DESCRIPTION

The Journal of Exercise Science and Fitness is the official peer-reviewed journal of The Society of Chinese Scholars on Exercise Physiology and Fitness (SCSEPF), the Physical Fitness Association of Hong Kong, China (HKPFA), and the Hong Kong Association of Sports Medicine and Sports Science (HKASMSS). It is published twice a year, in June and December, by Elsevier.

The Journal accepts original investigations, comprehensive reviews, case studies and short communications on current topics in exercise science, physical fitness and physical education.

Indexed in: CAB Abstracts, CINAHL, DOAJ, Embase, FMSHK (Journal Abstracts), Global Health, Physical Education Index (Cambridge Scientific Abstracts, USA), SCIE, ScienceDirect, Scopus, SIIC Data Bases, SPORTDiscus (Sport Information Resource Centre)

IMPACT FACTOR

2018: 0.786 © Clarivate Analytics Journal Citation Reports 2019

ABSTRACTING AND INDEXING

Science Citation Index Expanded
Scopus
SPORTDiscus
Physical Education Index
Cambridge Scientific Abstracts
CINAHL
Sociedad Iberoamericana de Informacion Cientifica (SIIC) Data Bases
PubMed Central
Directory of Open Access Journals (DOAJ)

EDITORIAL BOARD

Editor-in-Chief
Stephen H.S. Wong, The Chinese University of Hong Kong, Department of Sports Science and Physical Education, Hong Kong
**Associate Editors**

Bik-Chu Chow, Hong Kong Baptist University Department of Physical Education, Hong Kong  
Yuanlong Liu, Western Michigan University Department of Human Performance and Health Education, United States  
Jinlei Nie, Macau Polytechnic Institute School of Physical Education and Sports, Macao  
Grant Tomkinson, University of North Dakota Department of Kinesiology and Public Health Education, United States  
Jiexiu Zhao, China Institute of Sport Science Exercise Biology Research Center, China

**Managing Editor**

Fenghua Sun, The Education University of Hong Kong Department of Health and Physical Education, Hong Kong

**Editorial Board**

Ajmol Ali, Massey University School of Sport Exercise and Nutrition, New Zealand  
Stephen F. Burns, Nanyang Technological University National Institute of Education Department of Physical Education and Sports Science, Singapore  
Derwin K.C. Chan, University of Hong Kong Division of Behavioural Sciences, Hong Kong  
Chung-Ching Chen, National Taiwan Normal University Department of Physical Education, Taiwan  
Ching-Feng Cheng, National Taiwan Normal University Department of Athletic Performance, Taiwan  
Daniel T.P. Fong, Loughborough University School of Sport Exercise and Health Sciences, United Kingdom  
Freddie H. Fu, University of Pittsburgh Department of Orthopaedic Surgery, United States  
Li Fu, Tianjin Medical University, China  
Xiaohui Hou, Guangzhou Sport University, China  
Min Hu, Guangzhou Sport University, China  
Wendy Y. Huang, Hong Kong Baptist University Department of Physical Education, Hong Kong  
John Ivy, University of Texas at Austin Department of Kinesiology and Health Education, United States  
Li Li Ji, University of Minnesota Laboratory of Physiological Hygiene and Exercise Science, United States  
Zhaowei Kong, University of Macau, Macao  
Jason K.W. Lee, Defence Medical and Environmental Research Institute Human Performance Laboratory, Singapore  
Jonathan P. Little, The University of British Columbia, Canada  
Masashi Miyashita, Waseda University, Japan  
Lijun Shi, Beijing Sport University School of Sports Science Division of Sport Physiology, China  
Qingde Shi, Macau Polytechnic Institute School of Physical Education and Sports, Macao  
Cindy H.P. Sit, The Chinese University of Hong Kong, Department of Sports Science and Physical Education, Hong Kong  
Parco M.F. Siu, University of Hong Kong, Hong Kong  
Raymond C.H. So, Hong Kong Sports Institute Elite Training Science & Technology Division, Hong Kong  
Lin Wang, Shanghai University of Sport School of Kinesiology, China  
Xu Wen, Zhejiang University Department of Physical Education, China  
Haifeng Zhang, Hebei Normal University Department of Sports Rehabilitation, China  
Yong Zhang, Tianjin University of Sport Department of Health and Exercise Science, China  
Shi Zhou, Southern Cross University School of Health and Human Sciences, Australia

