DESCRIPTION


The Journal publishes scientific research related to oral and maxillofacial surgery, medicine, and pathology and covers a wide scope of oral and maxillofacial sciences, including oral oncology, oral radiology, and oral biology.

Article types include original research papers, review articles, technical notes, case reports, book reviews, and letters to the editor in subjects relating to clinical practice and research into the three main fields of interest to the publication.

We welcome papers not only from Asia, but also from all regions throughout the world.

ABSTRACTING AND INDEXING

Scopus

EDITORIAL BOARD

Editor-in-Chief
Yoshiki Hamada, Tsurumi University, Yokohama, Japan

Oral and Maxillofacial Surgery / Section Editor
Yoshiki Hamada, Tsurumi University, Yokohama, Japan

Oral and Maxillofacial Surgery / Associate Editors
Yoshiko Ariji, Osaka Dental University, Osaka, Japan
Haruhisa Fukuyama, Tokyo Medical and Dental University, Tokyo, Japan
Takahiro Kanno, Shimane University, Shimane, Japan
Jong-Ho Lee, Seoul National University, Seoul, Korea
Chung-Ji Liu, National Yang Ming Chiao Tung University, Taiwan
Kenji Mitsudo, Yokohama City University, Kanagawa, Japan
Norifumi Nakamura, Kagoshima University, Kagoshima, Japan
Seiji Nakamura, Kyushu University, Fukuoka, Japan
Girish Rao, Sri Shankara Cancer Hospital and Research Centre, India
Akira Sasaki, The Graduate University for Advanced Studies, Okayama, Japan
Tetsu Takahashi, Tohoku University, Miyagi, Japan
Guang-Yan Yu, Peking University, Beijing, China

Oral and Maxillofacial Surgery / Editorial Board Members
Izumi Asahina, Nagasaki University, Nagasaki, Japan
Michael Yuanchien Chen, China Medical University Hospital, Taiwan
Wei-Fan Chiang, Chi Mei Hospital Liou Ying, Taiwan
George Dimitroulis, University of Melbourne, Melbourne, Australia
Edward Ellis, III, University of Texas at San Antonio, Texas, United States of America
Rajan Gunaseelan, Rajan Dental Institute, India
Hideharu Hibi, Nagoya University, Aichi, Japan
Mitsu Yoshi Tino, Yamagata University, Yamagata, Japan
Kenji Izumi, Niigata University, Niigata, Japan
Shou-Yen Kao, National Yang-Ming Chiao Tung University, Taiwan
Peter Kessler, Maastricht University, Netherlands
Hyung-Jun Kim, Yonsei University, Seodaemun-gu, Korea
Jong-Ryoul Kim, Pusan National University, Geumjeong-gu, Korea
Su-Gwan Kim, Chosun University, Gwangju, Korea
Young-Kyun Kim, Seoul National University, Seoul, Korea
Tadaaki Kirita, Nara Medical University, Nara, Japan
Tadaharu Kobayashi, Niigata University, Niigata, Japan
Sang-Heng Kok, National Taiwan University, Taipei, Taiwan
Hirosi Kurita, Shinshu University, Nagano, Japan
Daniel M Laskin, Virginia Commonwealth University, United States of America
David MacDonald-Jakowski, The University of British Columbia, British Columbia, Canada
Varghese Mani, College of Dental Science Davangere, India
Yoji Miyamoto, University of Tokushima, Tokushima, Japan
Yasuhiro Morimoto, Kyushu Dental College, Fukuoka, Japan
Toshitaka Nagao, Tokyo Medical University, Tokyo, Japan
Makoto Noguchi, University of Toyama, Toyama, Japan
Hee-Kyun Oh, Chonnam National University, Korea
Je-Uk Park, The Catholic University of Korea, Korea
Jun-Woo Park, Hallym University, Korea
Srinivas Gosla Reddy, GSR Institute, India
Dong-Mok Ryu, Kyung Hee University, Seoul, Korea
Nabil Samman, The University of Hong Kong, Hong Kong
Henning Schliephake, University of Göttingen, Göttingen, Germany
Nihal Asoka de Silva Amaratunga, University of Peradeniya, Sri Lanka
Hideki Tanzawa, Chiba University, Chiba, Japan
Timothy Turvey, University of North Carolina, North Carolina, United States of America
Et suhide Yamamoto, Kanazawa University, Ishikawa, Japan
Satoshi Yokoo, Gunma University, Gunma, Japan
Yi-Fang Zhao, Wuhan University, Wuhan, China
Jia-Wei Zheng, Shanghai Jia Tong University, Shanghai, China

Oral Medicine / Section Editor
Kazuhito Satomura, Tsurumi University, Yokoyama, Japan

