INTRODUCTION

*Enfermería Intensiva* (Intensive Care Nursing) is a peer reviewed journal that publishes original research articles on nursing interventions on the critically ill patient (Intensive Care, semi-critical, Emergency Department, as well outside the hospital), not only in adults, but also in newborns, infants and children in their different healthcare environments. Its aim is to promote the improvement of knowledge by publishing original research and other works that could help nursing professionals improve their daily practice. This aim is also demonstrated in the different sections of the Journal: Editorials, Original Articles, Clinical Case, Literature Reviews, Letters to the Editor and Comments to research articles. The Journal accepts articles for review from multidisciplinary teams, made up mainly of nurses, intensive care physicians, anaesthetists, emergency care physicians, physiotherapists, nutritionists, and psychologists. *Enfermería Intensiva* is the official Journal of the Sociedad Española de Enfermería Intensiva y Unidades Coronarias (SEEIUC) and is indexed in Medline/PubMed and SCOPUS.

**Types of article**

**Editorials:** Reflections, criticisms or comments on novel or controversial topics related to practice, teaching, management or research of interest for the nursing professionals who work in the context of the critically ill patient. Editorials will be commissioned by the Journal Editorial Team.

**Original articles:** Research works or systematic reviews that deal with any aspect related to the care of the critically ill patient. They will be structured as follows: Introduction, Method, Results, and Discussion. The manuscript should have between 2000 and 7000 words, not counting the Abstract, the Acknowledgements, the literature references, Tables and Figures. A maximum of 6 Figures and 6 Tables may be submitted. An Abstract with the same manuscript language (optionally it will be sent in Spanish and English) will be included with the following structure: Objectives, Method, Results, Discussion and Conclusions, with a maximum of 300 words.

**Clinical cases:** Basically descriptive works of one or several cases of exceptional interest, either due to being uncommon, or for their unusual outcome, or for their contribution to the knowledge in the field of intensive care nursing (*Enfermería Intensiva*). It must not exceed 1500 words, not counting the Abstract/Resumen, the acknowledgements, the literature references, Tables and Figures. It will be structured as follows: Introduction, Description of the case (which will briefly include general data, the diagnostic tests performed, and the medical diagnosis), Assessment of the patient following a systematic and nurse oriented method (e.g., due to needs), Diagnoses (it is recommended to identify the Patient Diagnoses, Collaboration Problems or Potential Complications following any recognised taxonomy in nursing), Planning of care...
(NOC and NIC may be used), Discussion of the results, and Conclusions. Up to a maximum of 2 Tables and 2 Figures and 10 References will be accepted. It will also include an Abstract of 300 words with the same manuscript language (optionally it will be sent in Spanish and English), with the following structure: Assessment, Diagnoses, Planning, and Discussion.

**Literature Review:** it must contribute evidence to nursing clinical practice and in particular in the field of intensive care. They will be structured as follows: Introduction, Objective, methodology, Results, Discussion and Conclusions. The maximum length must be 3500 words, not counting the Abstract, the acknowledgements, the literature references, Tables and Figures. A maximum of 1 Figure and 3 Tables. An Abstract with the same manuscript language (optionally it will be sent in Spanish and English), will be included with the following structure: Objective, Method, Results, and Conclusions, with a maximum of 300 words.

**Letters to the Editor:** Formally acceptable scientific observations on the articles published in the Journal, will be published in this section. It is also a space for readers to send their comments on currents issues, on any aspect related to the care of the critically ill patient that may be of interest for professionals. Length: must not exceed 700 words, a maximum of one Table and one Figure and 5 References.

**Comments to research articles:** In this section comments on relevant articles made by experts on the topic of the article, will be presented. The objective is to encourage critical reading of articles and collaborate in the clinical application of research results. The maximum length of the entire document (summary of the original article, commentary and bibliography) must be less than 2000 words.

**Other sections:** The Journal includes other sections such as, Developments, Technical Advances, references to articles on intensive care nursing published in other journals, Book reviews, Information from the Society of Intensive.

**Contact details for submission**
You can send your manuscript at http://ees.elsevier.com/ei

**Page charges**
This journal has no page charges.

**Language**
This journal is published in Spanish and in English language. Manuscripts can be submitted in Spanish or English. English articles accepted will be published as a Spanish translation in the printed and online formats of the journal. The journal will publish two versions, one in Spanish (printed copy and online) and another one fully translated into English (online).

**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)
• 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.

Human and animal rights
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; Uniform Requirements for manuscripts submitted to Biomedical journals. 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.

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.

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

**Changes to authorship**
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.

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.

