



JOURNAL OF HAZARDOUS MATERIALS

Environmental Control, Risk Assessment, Impact and Management

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

●	Description	p.1
●	Audience	p.2
●	Impact Factor	p.2
●	Abstracting and Indexing	p.2
●	Editorial Board	p.3
●	Guide for Authors	p.4



ISSN: 0304-3894

DESCRIPTION

The *Journal of Hazardous Materials* publishes full-length research papers, review articles, and case studies that improve our understanding of the hazards and risks that certain materials pose to public health and the environment. Papers that deal with ways of controlling and mitigating risks of hazardous materials (HM) are within the scope of the journal. However, the following areas are excluded: non-hazardous materials, work place health & safety, standard municipal waste and wastewater treatment processes including nutrient removal, greenhouse gas mitigation, toxicology of hazardous materials below the organism level (i.e. at the cellular, metabolic, or molecular level), and the manufacturing of explosives.

The Journal publishes high-impact contributions on:

- Characterization of the Harmful Effects of Chemicals and Materials
- (including contaminants of emerging concern)
- Measurement and Monitoring of HM Transport and Fate of HM in Environment
- Risk Assessment and Management
- Physico-chemical and Separation Processes for HM Removal
- (Absorption, Ion Exchange, Coagulation/Flocculation/Precipitation, Membrane Process, Flotation, Stabilization/Solidification)
- Thermal Processes for HM Removal
- (Incineration, Pyrolysis, Gasification, Plasma)
- Advanced Oxidation Process for HM Removal
- (Photodegradation/Photocatalysis, H₂O₂-UV, Fenton, Ozone, Sonolysis, Plasma Processes, etc.)
- Biological Processes for HM Removal
- (Biodegradation, Phytoremediation, Combined Degradation Processes)
- Safer and Cleaner Technologies
- Material and Energy Resource Recovery from Hazardous Waste
- (Medical waste, Electronic waste, etc.)
- Micropollutants & Endocrine Disrupting Chemicals

The Journal publishes papers with significant novelty and scientific impact. The Editors reserve the right to decline, without external review, papers that do not meet these criteria, including papers that:

Are very similar to previous publications, with changed target substrates, employed materials, analyzed sites or experimental methods, Deal with parameter optimization of known processes without new concepts and/or interpretations, Report the environmental analysis and monitoring of specific geographic areas without presenting new insights and/or hypothesis testing, or Do not focus on the environmental relevance and significance of the studied systems or materials.

A 100 word (maximum) "statement of novelty" explaining why the work should be published in *Journal of Hazardous Materials* must be provided as a separate document upon submission of your manuscript. The "statement of novelty" must not be a retelling of the abstract. When preparing the statement, please make sure to address (a) the significance and novelty of the work, with respect to existing

literature, and (b) the scientific impact and interests to our readership. Papers that lack significant novelty will be rejected.

Types of Papers

Full-length research papers within the above stated Aims and Scope are welcome. Such contributions are not to be submitted in two parts (i.e. Part I and Part II) - these must be consolidated into one manuscript. Short communications are not considered.

The Editors welcome proposals for review articles. Proposals must contain the following components for consideration: (1) a brief summary of the proposed review article content, (2) a clear indication of the novelty and urgency of such a review paper at this time, in light of other review articles on the same topic, (3) a brief description of the authors' academic background and research areas, and (4) a list of all authors' publications related to the proposed review article topic. Please send your proposals to one of the Editors directly using the e-mail addresses available on the Journal homepage: <http://www.elsevier.com/locate/hazmat>. Note the submission of review articles is by invitation only, pending approval of the proposal by the Editors.

Letters to the Editor will undergo review. Any Letters to the Editor received will be circulated to all Editors before a decision is made whether to publish. Authors of earlier papers, if the Letter concerns a prior publication, will also be given an opportunity to respond.

To ensure conciseness, follow these maximum word count guidelines: research paper: 5,000 words; review article: 15,000 words. Cover letters must state the manuscript word count, which includes text, figure captions, and table legends, but not references.

AUDIENCE

Chemists, Chemical Engineers, Manufacturers of Chemicals, Designers of Chemical Plants, Local Authorities, Emergency Services, Transportation Services, Safety Engineers and Inspectors.