**Editorial Office**

Journal of Exercise Science & Fitness, Exercise Physiology Laboratory, Department of Sports Science and P.E., The Chinese University of Hong Kong, New Territories, Shatin, Shatin, Hong Kong SAR
INTRODUCTION

The Journal of Exercise Science & Fitness (JESF) is the official, peer-reviewed, open-access journal of The Society of Chinese Scholars on Exercise Physiology and Fitness (SCSEPF), the Physical Fitness Association of Hong Kong, China (HKPFA), and the Hong Kong Association of Sports Medicine and Sports Science (HKASMS). It is published biannually, in June and December, by Elsevier. The JESF is indexed/abstracted in SCI Expanded, CAB ABSTRACTS, CINAHL Information Systems (Glendale, USA), EMBASE, FMSHK (Journal Abstracts), GLOBAL HEALTH, Physical Education Index (Cambridge Scientific Abstracts, USA), ScienceDirect, SCOPUS, SIIC Data Bases, and SPORTDiscus (SIRC, Canada).

The English-language publication features original investigations, comprehensive reviews and case studies on current topics in exercise science, physical fitness and physical education. Authors are required to be in compliance with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals, which are compiled by the International Committee of Medical Journal Editors (ICMJE), and which are available at http://www.icmje.org.

This Guide for Authors is revised periodically by the Editors as needed. Authors should visit the journal’s homepage for the latest version of this guide. Any manuscript not prepared according to these instructions will be returned immediately to the author(s) without review.

Types of article

Review articles

These should aim to provide the reader with a balanced overview of an important and topical subject in sport and exercise sciences and fitness, and should be systematic and critical assessments of literature and data sources. They should cover aspects of a topic in which scientific consensus exists as well as aspects that remain controversial and are the subject of ongoing scientific research. All articles and data sources reviewed should include information about the specific type of study or analysis, population, intervention, exposure, and tests or outcomes. All articles or data sources should be selected systematically for inclusion in the review and critically evaluated. For reporting of systematic reviews and meta-analyses, they must conform to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)-P 2015 statement (For detail, please refer to http://www.prisma-statement.org/). Ensure that a Conflicts of Interest Statement and Funding/Support Statement are included at the end of the main text.

Typical length: abstract no more than 250 words, main text no more than 3000 words, 50–80 references.

Full length articles/Research papers

These may be randomized trials, intervention studies, studies of screening and diagnostic tests, laboratory and animal studies, cohort studies, cost-effectiveness analyses, case-control studies, and surveys with high response rates, which represent new and significant contributions to exercise science, physical fitness and physical education. Section headings should be: Abstract, Introduction, Methods, Results, Discussion, Conflicts of Interest Statement, Funding/Support Statement, Acknowledgments (if any), and References.

The Introduction should provide a brief background to the subject of the paper, explain the importance of the study, and state the objective/hypothesis.

The Methods section should describe the study design and methods (including the study setting and dates, patients/participants with inclusion and exclusion criteria, or data sources and how these were selected for the study, patient samples or animal specimens used, explain the laboratory methods followed), and state the statistical procedures employed in the research.

The Results section should comprise the study results presented in a logical sequence, supplemented by tables and/or figures. Take care that the text does not repeat data that are presented in tables and/or figures. Only emphasize and summarize the essential features of any interventions, the main outcome measures, and the main results.
The Discussion section should be used to emphasize the new and important aspects of the study, placing the results in context with published literature, the implications of the findings, and the conclusions that follow from the study results.

Typical length: abstract no more than 250 words, main text no more than 3000 words, 40–80 references.

