

Biotechnology

Home > Chemistry > Biotechnology

SUBDISCIPLINES JOURNALS BOOKS SERIES TEXTBOOKS REFERENCE WORKS



3 Biotech

Executive Editor-in-Chief: Bharat **Patel**
 Editors-in-Chief: Futwan A. A. **Al-Mohanna**
 ISSN: 2190-5738 (electronic version)
 Journal no. 13205



299,00 € [Personal Rate e-only](#)

[Get Subscription](#)

Online subscription, valid from January through December of current calendar year

Immediate access to this year's issues via SpringerLink

Volume(-s) with issue(-s) per annual subscription

Automatic annual renewal

More information: >> [FAQs](#) // >> [Policy](#)

[VIDEO](#) [ABOUT THIS JOURNAL](#) [EDITORIAL BOARD](#) [KACST](#)
[GENERAL INSTRUCTIONS FOR AUTHORS](#)

[MORE](#)

Instructions for Authors

MANUSCRIPT SUBMISSION

Manuscript Submission

Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly – at the institute where the work has been carried out. The publisher will not be held legally responsible should there be any claims for compensation.

Permissions

Authors wishing to include figures, tables, or text passages that have already been published elsewhere are required to obtain permission from the copyright owner(s) for both the print and online format and to include evidence that such permission has been granted when submitting their papers. Any material received without such evidence will be assumed to originate from the authors.

Online Submission

Please follow the hyperlink “Submit online” on the right and upload all of your manuscript files following the instructions given on the screen.

TITLE PAGE

Title Page

The title page should include:

- ⌘ The name(s) of the author(s)
- ⌘ A concise and informative title
- ⌘ The affiliation(s) and address(es) of the author(s)
- ⌘ The e-mail address, and telephone number(s) of the corresponding author
- ⌘ If available, the 16-digit ORCID of the author(s)

Abstract

Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references.

Keywords

Please provide 4 to 6 keywords which can be used for indexing purposes.

TEXT

Text Formatting

Manuscripts should be submitted in Word.

- ⌘ Use a normal, plain font (e.g., 10-point Times Roman) for text.
- ⌘ Use italics for emphasis.
- ⌘ Use the automatic page numbering function to number the pages.
- ⌘ Do not use field functions.
- ⌘ Use tab stops or other commands for indents, not the space bar.
- ⌘ Use the table function, not spreadsheets, to make tables.
- ⌘ Use the equation editor or MathType for equations.
- ⌘ Save your file in docx format (Word 2007 or higher) or doc format (older Word versions).

Manuscripts with mathematical content can also be submitted in LaTeX.

LaTeX macro package (zip, 182 kB)

Headings

Please use no more than three levels of displayed headings.

Abbreviations

Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes

Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data). Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

REFERENCES

Citation

Cite references in the text by name and year in parentheses. Some examples:

Negotiation research spans many disciplines (Thompson 1990).
 This result was later contradicted by Becker and Seligman (1996).
 This effect has been widely studied (Abbott 1991; Barakat et al. 1995a, b; Kelso and Smith 1998; Medvec et al. 1999, 2000).

Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference list.

Reference list entries should be alphabetized by the last names of the first author of each work. Order multi-author publications of the same first author alphabetically with respect to second, third, etc. author. Publications of exactly the same author(s) must be ordered chronologically.