IMPACT FACTOR

2016: 6.065 © Thomson Reuters Journal Citation Reports 2017

ABSTRACTING AND INDEXING

ASM
Applied Science & Technology Abstracts
Elsevier BIOBASE
CIS
Cambridge Scientific Abstracts
Centre de Documentation Scientifique et Technique - PASCAL Database
Chemical Abstracts
Coal Abstracts
Current Contents/Engineering, Computing & Technology
Laboratory Hazards Bulletin/Chemical Hazards in Industry
EMBASE
Engineering Index
Environmental Periodicals Bibliography
NIOSH TIC
Système de Documentation et Information Métallurgique
Scopus

EDITORIAL BOARD

Editors:

Diana Aga, The State University of New York at Buffalo, Buffalo, New York, USA
Andrew Daugulis, Queen's University, Kingston, Ontario, Canada
Gianluca Li Puma, Loughborough University, Loughborough, UK
Gerasimos Lyberatos, National Technical University of Athens (NTUA), Athens, Greece
Joo Hwa Tay, University of Calgary, Calgary, Alberta, Canada

Associate Editors:

Jaesang Lee, Korea University, Seoul, The Republic of Korea
Constantina Marazioti, University of Patras, Patras, Greece

Editorial Board:

R. Andreozzi, Napoli, Italy
A. Ballester, Madrid, Spain
S.L. Bartelt-Hunt, Omaha, Nebraska, USA
E. Brillas, Barcelona, Spain
H. Cheng, China
V. Cozzani, Bologna, Italy
D. Dionysiou, Cincinnati, Ohio, USA
M. Erdem, Elazig, Turkey
S. Esplugas, Barcelona, Spain
Z.P. Hao, Beijing, China
W. Lee, Yuseong-gu, Daejeon, The Republic of Korea
W.-J. Lee, Tainan, Taiwan, ROC
P. Lianos, Patras, Greece
E.C. Lima, Porto Alegre, Brazil
L.Q. Ma, Gainesville, Florida, USA
R. Marotta, Napoli, Italy
D. Mohan, India
C. Mulligan, Montreal, Quebec, Canada
J.M. Park, Pohang, Gyeongbuk, The Republic of Korea
H.J. Pasma, Delft, Netherlands
S.G. Pavlostathis, Atlanta, Georgia, USA
M.J. Plewa, Urbana, Illinois, USA
X. Quan, Dalian, China
S.D. Richardson, Columbia, South Carolina, USA
M.A. Rodrigo, Real, Spain
P. Stepnowski
S. Tunalı Akar, Meselik/Eskisehir, Turkey
S.-B. Wang, Perth, Western Australia, Australia
X. Wang, Beijing, China
J. Yu, Wuhan, China
S. Zeman, Pardubice, Czech Republic
A.I. Zouboulis, Thessaloniki, Greece

GUIDE FOR AUTHORS

INTRODUCTION

The *Journal of Hazardous Materials* full-length research papers, review articles, and case studies that improve our understanding of the hazards and risks that certain materials pose to public health, and the environment. Papers that deal with ways of controlling and mitigating risks of hazardous materials (HM) are within the scope of the journal. However, the following areas are excluded: non-hazardous materials, work place health and safety, standard municipal waste and wastewater treatment processes including nutrient removal, greenhouse gas mitigation, toxicology of hazardous materials below the organism level (i.e. at the cellular, metabolic, or molecular level) and the manufacturing of explosives.

The Journal publishes high-impact contributions on: Characterization of the Harmful Effects of Chemicals and Materials (including contaminants of emerging concern) Measurement and Monitoring of HM Transport and Fate of HM in the Environment Risk Assessment and Management Physico-chemical and Separation Processes for HM Removal (Adsorption, Ion Exchange, Coagulation/Flocculation/Precipitation, Membrane Processes, Flotation, Stabilization/Solidification) Thermal Processes for HM Removal (Incineration, Pyrolysis, Gasification, Plasma) Advanced Oxidation Processes for HM Removal (Photodegradation/Photocatalysis, H₂O₂-UV, Fenton, Ozone, Sonolysis, Plasma Processes, etc.) Biological Processes for HM Removal (Biodegradation, Phytoremediation, Combined Degradation Processes) Safer and Cleaner Technologies Material and Energy Resource Recovery from Hazardous Waste (Medical waste, Electronic waste, etc.) Micropollutants and Endocrine Disrupting Chemicals.

The Journal publishes papers with significant novelty and scientific impact. The Editors reserve the right to decline, without external review, papers that do not meet these criteria, including papers that: Are very similar to previous publications, with changed target substrates, employed materials, analyzed sites or experimental methods, Deal with parameter optimization of known processes without new concepts and/or interpretations, Report the environmental analysis and monitoring of specific geographic areas without presenting new insights and/or hypothesis testing, or Do not focus on the environmental relevance and significance of the studied systems or materials.

A 100 word (maximum) "statement of novelty" explaining why the work should be published in *Journal of Hazardous Materials* must be provided as a separate document upon submission of your manuscript. The "statement of novelty" must not be a retelling of the abstract. When preparing the statement please make sure to address (a) the significance and novelty of the work, with respect to existing literature, and (b) the scientific impact and interests to our readership. Papers that lack significant novelty will be rejected.

Types of Paper

Full-length research papers within the above stated Aims and Scope are welcome. Such contributions are not to be submitted in two parts (i.e. Part I and Part II) - these must be consolidated into one manuscript. Short communications are not considered.