Oral Medicine / Associate Editors
Tomonao Aikawa, Hiroshima University, Faculty of Medicine Graduate School of Biomedical and Health Sciences, Japan
Jong-Hoon Choi, Yonsei University, Seodaemun-gu, Korea
Masahiro Iikubo, Tohoku University Graduate School of Dentistry School of Dentistry, Japan
Yoshimasa Kitagawa, Hokkaido University, Hokkaido, Japan
Eiro Kubota, Kanagawa Dental College, Kanagawa, Japan
Kentarou Mizuta, Tohoku University Graduate School of Dentistry School of Dentistry, Japan
Takeshi Nomura, Tokyo Dental College, Tokyo, Japan
Susumu Tanaka, Osaka University Graduate School of Dentistry Graduate School of Dentistry, Japan
Takaaki Ueno, Osaka Medical and Pharmaceutical University, Japan
Gen-Yuki Yamane, Tokyo Dental College, Tokyo, Japan
Souichi Yamamoto, Hiroshima University, Faculty of Medicine Graduate School of Biomedical and Health Sciences, Japan
Izumi Yoshioka, Kyushu Dental College, Fukuoka, Japan
Oral Medicine / Editorial Board Members
Takashi Fujibayashi, Kanagawa Dental College, Kanagawa, Japan
Michael Glick, University at Buffalo, Buffalo, New York, United States of America
Yoshiki Imamura, Nihon University, Chiba, Japan
Hong-Seop Kho, Seoul National University, Seoul, Korea
Mikio Kusama, Jichi Medical University, Tochigi, Japan
Peter B. Lockhart, Carolinas Medical Center, Charlotte, North Carolina, United States of America
Takashi Sasano, Tohoku University, Miyagi, Japan
Kobkan Thongprasom, Chulalongkorn University, Bangkok, Thailand
Arjan Vissink, Academic Medical Centre Groningen, Groningen, Netherlands
Yoshiaki Yura, Osaka University, Osaka, Japan

Oral Pathology / Section Editor
Tarou Irié, Iwate Medical University, Iwate, Japan

Oral Pathology / Associate Editors
Chun-Pin Chiang, National Taiwan University Hospital, Taiwan
Kyoko Hida, Hokkaido University, Hokkaido, Japan
Tohru Ikeda, Tokyo Medical and Dental University, Tokyo, Japan
Koaru Kusama, Meikai University, Saitama, Japan
Chong-Heon Lee, Dankook University, Yongin, Korea
Mutsumi Miyauchi, Hiroshima University, Hiroshima, Japan
Jun-ichi Tanuma, Asahi University, Gifu, Japan

Oral Pathology / Editorial Board Members
Kuo Wei Chang, National Yang-Ming University, Taiwan
Erik Dabelsteen, University of Copenhagen, Denmark
Robert D. Foss, Johns Hopkins University, United States of America
Vinay Hazarey, Punjab Government Dental College and Hospital, India
Sam-Pyo Hong, Seoul National University, Seoul, Korea
Ying-Tai Jin, Taiwan Adventist Hospital, Taiwan
Harvey Kessler, Texas A&M University Health Sciences Center, United States of America
Jin Kim, Yonsei University, Seoul, Korea
Gabriel Landini, University of Birmingham, United Kingdom
Jiang Li, Shanghai Jiao Tong University, China
Tie-Jun Li, Peking University, Beijing, China
Hatsuhiko Maeda, Aichi Gakuin University, Aichi, Japan
Hitotsu Nagatsuka, Okayama University, Okayama, Japan
Edward Odell, King's College London, London, United Kingdom
Nirmala N Rao, Manipal Academy of Higher Education, India
Ichiro Saitoh, Tsuru University, Yokoyama, Japan
Faleh Sawair, The University of Jordan, Jordan
Ichiro Semba, Kagoshima University, Kagoshima, Japan
Takashi Takata, Hiroshima University, Hiroshima, Japan
Akio Tanaka, Osaka Dental University, Osaka, Japan
WM Tilakaratne, University of Peradeniya, Sri Lanka
Satoru Toyosawa, Osaka University, Osaka, Japan
Woranut Weerapradit, Mahidol University, Thailand
Sunardhi Widayaputra, Padjadjaran University, Indonesia
GUIDE FOR AUTHORS

INTRODUCTION

The Journal publishes scientific research related to oral and maxillofacial surgery, medicine, and pathology and covers a wide scope of oral and maxillofacial sciences, including oral oncology, oral radiology, and oral biology.

We welcome papers not only from Asia, but also from all regions throughout the world.