**Case reports**
These are short discussions of a case or case series with unique features not previously described that make an important teaching point or scientific observation. They may describe novel techniques, novel use of equipment, or new information on conditions of importance. Section headings should be: Abstract, Introduction, Case report, Discussion, Conflicts of Interest Statement, Funding/Support Statement, Acknowledgments (if any), and References.

The Introduction should describe the purpose of the report, the significance of the condition, and briefly review the relevant literature. The Case report should include the general data of the case, history, chief complaint, present illness, clinical manifestation, methods of diagnosis and treatment, and outcome. The Discussion should compare, analyze and discuss the similarities and differences between the reported case and similar previously reported cases. The importance or specificity of the case should be restated when discussing the differential diagnoses. Suggest the prognosis and possibility of prevention. Typical length: abstract no more than 250 words, main text no more than 1300 words, 10–30 references.

**Short communications**
These are research notes on topics such as test or equipment development, profile evaluations, data reanalysis, and document verification. Section headings should be: Abstract, Introduction, Methods, Results, Discussion, Conflicts of Interest Statement, Funding/Support Statement, Acknowledgments (if any), and References.

Typical length: abstract no more than 250 words, main text no more than 1000 words, 10–20 references.

The Editors reserve the right to decide what constitutes a Short Communication.

**Contact details for submission**
Manuscripts (meaning all submission items, including all text, tables, artwork, cover letter, conflicts of interest disclosures, and any other required documents/material) must be submitted online to the JESF through the Elsevier EVISE site. This site will guide authors stepwise through the submission process. If assistance is required, please refer to the tutorials and/or customer support that are available on the website, or e-mail the Editorial Office at JESF@scsepf.org.

**Open access publication fees**
The Open Access APCs are set at US$1500 per article; however, JESF is offering a discounted APC of US$1000 per article for all article type. Please note that there is no limitation on the number of pages, figures, or colour figures

**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.

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').

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

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.

**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.

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

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

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

**Open access**
Please visit our Open Access page for more information.
**Elsevier Researcher Academy**

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

**Language (usage and editing services)**

Please write your text in good English (using American spelling). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop [http://webshop.elsevier.com/languagediting/](http://webshop.elsevier.com/languagediting/) or visit our customer support site [https://service.elsevier.com](https://service.elsevier.com) for more information.

**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.

**Submit your article**

Please submit your article at the journal's [EVISE site](http://www.evise.elsevier.com/

**Referees**

Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our [Support site](https://service.elsevier.com). Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

**Additional information**

The following documents must be included in your submission. Items (1) and (2) are mandatory. Items (3), (4), (5) and (6) are required only if they are applicable to your manuscript.

(1) **Cover Letter.** This must include the following information: Title of the manuscriptCorresponding author's details (name, e-mail, mailing address, telephone and fax numbers)Statements that (i) all authors agree with the content of the article and approve of its submission to the journal; (ii) the material contained in the manuscript has not been previously published and is not being concurrently submitted elsewhere; (iii) the experiments reported in the article were undertaken in compliance with the current laws of the country in which the experiments were performed. Authors will be held responsible for false statements. Signature of the corresponding author

(2) **Authorship & Conflicts of Interest Statement.** Each author's contribution to the manuscript should be listed. Any and all potential and actual conflicts of interest should also be listed and the details of the conflict(s) described. Please use the form [JESF Authorship & Conflicts of Interest Statement](https://service.elsevier.com). Ensure that the name of each author listed in your manuscript appears in either Section I or Section II on page 2 of the form (an author's name cannot appear in both Section I and Section II of the form). Your signature and those of ALL your coauthors must be included.
(3) Ethics Statement. Articles covering the use of human or animal samples in research, or human or animal experiments must be accompanied by a letter of approval from the relevant review committee or authorities.

(4) Consolidated Standards of Reporting Trials (CONSORT) flowchart for randomized controlled trials submitted for publication.

