https://doi.org/10.17632/xwi98nb39r.1.

Journal abbreviations source

Journal names should be abbreviated according to the List of Title Word Abbreviations.

Video

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 file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. 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. 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.

Data visualization

Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.

Supplementary material

Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

Research data

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

Data linking

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to *Mendeley Data*. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

Data in Brief

You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for *Data in Brief* as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to *Data in Brief* where it will be editorially reviewed and published in the open access data journal, *Data in Brief*. Please note an open access fee of 600 USD is payable for publication in *Data in Brief*. Full details can be found on the *Data in Brief* website. Please use this template to write your Data in Brief.

MethodsX

You have the option of converting relevant protocols and methods into one or multiple MethodsX articles, a new kind of article that describes the details of customized research methods. Many researchers spend a significant amount of time on developing methods to fit their specific needs or setting, but often without getting credit for this part of their work. MethodsX, an open access journal, now publishes this information in order to make it searchable, peer reviewed, citable and reproducible. Authors are encouraged to submit their MethodsX article as an additional item directly alongside the revised version of their manuscript. If your research article is accepted, your methods article will automatically be transferred over to MethodsX where it will be editorially reviewed. Please note an open access fee is payable for publication in MethodsX. Full details can be found on the MethodsX website. Please use this template to prepare your MethodsX article.

Data statement

To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

AFTER ACCEPTANCE

Online proof correction

To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. 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. 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.

Offprints

The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, 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 Author Services. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

AUTHOR INQUIRIES

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch.

You can also check the status of your submitted article or find out when your accepted article will be published.

© Copyright 2018 Elsevier | https://www.elsevier.com