DESCRIPTION

The Journal of Infection and Chemotherapy (JIC) — official journal of the Japanese Society of Chemotherapy and The Japanese Association for Infectious Diseases — welcomes original papers, laboratory or clinical, as well as case reports, notes, committee reports, surveillance and guidelines from all parts of the world on all aspects of chemotherapy, covering the pathogenesis, diagnosis, treatment, and control of infection, including treatment with anticancer drugs. Experimental studies on animal models and pharmacokinetics, and reports on epidemiology and clinical trials are particularly welcome.

IMPACT FACTOR

2017: 1.777 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

Current Contents/Clinical Medicine
Science Citation Index Expanded
PubMed
MEDLINE®
Chemical Abstracts
Scopus
BIOSIS Previews

EDITORIAL BOARD

Editor-in-Chief
Satoshi Takahashi, Hokkaido, Japan

Deputy Editors-in-Chief
Yoshikazu Ishii, Tokyo, Japan
Hiromu Takemura, Kanagawa, Japan

Senior Editors
Yosuke Aoki, Saga, Japan
Shigeru Fujimura, Miyagi, Japan
<table>
<thead>
<tr>
<th>Author Name</th>
<th>City, Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiroyuki Gatanaga</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Atsuo Hamada</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Hiroaki Hata</td>
<td>Kyoto, Japan</td>
</tr>
<tr>
<td>Futoshi Higa</td>
<td>Okinawa, Japan</td>
</tr>
<tr>
<td>Toshinobu Horii</td>
<td>Shizuoka, Japan</td>
</tr>
<tr>
<td>Yoshitsugu Inuma</td>
<td>Ishikawa, Japan</td>
</tr>
<tr>
<td>Naruhiko Ishiwada</td>
<td>Chiba, Japan</td>
</tr>
<tr>
<td>Hiromichi Iwasaki</td>
<td>Fukui, Japan</td>
</tr>
<tr>
<td>Koichi Izumikawa</td>
<td>Nagasaki, Japan</td>
</tr>
<tr>
<td>Hisashi Kawashima</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Masahiro Kobayashi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Osaamu Kobayashi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Isao Miyairi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Yoshitsugu Miyazaki</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Hiroki Ohge</td>
<td>Hiroshima, Japan</td>
</tr>
<tr>
<td>Masafumi Seki</td>
<td>Miyagi, Japan</td>
</tr>
<tr>
<td>Junko Tanuma</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Masanori Terashima</td>
<td>Shizuoka, Japan</td>
</tr>
<tr>
<td>Hiroshi Watanabe</td>
<td>Fukuoka, Japan</td>
</tr>
<tr>
<td>Shingo Yamamoto</td>
<td>Hyogo, Japan</td>
</tr>
<tr>
<td>Hisakazu Yano</td>
<td>Nara, Japan</td>
</tr>
<tr>
<td>Mitsuru Yasuda</td>
<td>Gifu, Japan</td>
</tr>
<tr>
<td>Shin-ichi Yokota</td>
<td>Hokkaido, Japan</td>
</tr>
<tr>
<td>Hiroshi Yotsuyanagi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Associate Editors</td>
<td></td>
</tr>
<tr>
<td>Hiroshi Hayami</td>
<td>Kagoshima, Japan</td>
</tr>
<tr>
<td>Kazufumi Hiramatsu</td>
<td>Oita, Japan</td>
</tr>
<tr>
<td>Hideyuki Ikematsu</td>
<td>Fukuoka, Japan</td>
</tr>
<tr>
<td>Tadashi Ishida</td>
<td>Okayama, Japan</td>
</tr>
<tr>
<td>Hiroshi Kakeya</td>
<td>Osaka, Japan</td>
</tr>
<tr>
<td>Yoshinobu Kanda</td>
<td>Saitama, Japan</td>
</tr>
<tr>
<td>Kei Kasahara</td>
<td>Nara, Japan</td>
</tr>
<tr>
<td>Yoshiaki Kawamura</td>
<td>Aichi, Japan</td>
</tr>
<tr>
<td>Yuki Kinjo</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Takaya Maruyama</td>
<td>Mie, Japan</td>
</tr>
<tr>
<td>Kazuaki Matsumoto</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Tomoshige Matsumoto</td>
<td>Osaka, Japan</td>
</tr>
<tr>
<td>Satoshi Mitarai</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Kotaro Mitsutake</td>
<td>Saitama, Japan</td>
</tr>
<tr>
<td>Naoyuki Miyashita</td>
<td>Kanagawa, Japan</td>
</tr>
<tr>
<td>Fukumi Nakamura-Uchiyama</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Tetsuo Nakayama</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Yoshifumi Nishi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Kiyofumi Ohkusu</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Norio Ohmagari</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Kenji Ohnishi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Makoto Ohnishi</td>
<td>Tokyo, Japan</td>
</tr>
<tr>
<td>Toshiyuki Sasagawa</td>
<td>Ishikawa, Japan</td>
</tr>
<tr>
<td>Marc Scheetz</td>
<td>IL, USA</td>
</tr>
<tr>
<td>Akira Watanabe</td>
<td>Chiba, Japan</td>
</tr>
<tr>
<td>Tetsuya Yagi</td>
<td>Aichi, Japan</td>
</tr>
<tr>
<td>Yoshinori Yamano</td>
<td>Osaka, Japan</td>
</tr>
<tr>
<td>Takahiro Yamauchi</td>
<td>Fukui, Japan</td>
</tr>
<tr>
<td>Katsunori Yanagihara</td>
<td>Nagasaki, Japan</td>
</tr>
</tbody>
</table>
GUIDE FOR AUTHORS