(5) Signed Statement of Informed Consent. Articles where human subjects can be identified in descriptions, photographs or pedigrees must be accompanied by a signed statement of informed consent to publish (in print and online) the descriptions, photographs and pedigrees from each person who can be identified.

(6) Copyright Permission. If you have reproduced or adapted material from other copyrighted sources, the letter(s) of permission from the copyright holder(s) to reproduce or adapt the copyrighted sources must be supplied. Otherwise, such material must be removed from your manuscript.

PREPARATION

Peer review
This journal operates a double blind review process. All contributions are 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.

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, affiliations, acknowledgements and any Declaration of Interest statement, 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. 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.

Methods
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.

Conclusion
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of the 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
First title page
The first title page should contain the information below (from the top to bottom of the page).
Category of paper: (i) Review article, (ii) Full length article/Research paper, (iii) Case report, or (iv) Short communication. Article title: Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. Author names and affiliations: Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate affiliation. Provide the e-mail address, if available, of each author. Corresponding author: Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be 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.

Second title page
The second title page should contain the article title only.

Abstract
A concise and factual abstract of no more than 250 words is required for the following article categories: Review Articles, Full Length Articles/Research Papers, Case Reports, and Short Communications.

Abstracts for systematic reviews and meta-analyses must be structured using the subheadings 'Background/Objective', 'Methods', 'Results', and 'Conclusion', while abstracts for all other types of review are unstructured (i.e., no subheadings).

Abstracts for Full Length Articles must also be structured using the subheadings 'Background/Objective', 'Methods', 'Results', and 'Conclusion'. The abstract should include the rationale for the study, its purpose, basic procedures (selection of study participants, 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.

Abstracts for Case Reports should be unstructured (i.e., in one single paragraph with no subheadings), and include the significance and purpose of the case presentation, the diagnostic methods of the case, the key data, and brief comments and suggestions with regard to the case.

Abstracts for Short Communications should also be unstructured, and include information on the background/purpose of the report, methods, results, and concluding remarks.
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.

**Keywords**
Immediately after the abstract, provide a maximum of 6 keywords in alphabetical order, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Keywords should not simply be taken from the manuscript title but should be representative of the content of the article and be characteristic of the terminology used within the particular field of the study. They should be taken from Index Medicus (Medical Subject Headings, MeSH) or be composed by analogy on the same principle. Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Abbreviations**
Where a term/definition will be continually referred to, it must be written in full when it first appears in the text, followed by the subsequent abbreviation in parentheses (even if it was previously defined in the abstract). Thereafter, the abbreviation may be used. An abbreviation should not be first defined in any section heading; if an abbreviation has previously been defined in the text, then the abbreviation may be used in a subsequent section heading. Restrict the number of abbreviations to those that are absolutely necessary and ensure consistency of abbreviations throughout the article. Ensure that an abbreviation so defined does actually appear later in the text (excluding in figures/tables), otherwise, it should be deleted. Author-invented abbreviations should be avoided.

**Acknowledgments**
Collate acknowledgments 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. Blood pressure values are to be reported in mmHg. Use the metric system for the expression of length, area, mass, and volume. Temperatures are to be given in degrees Celsius.

**Numbers**
Numbers that begin a sentence or those that are less than 10 should be spelled out using letters. Centuries and decades should be spelled out, e.g., the Eighties or Nineteenth century. Laboratory parameters, time, temperature, length, area, mass, and volume should be expressed using digits.

**Names of drugs, devices and other products**
Use the Recommended International Non-proprietary Name (rINN) for medicinal substances, unless the specific trade name of a drug is directly relevant to the discussion. Generic drug names should appear in lowercase letters in the text. If a specific proprietary drug needs to be identified, the brand name may appear only once in the manuscript in parentheses following the generic name the first
time the drug is mentioned in the text. For devices and other products, the specific brand or trade name, the manufacturer and their location (city, state, country) should be provided the first time the device or product is mentioned in the text, for example, “...IBM SPSS Statistics 21.0 was used (IBM Corp., Armonk, NY, USA)”. Thereafter, the generic term (if appropriate) should be used.