Types of paper
The Journal publishes original research papers, clinical observations, review articles, viewpoints, commentaries, technical notes, case reports, book reviews, and letters to the editor in subjects relating to clinical practice and research into oral and maxillofacial surgery, medicine, and pathology.

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

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

• E-mail address
• Full postal address

All necessary files have been uploaded:

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

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations
• Manuscript has been 'spell checked' and 'grammar checked'
• All references mentioned in the Reference List are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Internet)
• A competing interests statement is provided, even if the authors have no competing interests to declare
• Journal policies detailed in this guide have been reviewed
• Referee suggestions and contact details provided, based on journal requirements
• At your submission, please select the Section related to your manuscript in the editorial system. Please note that the section of your manuscript may be changed by the judgement during editorial process.

For further information, visit our Support Center.

BEFORE YOU BEGIN

Ethics in publishing
Please see our information on Ethics in publishing.
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 Research Council's Guide for the Care and Use of Laboratory Animals 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.

Conflict 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. See also https://www.elsevier.com/conflictofinterest. Further information and an example of a Conflict of Interest form can be found at: https://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing.

Declare the instances of conflict of interest or its nonexistence just before the References section, and if present, the Acknowledgement section.

Declaration of generative AI in scientific writing

The below guidance only refers to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process.

Where authors use generative artificial intelligence (AI) and AI-assisted technologies in the writing process, authors should only use these technologies to improve readability and language. Applying the technology should be done with human oversight and control, and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. AI and AI-assisted technologies should not be listed as an author or co-author, or be cited as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans, as outlined in Elsevier’s AI policy for authors.

Authors should disclose in their manuscript the use of AI and AI-assisted technologies in the writing process by following the instructions below. A statement will appear in the published work. Please note that authors are ultimately responsible and accountable for the contents of the work.

Disclosure instructions

Authors must disclose the use of generative AI and AI-assisted technologies in the writing process by adding a statement at the end of their manuscript in the core manuscript file, before the References list. The statement should be placed in a new section entitled 'Declaration of Generative AI and AI-assisted technologies in the writing process'.

Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

This declaration does not apply to the use of basic tools for checking grammar, spelling, references etc. If there is nothing to disclose, there is no need to add a statement.
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 compliance, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.

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

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Reporting sex- and gender-based analyses

Reporting guidance
For research involving or pertaining to humans, animals or eukaryotic cells, investigators should integrate sex and gender-based analyses (SGBA) into their research design according to funder/sponsor requirements and best practices within a field. Authors should address the sex and/or gender dimensions of their research in their article. In cases where they cannot, they should discuss this as a limitation to their research's generalizability. Important, authors should explicitly state what definitions of sex and/or gender they are applying to enhance the precision, rigor and reproducibility of their research and to avoid ambiguity or conflation of terms and the constructs to which they refer (see Definitions section below). Authors can refer to the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER guidelines checklist. These offer systematic approaches to the use and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.

Definitions
Sex generally refers to a set of biological attributes that are associated with physical and physiological features (e.g., chromosomal genotype, hormonal levels, internal and external anatomy). A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth"), most often based solely on the visible external anatomy of a newborn. Gender generally refers to socially constructed roles, behaviors, and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society. Sex and gender are often incorrectly portrayed as binary (female/male or woman/man) and unchanging whereas these constructs actually exist along a spectrum and include additional sex categorizations and gender identities such as people who are intersex/have differences of sex development (DSD) or identify as non-binary. Moreover, the terms "sex" and "gender" can be ambiguous—thus it is important for authors to define the manner in which they are used. In addition to this definition guidance and the SAGER guidelines, the resources on this page offer further insight around sex and gender in research studies.
**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.

**Copyright**
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

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

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

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

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

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

**Language (usage and editing services)**
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's Author Services.
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, https://www.elsevier.com/patient-consent-policy. 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.

Document all relevant ethics committee approval and informed consent obtained in the Ethical Approval section following the Conclusion section.

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


Suggesting reviewers

Please submit the names and institutional e-mail addresses of several potential reviewers.

You should not suggest reviewers who are colleagues, or who have co-authored or collaborated with you during the last three years. Editors do not invite reviewers who have potential competing interests with the authors. Further, in order to provide a broad and balanced assessment of the work, and ensure scientific rigor, please suggest diverse candidate reviewers who are located in different countries/regions from the author group. Also consider other diversity attributes e.g. gender, race and ethnicity, career stage, etc. Finally, you should not include existing members of the journal’s editorial team, of whom the journal are already aware.

Note: the editor decides whether or not to invite your suggested reviewers.

PREPARATION

Please download forms required for submitting manuscripts.