INTRODUCTION

The Journal of Infection and Chemotherapy (JIC) — official journal of the Japanese Society of Chemotherapy and The Japanese Association for Infectious Diseases — welcomes original papers, laboratory or clinical, as well as case reports, notes, committee reports, surveillance and guidelines from all parts of the world on all aspects of chemotherapy, covering the pathogenesis, diagnosis, treatment, and control of infection, including treatment with anticancer drugs. Experimental studies on animal models and pharmacokinetics, and reports on epidemiology and clinical trials are particularly welcome.

Types of article

Original article

Original articles should be concise, not exceeding 3000 words, set out as follows, with each section beginning on a separate page: Title page, abstract, text, references, tables, legends to figures and illustrations. The text is to be arranged as follows: (1) Introduction; (2) Patients and methods, or Materials and methods; (3) Results; (4) Discussion; and (5) Acknowledgments.

Papers giving minimum inhibitory concentration (MIC) values of drugs without supporting clinical observations should be submitted as Notes.

Review article

Review articles are in principle solicited by the Editorial Committee.

Editorial

Editorials are considered for publication by invitation.

Case report

Case reports should be relevant to medical practice in the fields of infection and chemotherapy and are to be presented as concisely as possible. References should be kept to an absolute minimum. In Case reports, the arrangement of the text is as follows: (1) Abstract; (2) Introduction; (3) Case Report; and (4) Discussion.

Note

Notes should be concise, not exceeding two to four printed pages (ten doubles paced manuscript pages), with an abstract, up to 15 references, and three tables and/or figures. Do not use section headings in the body of the article.

Letter to the Editor

Questions or comments concerning recently published papers should be sent to the Editor, who will refer them to the authors. The questions and authors’ replies may subsequently be published together.

Committee report

Committee reports from any organization concerned with medical practice or research in the fields of infection and chemotherapy will be considered for publication.

Surveillance

Surveillance articles should focus on epidemiological trends regarding a specific disease or a group of diseases with data from a regional, national or international surveillance system, but could also be an analysis of a surveillance system or a description of a new surveillance system. Longer reports on regional, national or international outbreaks should be submitted once the outbreak has been fully investigated and focus on new and unexpected aspects and on lessons learned. The length of these articles is usually 3,500 words, with up to 30 references and six illustrations (graphs or tables).

Guideline

Guidelines for medical practice, clinical examinations, or experiments in the fields of infection and chemotherapy will be considered for publication.

Contact details for submission

Address all editorial communications to the Editor-in-Chief
Journal of Infection and Chemotherapy Editorial Office
c/o Elsevier Japan KK,
Page charges
For original papers, authors are expected to pay a charge, currently JPY 10,000 per page, for all pages exceeding four printed pages. For case reports, notes, committee reports, surveillance, guidelines, and papers on clinical trials, the same charges apply for all pages exceeding two printed pages. The payments are required after acceptance. Articles are not published in both the online and print format until the required page charges are fully paid. If author fails to do so within two (2) months of the payment notice, the paper may be withdrawn from the journal publication service. Invited articles are exempt from this charge. Authors are responsible for the costs of a corrigendum (JPY 10,000 per page).

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
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)
- Relevant declarations of interest have been made
- 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.

Studies in humans and animals
If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.
All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Institutes of Health guide for the care and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

**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 competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

In case of doubt, the principle investigator and companies involved with the research must be held accountable.

**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.

**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').

**Authorship**

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

The statement that all authors meet the above ICMJE authorship criteria must be included on the title page.

In accordance with ICMJE recommendations, individuals who provided help, but do not meet the authorship requirement (e.g., medical writer or statistical analysts) must be mentioned in the Acknowledgements section.

**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.

**Clinical trial results**

In line with the position of the International Committee of Medical Journal Editors, the journal will not consider results posted in the same clinical trials registry in which primary registration resides to be prior publication if the results posted are presented in the form of a brief structured (less than 500 words) abstract or table. However, divulging results in other circumstances (e.g., investors' meetings) is discouraged and may jeopardise consideration of the manuscript. Authors should fully disclose all posting in registries of results of the same or closely related work.

**Reporting clinical trials**

Randomized controlled trials should be presented according to the CONSORT guidelines. At manuscript submission, authors must provide the CONSORT checklist accompanied by a flow diagram that illustrates the progress of patients through the trial, including recruitment, enrollment, randomization, withdrawal and completion, and a detailed description of the randomization procedure. The CONSORT checklist and template flow diagram are available online.