• Journal article

Gamelin FX, Baquet G, Berthoin S, Thevenet D, Nourry C, Nottin S, Bosquet L (2009) Effect of high intensity intermittent training on heart rate variability in prepubescent children. *Eur J Appl Physiol* 105:731-738.
<https://doi.org/10.1007/s00421-008-0955-8>

Ideally, the names of all authors should be provided, but the usage of “et al” in long author lists will also be accepted:

Smith J, Jones M Jr, Houghton L et al (1999) Future of health insurance. *N Engl J Med* 341:325–329

• Article by DOI

Slifka MK, Whitton JL (2000) Clinical implications of dysregulated cytokine production. *J Mol Med*. <https://doi.org/10.1007/s001090000086>

• Book

South J, Blass B (2001) *The future of modern genomics*. Blackwell, London

• Book chapter

Brown B, Aaron M (2001) The politics of nature. In: Smith J (ed) *The rise of modern genomics*, 3rd edn. Wiley, New York, pp 230-257

• Online document

Cartwright J (2007) Big stars have weather too. *IOP Publishing PhysicsWeb*.
<http://physicsweb.org/articles/news/11/6/16/1>. Accessed 26 June 2007

• Dissertation

Trent JW (1975) *Experimental acute renal failure*. Dissertation, University of California

Always use the standard abbreviation of a journal’s name according to the ISSN List of Title Word Abbreviations, see

ISSN LTWA

If you are unsure, please use the full journal title.

For authors using EndNote, Springer provides an output style that supports the formatting of in-text citations and reference list.

EndNote style (zip, 2 kB)

TABLES

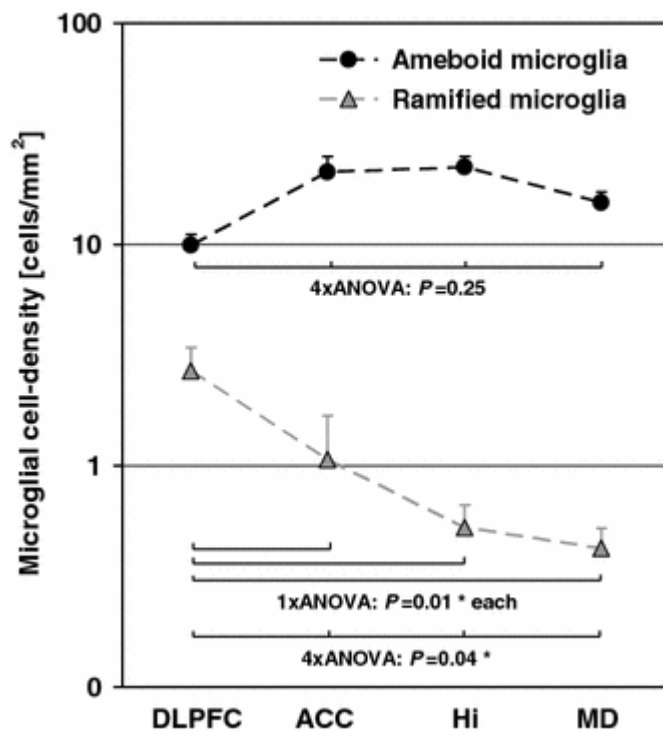
- ⌘ All tables are to be numbered using Arabic numerals.
- ⌘ Tables should always be cited in text in consecutive numerical order.
- ⌘ For each table, please supply a table caption (title) explaining the components of the table.
- ⌘ Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
- ⌘ Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.

ARTWORK AND ILLUSTRATIONS GUIDELINES

Electronic Figure Submission

- ⌘ Supply all figures electronically.
- ⌘ Indicate what graphics program was used to create the artwork.
- ⌘ For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. MSOffice files are also acceptable.
- ⌘ Vector graphics containing fonts must have the fonts embedded in the files.
- ⌘ Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

Line Art



- ⌘ Definition: Black and white graphic with no shading.
- ⌘ Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- ⌘ All lines should be at least 0.1 mm (0.3 pt) wide.

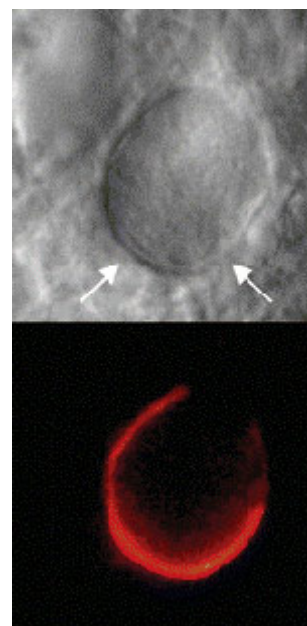
- ⌘ Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.
- ⌘ Vector graphics containing fonts must have the fonts embedded in the files.

