DESCRIPTION

The Journal of Oral Biosciences (JOB) is the official journal of the Japanese Association for Oral Biology, and is published quarterly in addition to a supplementary issue for the Proceedings of the Annual Meeting of the Japanese Association for Oral Biology. The Journal is an interdisciplinary journal, devoted to the advancement and dissemination of fundamental knowledge concerning every aspect of oral biosciences including cariology research, craniofacial biology, dental materials, implant biology, geriatric oral biology, microbiology/immunology and infection control, mineralized tissue, neuroscience, oral oncology, periodontal research, pharmacology, pulp biology, salivary research, and other fields.

A global journal, JOB welcomes submission from both society members and non-members from around the world. Article types accepted include original and review articles, short communications, technical notes and letters.

Authors submitting to the journal may choose to publish their article open access.

IMPACT FACTOR

2022: 2.400 © Clarivate Analytics Journal Citation Reports 2023

ABSTRACTING AND INDEXING

PubMed/Medline
Scopus
Emerging Sources Citation Index (ESCI)

EDITORIAL BOARD

Editor-in-Chief
Kenji Mishima, Showa University, Department of Oral Diagnostics Sciences, Shinagawa-Ku, Japan
Pathology
**Vice Editor-in-Chief**

Hayato Ohshima, Niigata University Division of Anatomy and Cell Biology of the Hard Tissue Department of Tissue Regeneration and Reconstruction, Niigata, Japan

Anatomy

**Associate Editors**

Osamu Amano, Meikai University Faculty of Dentistry Graduate School of Dentistry Division of Anatomy, Sakado, Japan

Anatomy

Tetsuya Goto, Kagoshima University Graduate School of Medicine and Dental Sciences Department of Oral Anatomy and Cell Biology, Kagoshima, Japan

Histology

Tomoka Hasegawa, Hokkaido University Developmental Biology of Hard Tissue Graduate School of Dental Medicine and Faculty of Dental Medicine, Sapporo, Japan

Histology

Yoshiaki Hasegawa, Aichi Gakuin University School of Dentistry Graduate School of Dentistry Department of Microbiology, Nagoya, Japan

Microbiology

Kazuyuki Ishihara, Tokyo Dental College Department of Microbiology, Tokyo, Japan

Microbiology

Naozumi Ishimaru, University of Tokushima Department of Oral Molecular Pathology, Tokushima, Japan

Pathology

Akira Ishisaki, Iwate Medical University Division of Cellular Biosignal Sciences Department of Biochemistry, Morioka, Japan

Biochemistry

Hiromi Kimura-Suda, Chitose Institute of Science and Technology, Chitose, Japan

Material Science

Satoshi Kubota, Osaka University School of Dentistry Graduate School of Dentistry Molecular Oral Biology and Dentistry, Department of Molecular and Cellular Biochemistry, Suita, Japan

Biochemistry

Naoya Ohara, Okayama University Department of Oral Microbiology, Okayama, Japan

Microbiology

Kentaro Ono, Kyushu Dental University Division of Physiology, Kitakyushu, Japan

Physiology

Mitsuru Saito, Kagoshima University Graduate School of Medicine and Dental Sciences Department of Oral Physiology, Kagoshima, Japan

Physiology

Yo Shibata, Showa University Department of Conservative Dentistry Division of Biomaterials and Engineering, Tokyo, Japan

Material Science

Masamichi Takami, Showa University Department of Pharmacology, Tokyo, Japan

Pharmacology

Yu Usami, Osaka University Graduate School of Dentistry, Department of Oral Physiology, Suita, Japan

Pathology

**Editorial Board**

Stuart Dashper, The University of Melbourne, Melbourne, Australia

Oral Microbiology

Hansel M. Fletcher, Loma Linda University, Loma Linda, California, United States of America

Microbiology and Molecular Genetics

Satoshi Fukumoto, Tohoku University Graduate School of Dentistry School of Dentistry, Sendai, Japan

Pediatric Dentistry

George Hajishengallis, University of Pennsylvania, Philadelphia, Pennsylvania, United States of America

Microbiology

Hidemitsu Harada, Iwate Medical University, Morioka, Japan

Developmental Biology and Regenerative Medicine

Takashi Inoue, Tokyo Dental College, Chiba, Japan

Clinical Pathophysiology

Tomio Inoue, Showa University, Shinagawa-Ku, Japan

Oral Physiology

Sebastian Joyce, Vanderbilt University School of Medicine, Nashville, Tennessee, United States of America