**Registration of clinical trials**

Registration in a public trials registry is a condition for publication of clinical trials in this journal in accordance with International Committee of Medical Journal Editors recommendations. Trials must register at or before the onset of patient enrolment. The clinical trial registration number should be included at the end of the abstract of the article. A clinical trial is defined as any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects of health outcomes. Health-related interventions include any intervention used to modify a biomedical or health-related outcome (for example drugs, surgical procedures, devices, behavioural treatments, dietary interventions, and process-of-care changes). Health outcomes include any biomedical or health-related measures obtained in patients or participants, including pharmacokinetic measures and adverse events. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) will not require registration.

The journal accepts registration in the following registries:
- [Clinical Trials](http://www.clinicaltrials.gov/)
- [Australian New Zealand Clinical Trials Registry](http://www.anzctr.org.au/)
- [ISRCTN Register](http://isrctn.org)
- [Netherlands Trial Register](http://www.trialregister.nl/trialreg/index.asp)
- [UMIN Clinical Trials Registry](http://www.umin.ac.jp/ctr)

**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. Authors will be asked to transfer copyright of their articles to the Japanese Society of Chemotherapy and The Japanese Association for Infectious Diseases.

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 gold open access publication fee. Details of existing agreements are available online. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

**Open access**
This journal offers authors a choice in publishing their research:

**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.
- The Author is entitled to post the accepted manuscript in their institution's repository and make this public after an embargo period (known as green Open Access). The published journal article cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

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

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

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

**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 gold open access publication fee for this journal is $2500, excluding taxes. Learn more about Elsevier's pricing policy.

**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 12 months.

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 WebShop.

Informed consent and patient details
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission.

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

Please submit your article via http://ees.elsevier.com/jic/.

Referees
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

Please refrain from suggesting potential referees with whom the authors may be considered to have conflict of interest.

Expedited reviews of manuscripts
Reviews of manuscripts by the Editorial Committee may be accelerated on an exceptional basis when publication, if approved, would be urgent - for instance, for an author for whom the completion of an academic degree depends on publication of a submitted paper. In such cases, the author must state the specific reasons for the request to accelerate the review process when submitting the manuscript via Elsevier Editorial System. If the quicker review is undertaken, the author will be expected to contribute any extra costs that may be incurred.

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 - unnumbered sections

Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply 'the text'.

Introduction

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

Material and methods

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also 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. 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 lowercase 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.

- **Authorship statement.** The statement that all authors meet the ICMJE authorship criteria must be included on the title page.

**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.

The abstract must not exceed 250 words.

**Keywords**
Immediately after the abstract, provide 3 to 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

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

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

Individuals included in acknowledgements must also disclose source of funding and any potential conflict of interest. In case paid service from individuals who are perceived to have conflict of interest was used during conducting clinical research or drafting the article, roles of such individuals must also be described.

**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, yyyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzzz]; and the United States Institutes of Peace [grant number aaaaa].

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**
Authors are referred to: Chemical Abstracts (Chemical Abstracts Service, Ohio State University) and The Merck Index (Merck and Co., Inc.) for chemical and biological names; the International Code of Nomenclature of Bacteria and the Approved Lists of Bacterial Names (amended edition, American Society for Microbiology, Washington D.C.); The Yeasts: a Taxonomic Study (NJW Kregervan Riji, Elsevier Science Publishers B.V., Amsterdam), and Ainsworth and Bisby's Dictionary of the Fungi, Including the Lichens (Commonwealth Mycological Institute, Kew, Surrey, England) for fungal names, although the classification of fungi is not complete; and to recommendations from The International Committee on Nomenclature of Viruses for viral names and their classification.
Math formulae
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

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

Conflict of interest
Authors must disclose any financial or personal relationships that may pose conflict of interest. All disclosures should be inserted by the author in the "Conflict of interest", which should be placed in a separate section before the reference list. If no conflict of interest is declared, then "None" should be inserted in this section.

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.
- 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): Bitmapted (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapted 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) in addition to color reproduction in print. Further information on the preparation of electronic artwork.

Illustration services
Elsevier's WebShop offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

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
The author is responsible for the accuracy of the 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 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. 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.

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.
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:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:
Note shortened form for last page number. e.g., 51–9, and that for more than 6 authors the first 6 should be listed followed by 'et al.' For further details you are referred to 'Uniform Requirements for Manuscripts submitted to Biomedical Journals' (J Am Med Assoc 1997;277:927–34) (see also Samples of Formatted References).

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.
**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.

**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 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.

**Articles in press**

An article will be published online after receipt of the corrected proofs. This is the official publication citable with the Digital Object Identifier (DOI), which may be used to cite and link to electronic documents. The DOI consists of a unique alphanumeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal Physics Letters B): [http://dx.doi.org/10.1016/j.physletb.2010.09.059](http://dx.doi.org/10.1016/j.physletb.2010.09.059). When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

After release of the printed version, the article can also be cited by issue and page numbers.

**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.