• Presubmission check list: download
• Patient consent form for adult: download
• Patient consent form for minors: download
• Disclaimer form: download

Peer review

This journal operates a double anonymized review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor’s decision is final. Editors are not involved in decisions about papers which they have written themselves or have been written by family members or colleagues or which relate to products or services in which the editor has an interest. Any such submission is subject to all of the journal’s usual procedures, with peer review handled independently of the relevant editor and their research groups. More information on types of peer review.

Double anonymized review

This journal uses double anonymized 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.

Anonymized 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 wordprocessor used. Format the text using 12-point size of Times or Times New Roman font. All paragraph modes are set flush left at 25 lines per page on A4-size paper, leaving 25mm margins on all sides. 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 wordprocessor'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: https://www.elsevier.com/guidepublication). 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 wordprocessor.

Article structure
Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

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

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.

Conclusions
The main conclusions of the study should be presented in a short Conclusions 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.

For case reports, divide your article into the following sections: Introduction, Case report, and Discussion.

Essential title-page information
- Titles. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulas where possible.
- Author names and affiliations. List all author names without professional degrees (M.D., Ph.D., etc.). 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 lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of every author.
• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also during postpublication. **Ensure that telephone and fax numbers (with country and area codes) 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 if the author was visiting at that 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.

**Save the title page file separately from the manuscript file. The manuscript file should start from the abstract section and should contain no author-identifiable parts.**

**Abstract**

A concise and factual abstract is required (no more than 250 words). It should state briefly the purpose of the research, the principal results, and the major conclusions in either a structured format (for original research papers, clinical observations, review articles, and technical notes), or a nonstructured format (for case reports). A structured abstract should consist of four sections: Objective, Methods, Results, and Conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if they are essential, cite the author(s) and year(s). Also, avoid nonstandard and uncommon abbreviations. Essential abbreviations, however, must be defined at their first mention in the abstract.

**Keywords**

Immediately after the abstract, provide a maximum of 5 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. Viewpoints, commentaries, book reviews and letters to the editor do not require keywords.

**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 proofreading the article, etc.).

**Nomenclature and units**

Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult IUB: Biochemical Nomenclature and Related Documents for further information.

**Footnotes**

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

**Artwork**

**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.
• Save text in illustrations as 'graphics' or enclose the font.
• Use only the following fonts in your illustrations: Arial, Courier, Times, Symbol.
• For labeling in a multipanel figure, use an uppercase letter (A, B, C, etc.) of sans-serif bold font in the upper left corner of each panel.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Produce images near to the desired size of the printed version.
• Submit each figure as a separate file.
• Provide a scale bar in the figure, if any. Please do NOT indicate a scale bar outside of the figure.

A detailed guide on electronic artwork is available on our website:
https://www.elsevier.com/artworkinstructions

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

Formats
Regardless of the application used, when your electronic artwork is finalised, 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: Vector drawings. Embed the font or save the text as 'graphics'.
TIFF (or JPEG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped line drawings: use a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is'.

Please do not:
• Supply files that are optimised for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low;
• Supply files that are too low in resolution;
• Submit graphics that are disproportionately large for the content.

Color artwork
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article. Please indicate your preference for color: in print or online only. Further information on the preparation of electronic artwork.

Figure captions
Ensure that each illustration has a caption. 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.
Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

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

Preprint references
Where a preprint has subsequently become available as a peer-reviewed publication, the formal publication should be used as the reference. If there are preprints that are central to your work or that cover crucial developments in the topic, but are not yet formally published, these may be referenced. Preprints should be clearly marked as such, for example by including the word preprint, or the name of the preprint server, as part of the reference. The preprint DOI should also be provided.

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 number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.
List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.
Examples:
Reference to a journal publication:
Reference to a book:
Reference to a chapter in an edited book:
[4] Mettam GR, Adams LB. How to prepare an electronic version of your article. In: Jones BS, Smith RZ, editors. Introduction to the electronic age. New York: E-Publishing Inc; 1999. p. 281–304. 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;277:927–934) (see also http://www.nlm.nih.gov/bsd/uniform_requirements.html).

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

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, which may also include 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).

**Data statement**

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

**AFTER ACCEPTANCE**

**Availability of Accepted Article**

This journal makes articles available online as soon as possible after acceptance. This concerns the accepted article (both in HTML and PDF format), which has not yet been copyedited, typeset or proofread. A Digital Object Identifier (DOI) is allocated, thereby making it fully citable and searchable by title, author name(s) and the full text. The article's PDF also carries a disclaimer stating that it is an unedited article. Subsequent production stages will simply replace this version.

**Online proof correction**

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

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

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this
stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

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

**AUTHOR INQUIRIES**
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

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