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.

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.

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 and copies of the consents or evidence that such consents have been obtained must be provided to Elsevier on request. 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.

**Submit your article**

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

The manuscripts will be separated into the following files *(Attach files)*, which will be entered into the system in the following order:

**Cover Letter:** All manuscripts must be accompanied by a mandatory Cover Letter, in which it should indicate: 1) The section of the journal desired for the work to be published; 2) The explanation, in a maximum of one paragraph, of what the original work contributes and the relevance of the work in the area of care of the critically ill patient; 3) and that the *Enfermería Intensiva* Author Guidelines have been taken into account. 4) The authors should mention in this letter, any business relationship that they may have and that could give rise to a conflict of interests as regards the manuscript submitted.

**First page:** The following details will be given in this order:

- The full title of the manuscript.
- The name and the two surnames (if applicable) joined by a hyphen (for identification purpose in the international indexes) of each one of the authors, along with their academic qualification, following the abbreviations described in the Style Manual of the American Medical Association, 9th edition, and their institutional affiliation (name of department, work centre or institution). The most common qualifications are Registered Nurse for authors who have a diploma/degree in nursing, MD for authors with a degree in medicine, Master of Science (MSc or Master of Science in Nursing (MSN), for those authors with the official title of Master, and Doctor of Philosophy (PhD), for those who have obtained the degree of Doctor by a university by Doctoral Thesis.
- Name and surnames, telephone number, e-mail address, and full postal address of the author to whom any correspondence should be sent.
- Origin of any support received in the form of subsidies, grants or financial support (if there are any).
- Acknowledgements: this is used to recognise the help of persons or institutions that may have contributed to the development of the work, but cannot be considered as authors.

(see also "Essential title page information")

**Manuscript (anonymous):** It will include, in the following order:

- The full title of the manuscript without the authors affiliations.
- *Resumen*/Abstract with the same manuscript language (optionally it will be sent in Spanish and English) and the keywords.
- The text, or body of the manuscript that includes the different sections depending on which section it is, and the literature references. The Tables will be included at the end of this document, if they are in text format. If not, they must be included in another document.

**Tables:** if they have a different format to the text.

**Figures:** always in a separate file.

**STRUCTURE OF THE MANUSCRIPTS**

**Title:** The full title of the manuscript must be concise but informative (it is recommended not to exceed 15 words). It must not include acronyms or abbreviations.

**Abstract/Resumen and key words/palabras clave:**

Manuscripts of Original Articles, Clinical Cases, and Literature Reviews must include an abstract/resumen that will not exceed 300 words.

In the Original Articles, this order will be followed: **Objective/s, Method** (design, population, sampling, information collection techniques/tools, analysis of the data), **Results**, the most important (if it is a quantitative study, it will mention the statistical significance), and **Conclusions** (1 or 2 arising from the results). It will not contain information that subsequently is not found in the manuscript. An Abstract with the same manuscript language (optionally it will be sent in Spanish and English) will be included.

In the Clinical Cases, this order will be followed: **Introduction, Case description, Assessment** of the person from a nursing perspective, **Diagnoses** (mention at least one nursing diagnosis and on potential complication or collaboration problem), **Planning**, mention general or NOC objectives and interventions/NIC (1 or 2 most relevant), and **Discussion and Conclusions** (1 or 2 arising from the results). It will not contain information that subsequently is not found in the manuscript. An Abstract with the same manuscript language (optionally it will be sent in Spanish and English) will be included.

In the Literature Reviews, this order will be followed: **Introduction, Objectives and Methodology** (the keywords and MESH terms used for the literature search must be indicated, as well as the search period and bases consulted, studies included/excluded and the reasons), **Results** (they must be presented objectively, without comments, and follow the order of the questions set out in the objectives of the study); **Discussion** (the interpretations must be based on the results, as well as to discuss the limitations of the review), and **Conclusions**. After each one of the Abstract, the authors must present between 3 and 12 keywords, directly associated with the subject presented in the manuscript. For the keywords in English, the Medical Subject Headings (MeSH) terms will be used; new terms may be used in the event that they are terms that have recently appeared and do not yet appear in MeSH. There is a version of MeSH in Spanish, known as DeCS (Descriptores en Ciencias de la Salud, Health Sciences Descriptors), and is available at http://decs.bvs.br/E/homepage.htm.

**In a separate file from the body of the manuscript (a separate file will be created) and only for original articles**

- **What is known/what it contributes.** Include “What is known” (a paragraph of 40 words in which it will mention what is currently known about the subject studied), and “What it contributes” (a paragraph in which it will indicate the specific contribution of the work to the advancement of nursing knowledge). It will be presented after the Abstract/Resumen and on a
single page.