Pathology, Microbiology and Immunology

Han-Sung Jung, Yonsei University, Seodaemun-gu, South Korea

Anatomy and Developmental Biology
Yosuke Kaifu, National Museum of Nature and Science, Taito-Ku, Japan
Anthropology
Hee-Jin Kim, Yonsei University, Seodaemun-gu, South Korea
Anatomy and Developmental Biology
Tamotsu Kiyoshima, Kyushu University, Fukuoka, Japan
Oral Pathology
Ophir Klein, University of California San Francisco, San Francisco, California, United States of America
Orofacial Sciences and Pediatrics
Shintaro Kondo, Nihon University, Chiyoda-Ku, Japan
Anatomy
Wen-Sen Lee, Taipei Medical University, Taipei, Taiwan
Endocrinology
Janina P. Lewis, Philips Institute for Oral Health Research, Richmond, Virginia, United States of America
Oral and Craniofacial Molecular Biology
Minqi Li, Shandong University, Jinan, China
Basic Science of Stomatology
Marc D. McKee, McGill University, Montréal, Quebec, Canada
Anatomy, Cell Biology and Dentistry
Byung-Moo Min, Seoul National University, Gwanak-gu, South Korea
Oral Biochemistry
Akira Nifuji, Tsurumi University and Tsurumi Junior College, Yokohama, Japan
Pharmacology
Bjorn R. Olsen, Harvard School of Dental Medicine, Boston, Massachusetts, United States of America
Developmental Biology
Barry Sessle, University of Toronto, Toronto, Ontario, Canada
Oral Physiology
Paul T. Sharpe, King's College London, London, United Kingdom
Craniofacial and Regenerative Biology
Shunichi Shibata, Tokyo Medical and Dental University, Bunkyo-Ku, Japan
Maxillofacial Anatomy
Nobuhiro Takahashi, Tohoku University, Sendai, Japan
Oral Ecology and Biochemistry
Kohsuke Takeda, Nagasaki University, Nagasaki, Japan
Cell Regulation
Masato Tamura, Hokkaido University, Sapporo, Japan
Biochemistry and Molecular Biology
Nobuyuki Udagawa, Matsumoto Dental University, Shiojiri, Japan
Biochemistry
Kensuke Yamamura, Niigata University, Niigata, Japan
Oral Physiology
Mijung Yim, Sookmyung Women's University, Yongsan-gu, South Korea
Bone Biology

Advisory Board
Kanj Tsuru, Editor-in-Chief, Dental Materials Journal; Fukuoka Dental College, Fukuoka, Japan
Material Science
GUIDE FOR AUTHORS

INTRODUCTION

The Journal of Oral Biosciences (JOB) is the official journal of the Japanese Association for Oral Biology, and is published quarterly. The Association is a unique society from the point of view of its constitution: it includes researchers from different academic research fields such as anatomy, physiology, biochemistry, pharmacology, microbiology, and pathology. The Journal is an interdisciplinary journal, devoted to the advancement and dissemination of fundamental knowledge concerning every aspect of oral biosciences including cariology, craniofacial biology, dental material research, implant biology, geriatric oral biology, microbiology/immunology and infection control, mineralized tissue research, neuroscience, oral oncology, periodontal research, pharmacology, pulp biology, salivary research, and other fields.

A global journal, JOB welcomes submission from both society members and non-members from around the world.

Types of article

The Journal publishes original and review articles, short communication, technical note and letter.

Original article

The length of an original article should not exceed 3,500 words, excluding ethical approval, conflicts of interest, acknowledgement, references, tables, figures and figure legends, which should number in all not more than 8. References are limited to 50. All manuscripts must be structured into sections as shown in "Article structure" in the Preparation section below. Abstracts are limited to 250 words.

Review

The length of a review should not exceed 6,000 words, excluding tables, figures and figure legends. Abstracts are limited to 250 words. Article structure is guided in the Preparation section below.

Short communication

A short communication should follow the same format of an original article, be presented as concisely as possible, and not exceed 1,500 words, excluding tables, figures and figure legends, which should number in all not more than 3. Abstracts are limited to 100 words.

Technical note

A technical note should describe a progress related to methodologies, be presented as concisely as possible, and not exceed 1,500 words, excluding tables figures and figure legends, which should number in all not more than 3. Abstracts are limited to 100 words.

Letter

The length of a letter should not exceed 600 words, excluding tables, figures and figure legends. Comments to a recently published article in the Journal or an author's response to such a comment. Neither an abstract nor keywords are required.