The Editors welcome proposals for review articles. Proposals must contain the following components for consideration: (1) a brief summary of the proposed review article content, (2) a clear indication of the novelty and urgency of such a review paper at this time, in light of other review articles on the same topic, (3) a brief description of the authors' academic background and research areas, and (4) a list of all authors' publications related to the proposed review article topic. Please send your proposals to one of the Editors directly using the e-mail addresses available on the Journal homepage: <http://www.elsevier.com/locate/hazmat>. Note that submission of review articles is by invitation only, pending approval of the proposal by the Editors.

Letters to the Editor will undergo review. Any Letters to the Editor received will be circulated to all Editors before a decision is made whether to publish. Authors of earlier papers, if the Letter concerns a prior publication, will also be given an opportunity to respond.

To ensure conciseness, follow these maximum word count guidelines: research paper: 5,000 words; review article: 15,000 words. Cover letters must state the manuscript word count, which includes text, figures captions, and table legends, but not references.

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. If there are no conflicts of interest then please state this: 'Conflicts of interest: none'. [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 or as part of a published lecture or academic thesis or as an electronic preprint, see '[Multiple, redundant or concurrent publication](#)' section of our ethics policy 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 [CrossCheck](#).

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 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 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.

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 funding bodies will reimburse the author for the Open Access Publication Fee. Details of [existing agreements](#) are available online.

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](#).
- 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 **USD 2500**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

Green open access

Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our [green open access page](#) for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. [Find out more](#).

This journal has an embargo period of 24 months.

Elsevier Publishing Campus

The Elsevier Publishing Campus (www.publishingcampus.com) is an online platform offering free lectures, interactive training and professional advice to support you in publishing your research. The College of Skills training offers modules on how to prepare, write and structure your article and explains how editors will look at your paper when it is submitted for publication. Use these resources, and more, to ensure that your submission will be the best that you can make it.

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.

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/hazmat/>) 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.

Manuscripts must conform to the following guidelines for revised manuscripts or they will be rejected.

Should Authors be requested by the Editor to revise their submission, the revised version should be submitted within **two months**. Please note that revised manuscripts will be sent out for review because revising a manuscript does not automatically mean it will be accepted for publication.

In the revision letter, authors must transcribe each reviewer's comments into the letter, followed by the author's responses. Any associated changes in the manuscript (**DO NOT** include page and line numbers) must be copied down in the revision letter. This will help the Editor compare the reviewer comments with both the replies and the changes made in the manuscript. The replies to the reviewers' comments must also be reflected in the revised manuscript wherever possible (not just in the revision letter). Authors must give clear reasons if they choose not to make changes according to the reviewer suggestions. In the revised manuscript, authors must indicate how the manuscript was changed according to the reviewer comments by highlighting the revisions (all new text/data/figures) with colour. Only one final revised version the manuscript must be uploaded.

Authors must provide the original manuscript number, the name of the original handling Editor, and state whether the revised manuscript is a resubmission of a rejected manuscript both in EES and in the cover letter in order to ensure that it is assigned to the original handling Editor.

Upon resubmission of a rejected manuscript, Authors will be required to upload the decision letter from the Editor requesting submission of the rejected manuscript, the original Reviewer comments of the rejected manuscript, the responses to the Reviewer comments, and the original manuscript number. The resubmitted manuscript must indicate, in color, where the revisions were made in the paper in response to the Reviewer comments.

Please be aware that manuscripts rejected for "out of scope" or "lack of novelty" will not be accepted as a resubmission.

PREPARATION

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.](#)

Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the [Guide to Publishing with Elsevier](#)). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. 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.

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.

Experimental

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

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.

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.

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.

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

Corresponding author. Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **The submitting author and the corresponding author must be the same person. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.**

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

Abstract

A concise and factual abstract is required (100-200 words). 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, they must be cited in full, without reference to the reference list. 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 [Illustration Services](#) to ensure the best presentation of their images and in accordance with all technical requirements.

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article 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). You can view [example Highlights](#) on our information site.

Keywords

Immediately after the abstract, provide a maximum of 5 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.).

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.

Nomenclature and units

Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult the International Union of Pure and Applied Chemistry (IUPAC) <http://www.iupac.org/> for further information.

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.

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. [Further information on the preparation of electronic artwork.](#)

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 and shading in table cells.

References

Manuscripts must contain at least 10 references. The references must cite recent and relevant research only. At least half (50%) of the references should be published within the last 10 years.

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.

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.

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](#) and [Zotero](#), as well as [EndNote](#). Using the word processor 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.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:

<http://open.mendeley.com/use-citation-style/journal-of-hazardous-materials>

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

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: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

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.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

Reference to a dataset:

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.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 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](#). 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.

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.

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 give 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).

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](#). Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Interactive plots

This journal enables you to show an Interactive Plot with your article by simply submitting a data file. [Full instructions](#).

AFTER ACCEPTANCE

Online proof correction

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 [Webshop](#). Corresponding authors who have published their article 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](#).