- **Implications of the study:** In one paragraph of 40 words, it will mention the most obvious implications for clinical practice, teaching, management and/or nurse research. It will be presented after the “What is known/what it contributes” section, on the same page.

**The text or body of the manuscript:** The text of the manuscript for Original Articles will have the following sections

- **Introduction:** It will mention the issue to be resolved, the theoretical framework on which it is based, the background, the current situation, and the importance or implication that resolving it will have for the subjects of the study and the health system. It will end with the presentation of the objective/s and hypothesis, if applicable. Literature references will be the most up to data and relevant on the topic studied.

- **Method:** How the study has been carried out must be described in detail, with sufficient information so that other investigators can repeat it. Its contents will be determined by the objectives set out.

  **Design:** The type of study carried out will be mentioned, justifying, if necessary, the reasons for the choice.

  **Environment:** It will indicate where and when the study was conducted. In the body of the manuscript, no reference should be made to the authors or the center where the study will be carried out. Use general terms such as the Intensive Care Unit. Check that the data related to the authors, their affiliation or other information that allows them to be identified should only appear on the first page and in the cover letter, which are not sent to the reviewers.

  **Subjects:** It will specify the characteristics of the population studied and the inclusion and exclusion criteria, how the sample size was calculated (if this is indicated), as well as the sampling technique.

  **Variables:** All the variables collected will be defined. If it is an experimental study, it must provide a detailed description of the intervention carried out on the experimental and control group, as well as the follow-up period. If it is a qualitative study, the dimensions of the phenomenon or event will be described.

  **Data collection:** The exact form on how the data was collected will be detailed (who collected them, the tools used, indicating if they are validated, and the corresponding literature reference/s). When it is a review article, it should contain a section in which it describes the methods used to locate, select, extract and analyse the data.

  **Analysis of the data:** The statistical analyses performed will be described (in qualitative studies, it will describe the type of qualitative analysis performed, as well as its stages), and it will mention the computer program used.

  Ethical Responsibilities: The authors must mention that the procedures used in patients and controls were performed after having obtained informed consent, as well as the Ethical Committee approval.

- **Results:** The results should correspond exactly to the objectives set out. It should not include any evaluation, interpretation or comment of the results obtained. The results will be presented in the text, Tables and Figures, following a logical sequence. It will start with a description of the
study subjects (indicating the total number, their characteristics, and losses, if there are any). It will continue with the descriptive analysis of the most important variables, using frequencies and percentages for the qualitative variables and means and standard deviations for the quantitative ones when they follow a normal distribution. The corresponding confidence intervals will also be indicated. If there is more than one study group, each one should be described, and indicate the comparisons between the groups in terms of statistical significance and magnitude of the difference and, above all, in terms of clinical relevance (this presentation will vary if it is a qualitative study).

The content shown in the Tables and Figures should not be presented entirety in the text, but the most relevant. The Tables and Figures should be sufficiently clear as to be able to interpret the data without the need to refer to the text. If abbreviations or acronyms are used, they must be explained in the Table or Figure footnote.

Finally, the results of the inferential statistics tests that are presented must be accompanied by the statistical value and the statistical significance ($P$ value), and confidence interval (when required). To indicate the $P$ value, is advisable not to use more than 3 decimals ($P=.002$); thus, a value of $P=.000001$ may be expressed as $P<.001$.

- **Discussion:** The authors should emphasise those new and important aspects of the study, and will have to make comparisons with the results obtained in other studies, which will be accompanied by the corresponding references. The data or information already included in other sections (Introduction, Results) should not be repeated. Furthermore, it should mention any limitations of the study that could affect the interpretation of the results.

- **Conclusions:** It will end with the conclusions and recommendations, as well as suggesting any future lines of research. The conclusions should be associated with the objectives of the study, and avoid making unsubstantiated statements and conclusions insufficiently supported by the data.

**Bibliography:** The adaption of the literature references to the Vancouver Rules and their accuracy are the responsibility of the authors. These will be presented in the order that they appear in the text with the corresponding consecutive numbering.

The reference number will always be shown in the text in superscript Arabic numbers, whether or not accompanied by the names of the authors. When these are mentioned, and if it is a work performed by two, both will be mentioned and, if there are several, it will mention the first one followed by the expression, “et al”.