Contact details for submission

Send inquiries on submission to:
JOB Editorial Office
E-mail: jp.job@elsevier.com
Tel: +81-3-3589-5037
Fax: +81-3-3589-6364

Page charges

This journal requires no page charges.

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
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.

Declare the instances of conflict of interest or its nonexistence just before the References section. When a manuscript is submitted, an online form of conflict of interest must be filled out by the corresponding author. The conflict of interest form can be downloaded from here.

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.

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. When a manuscript is submitted, the author contribution form MUST be filled out and signed by the corresponding author. The author contribution form can be downloaded from here.

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.

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.

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 about open access publishing in this journal.

Language (usage and editing services)
From September 1st, 2021, all manuscripts must be edited by a native English speaker prior to submission, preferably one with a specialized knowledge of medical editing. Authors must submit a certificate of proofreading when submitting their manuscript. Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors whose native language is not English MUST have the manuscript edited for language accuracy prior to submission. 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 (https://webshop.elsevier.com/language-editing/) or visit our customer support site (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 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. In the Ethical Approval section following the Conclusion, document all relevant ethics committee approval and informed consent obtained, or indicate explicitly if such approval or consent is not required.

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 Editors
Please request that a specific Editor be added to your submission, which will be taken into consideration by the Editors for the peer review process. You should choose the Editor carefully, as the peer review process may take longer if the appropriate Editor is not selected. Please visit the Editorial Board page, where you can see the Discipline and Research Interests of each Editor.

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**

**Peer review**

This journal operates a single 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. 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.

**Use of word processing software**

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

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

**Article structure**

**Subdivision - numbered sections**

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

**Original article**

Subsections in an original article would ordinarily include 'Introduction', 'Materials and methods', 'Results', 'Discussion', and 'Conclusions'.

**Review**

Subsections in a review can be flexible; however it must include 'Introduction' and 'Conclusions'.

**Other articles**

Subsections in other articles are flexible.

**Introduction**

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

**Material and methods**

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

**Results**

Results should be clear and concise.
**Discussion**
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Appendices**
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

**Essential title page information**
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Highlights**
Highlights are optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Abstract**
A concise and factual abstract is required. The abstract of original article should state briefly the purpose of the research, the principal results and major conclusions. A structured abstract is required for the original article and review article. For original article, the format should consist of four sections labeled 'Objectives', 'Methods', 'Results', and 'Conclusions'. For review article, the format should consist of three sections labeled 'Background', 'Highlight', and 'Conclusion'. An abstract is often presented separately from the article, thus it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself. The length should be no more than 250 words for a review and an original article, no more than 100 words for a short communication and a technical note. An abstract is not required for a letter.

**Graphical abstract**
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum
of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

**Keywords**
Immediately after the abstract, provide a maximum of 5, but at least 3 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of"). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes. Approved words from the Medical Subject Headings (MESH) database are available at: http://www.nlm.nih.gov/mesh/MBrowser.html

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

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

**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 IUPAC: Nomenclature of Organic Chemistry: http://www.iupac.org/ and IUB: Biochemical Nomenclature and Related Documents: http://www.chem.qmw.ac.uk/iubmb/ for further information.

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

**Artwork**
*Electronic artwork*
**General points**
- Make sure you use uniform lettering and sizing of your original artwork.
- Save text in illustrations as ‘graphics’ or enclose the font.
- Only use the following fonts in your illustrations: Arial, Courier, Times, Symbol.
- 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.

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 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: Vector drawings. Embed the font or save the text as 'graphics'.
- TIFF: Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
- TIFF: Bitmapped line drawings: use a minimum of 1000 dpi.
- TIFF: 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 optimized 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.

A reference style format can be downloaded from our website: [https://www.elsevier.com/__data/promis_misc/JOralBiosci.ens](https://www.elsevier.com/__data/promis_misc/JOralBiosci.ens)

**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.

**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 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:

Note shortened form for last page number, e.g., 51–9, and list the first six authors, followed by et al. If there are more than six authors, list the first six authors, followed by et al". For further details you are referred to "Uniform Requirements for Manuscripts submitted to Biomedical Journals" (J Am Med Assoc 1997;277:927–34) (see also 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.

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, 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.

**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'
- For authors whose native language is not English, the manuscript has been 'language-edited'
- 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 black-and-white in print
- If only color on the Web is required, black-and-white 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.
For questions about the editorial process (including the status of manuscripts under review) or for technical support on submissions, please visit our Support Center.

AFTER ACCEPTANCE

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. 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