**Statistical requirements**
Statistical analysis is essential for all research papers except case reports. Use correct nomenclature for statistical methods (e.g., two sample t test, not unpaired t test). Descriptive statistics should follow the scales used in data description. Inferential statistics are important for interpreting results and should be described in detail. All p values should be presented to the third decimal place for accuracy. The smallest p value that should be expressed is p<0.001 since additional zeros do not convey useful information; the largest p value that should be expressed is p > 0.99.

**Math formulae**
Present simple formulae in the line of 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).

**Conflicts of interest statement**
Since it is difficult to distinguish between an actual conflict of interest and a perceived conflict of interest, the JESF requires authors to disclose all and any potential conflicts of interest and let readers judge for themselves. Therefore, please ensure that you provide information about any potential financial and non-financial conflicts of interest in a concise paragraph after the main text. If none, then state, “The author(s) have no conflicts of interest relevant to this article.”

**Funding/support statement**
All grants, financial and material support for the research, work, writing and editorial assistance from internal or external agencies, including commercial companies, should be clearly and completely identified in a funding/support statement. If none, then state, "No financial or material support of any kind was received for the work described in this article."

**Artwork**

**General guidelines**
The number of illustrations should be restricted to the minimum necessary to support the textual material. Ensure that each illustration is numbered consecutively in accordance with their appearance in the text and 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 at the end of the caption. Items requiring explanatory footnotes should be denoted using superscripted lowercase letters (a, b, c, etc.), with the footnotes in alphabetical order at the end of the caption. Asterisks (*) and double asterisks (**) are used only to indicate the probability level of tests of significance. Abbreviations used must be defined and placed after the footnotes in alphabetical order. If you have included or adapted the figure from another source, whether published or unpublished, you must acknowledge the original source in the caption (and have documentary evidence to show that you have been granted permission to use or adapt the figure should you be asked for such evidence).

**Privacy of research participants**
Unless you have written permission from the patient (or, where applicable, the next of kin), identifying information (e.g., names, initials, hospital numbers, date of birth) of the patient must be removed. Informed consent should be obtained if there is any doubt that anonymity can be maintained. For example, masking the eye region in photographs of patients is inadequate protection of anonymity. If identifying characteristics are de-identified, authors should provide assurance, and editors should so note, that such changes do not distort scientific meaning. For further information, see [www.elsevier.com/patientphotographs](http://www.elsevier.com/patientphotographs).

**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.
- Ensure that color images are accessible to all, including those with impaired color vision.

A detailed [guide on electronic artwork](https://www.elsevier.com/locate/jesf) 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/halftone (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 on the Web (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, authors will be charged US$50 per illustration, figure or table that is in color.** Please indicate your preference for color: in print or on the Web only. For further information on the preparation of electronic artwork, please see [https://www.elsevier.com/artworkinstructions](https://www.elsevier.com/artworkinstructions).

Please note: Because of technical complications which can arise by converting color figures to 'grayscale' (for the printed version should you not opt for color in print), please submit in addition usable grayscale versions of all the color illustrations.

**Illustration services**

Elsevier's Author Services 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.

**Tables**

Tables should have a concise table heading, be self-explanatory, and numbered consecutively in accordance with their appearance in the text. Items requiring explanatory footnotes should be denoted using superscripted lowercase letters (a, b, c, etc.), with the footnotes arranged below the table body in alphabetical order. Asterisks (*, **) are used only to indicate the probability level of tests of significance. Abbreviations used in the table must be defined and placed after the footnotes in
alphabetical order. Avoid vertical rules. If you include a block of data or table from another source, whether published or unpublished, you must acknowledge the original source at the end of the table footnotes (and have documentary evidence to show that you have been granted permission to use the material should you be asked for such evidence). Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

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.