They will follow the regulations of the International Committee of Medical Journal Editors (ICMJE) on the uniform requirements of manuscripts submitted to biomedical journals (http://www.nlm.nih.gov/bsd/uniform_requirements.html). It is also recommended to the authors, that, before submitting manuscripts to the Editorial Team, they review the following guidelines:

- SQUIRE (Standard for QUality Improvement Reporting Excellence) Guidelines), (available at: http://www.elsevier.es/ficheros/docsrevistas/ENFI_SQUIRE.pdf). And depending on the design of the study that is going to be published, check the following checklists, which can be consulted on the web page: http://www.equator-network.org/reporting-guidelines/
- CONSORT guidelines for Clinical Trials
- TREND guidelines for non-randomised experimental studies
- STROBE guidelines for observational studies

- PRISMA guidelines for systematic reviews

- COREQ guidelines for qualitative study methodology Whenever possible, the inclusion of unpublished observations and personal communications should be avoided, except when these may provide essential unpublished information, in which case the name of the person and the date of the communication is quoted in the text between parentheses. Originals accepted, but still not published, may be included in the literature references as “in press” specifying the name of the journal, followed by in print (between parentheses). The names of the Journals must be abbreviated in accordance with the style used in Index Medicus: for this consult the “List of Journals Indexed” which is included every year in the January edition of Index Medicus.

The Collective Catalogue (called c17) of periodic publications of Spanish Health Sciences libraries (Catálogo colectivo de publicaciones periódicas de las bibliotecas de ciencias de la salud españolas) may also be consulted, (http://www.c17.net/). If a journal is not included in Index Medicus or c17, the full name will have to be written.

Tables: Tables show the information in a concise form and present it efficiently; they also present the information with the desired level of detail and precision. The inclusion of data in Tables and not in the text helps to reduce its length.

One per page will be submitted, with the title at the top and numbered with Arabic numerals, in the order that they appear in the text. Do not use horizontal or vertical lines. Give each column a brief or abbreviated title (heading). The authors must make comments in the Table footnotes, not in the Title. Explain all the uncommon abbreviations in the Table footnotes.

It should be checked that each table is mentioned in the text. If data from another source, whether published or unpublished, obtain the corresponding permission and give a complete reference of the sources.

Figures: Both photographs and graphs are classified as Figures. They are numbered consecutively and together follow the order of their first appearance in the text with Arabic numbers. All illustrations will be presented at the end of the text in a separate document separate from the manuscript.

They should be selected carefully, ensuring that they are of good quality and omitting those that do contribute to a better understanding of the text. If photographs of persons are used, the subjects must not be identifiable, or the images must be accompanied by the written authorisation to use the photography. For more information, consult the ICMJE, as regards the uniform requirements of manuscripts submitted to biomedical journals (http://www.nlm.nih.gov/bsd/uniform_requirements.html).

ENFERMERÍA INTENSIVA declines any responsibility on possible conflicts arising from the authorship of works published in the Journal.

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.
PREPARATION

Peer review
This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then 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.

Double-blind review
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:
Title page (with author details): This should include the title, authors' names and affiliations, and a complete address for the corresponding author including an e-mail address.
Blinded manuscript (no author details): The main body of the paper (including the references, figures, tables and any Acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

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 (Introduction, Method, Results, Discussion and Conclusions). 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.

Method
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. 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. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
• Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.
• Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Structured abstract
A structured abstract, by means of appropriate headings, should provide the context or background for the research and should state its purpose, basic procedures (selection of study subjects or laboratory animals, observational and analytical methods), main findings (giving specific effect sizes and their statistical significance, if possible), and principal conclusions. It should emphasize new and important aspects of the study or observations.

The headings will consist of: «Objectives», «Method», «Results» an «Conclusions».

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 and Enhancement service to ensure the best presentation of their images and in accordance with all technical requirements: Illustration Service.

**Highlights**

Highlights are a short collection of bullet points that convey the core findings of the article. Highlights are optional and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view example Highlights on our information site.

**Keywords**

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

**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.
Units
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

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): 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). 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
Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

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

A DOI can be used to cite and link to electronic articles where an article is in-press and full
citation details are not yet known, but the article is available online. 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, http://dx.doi.org/10.1029/2001JB000884i. 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. This 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.

Reference style
Text: Indicate references by superscript numbers in the text. The actual authors can be referred to, but the reference number(s) must always be given.
List: Number the references in the list in the order in which they appear in the text.
Examples:
Reference to a journal publication:
Reference to a book:
Reference to a chapter in an edited book:
281–304.

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 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.

RESEARCH DATA
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to
Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

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

ARTICLE ENRICHMENTS

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.

AFTER ACCEPTANCE

Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site. If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor.
We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**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.