Personal communications and unpublished data
These sources cannot be included in the references list but may be described in the text. The author(s) must give the full name and highest academic degree of the person, the date of the communication, and indicate whether it was in oral or written (letter, fax, e-mail) form. A signed statement of permission should be included from each person identified as a source of information in a personal communication or as a source for unpublished data.

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

Reference to arXiv
As with unpublished results and personal communications, references to arXiv documents are not recommended in the reference list. Please make every effort to obtain the full reference of the published version of an arXiv document. If a reference to an arXiv document must be included in the references list it should follow the standard reference style of the journal and should include a substitution of the volume and page numbers with 'arXiv:YYMM.NNNN' or 'arXiv:arch-ive/YYMMNNN' for articles submitted to arXiv before April 2007.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.
Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal’s style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Reference style
Text: Indicate references by (consecutive) superscript arabic numerals in the order in which they appear in the text. The numerals are to be used outside periods and commas, inside colons and semicolons. For further detail and examples you are referred to the AMA Manual of Style, A Guide for Authors and Editors, Tenth Edition, ISBN 0-978-0-19-517633-9 (see http://www.amanualofstyle.com).

List: Number the references in the list in the order in which they appear in the text. References should include, in order, author surnames and initials, article title, abbreviated journal name, year, volume and inclusive page numbers. The last names and initials of all the authors up to 3 should be included, but when authors number 4 or more, list the first 3 authors only followed by ‘et al’.

Examples of the most common reference types are provided below. Please pay particular attention to the formatting, word capitalization, spacing and style.

References to journal publications:

Reference to a journal supplement:

Reference to a journal article not in English but with English abstract:

Reference to a book:

Reference to a book chapter in a book with editor and edition:

Reference to a bulletin:

Reference to electronic publications:

Reference to items presented at a meeting but not yet published:


Reference to an item presented at a meeting and published:


Reference to material accepted for publication but not yet published:


Reference to theses and dissertations:


Reference to a website:


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

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

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

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

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

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

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

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

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

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

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address
- Phone numbers

All necessary files have been uploaded, and contain:
- Keywords
- All figure captions
- All tables (including title, description, footnotes)
Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- References are in the correct format for this journal
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Web)
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in grayscale in print
- If only color on the Web is required, grayscale versions of the figures are also supplied for printing purposes

For any further information please visit our customer support site at https://service.elsevier.com.

Additional information

The editorial and peer review process

As a general rule, the receipt of a manuscript will be acknowledged within 1 week of submission, and authors will be provided with a manuscript reference number for future correspondence. If such an acknowledgment is not received in a reasonable period of time, the author should contact the Editorial Office.

Submissions are reviewed by the Editorial Office to ensure that it contains all parts. The Editorial Office will not accept a submission if the author has not supplied all the material and documents as outlined in this Guide for Authors.

Manuscripts are then forwarded to the Editor-in-Chief, who makes an initial assessment of it. If the manuscript does not appear to be of sufficient merit or is not appropriate for the JESF, then the manuscript will be rejected without review. Manuscripts that appear meritorious and appropriate for the journal are subjected to double-blind review and seen by at least two Editorial Board members or expert consultants assigned by the Editor-in-Chief. Authors may be required to answer open questions or to supply missing information.

Authors will usually be notified within 6 weeks of whether the submitted article is accepted for publication, rejected, or subject to revision before acceptance. However, do note that delays are sometimes unavoidable.

Preparation for publication

Once a manuscript has been accepted for publication, authors should submit the final version of their manuscript (and final versions of all tables/figures as applicable). Accepted manuscripts are copyedited according to the journal’s style and PDF page proofs are e-mailed by the Publisher to the corresponding author for final approval. Authors are responsible for all statements made in their work, including changes made by the copy editor.

AFTER ACCEPTANCE

Use of the Digital Object Identifier

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique 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, from an article in the journal Physics Letters B): http://dx.doi.org/10.1016/j.physletb.2010.09.059

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

Online proof correction

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

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.
We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Forms**
Authorship & Conflicts of Interest Statement

**Offprints**
The corresponding author will be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Author Services.

**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.