Halftone Art

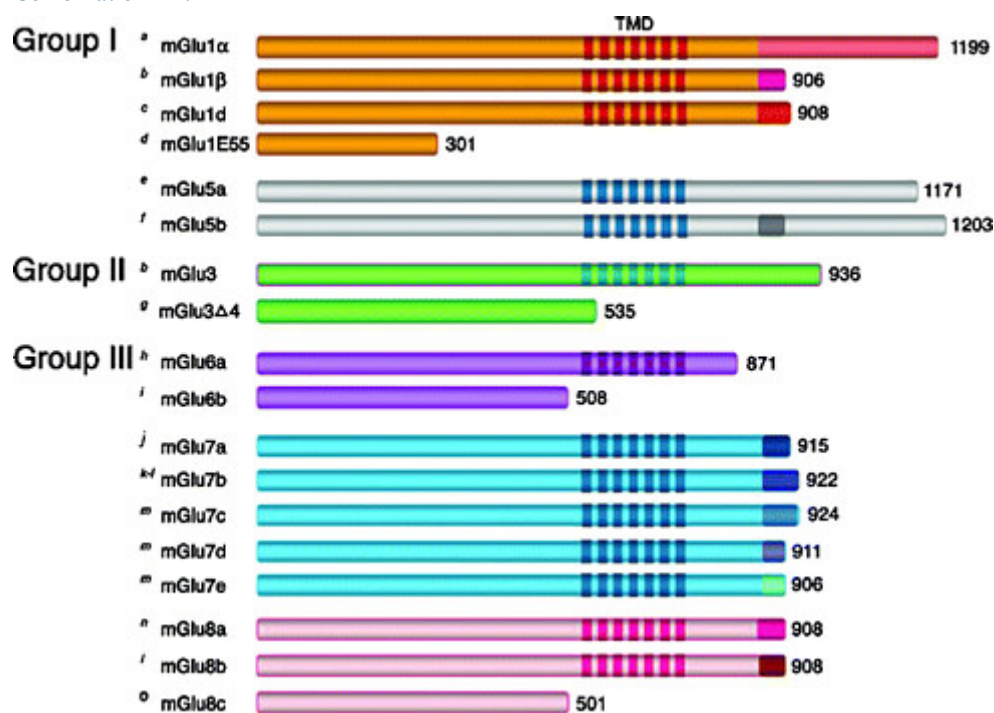
Definition: Photographs, drawings, or paintings with fine shading, etc.

If any magnification is used in the photographs, indicate this by using scale bars within the figures themselves.

Halftones should have a minimum resolution of 300 dpi.



Combination Art



Definition: a combination of halftone and line art, e.g., halftones containing line drawing, extensive lettering, color diagrams, etc.

Combination artwork should have a minimum resolution of 600 dpi.

Color Art

Color art is free of charge for online publication.

If black and white will be shown in the print version, make sure that the main information will still be visible. Many colors are not distinguishable from one another when converted to black and white. A simple way to check this is to make a xerographic copy to see if the necessary distinctions between the different colors are still apparent.

If the figures will be printed in black and white, do not refer to color in the captions. Color illustrations should be submitted as RGB (8 bits per channel).

Figure Lettering

- ⌘ To add lettering, it is best to use Helvetica or Arial (sans serif fonts).
- ⌘ Keep lettering consistently sized throughout your final-sized artwork, usually about 2–3 mm (8–12 pt).
- ⌘ Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.
- ⌘ Avoid effects such as shading, outline letters, etc.
- ⌘ Do not include titles or captions within your illustrations.

Figure Numbering

All figures are to be numbered using Arabic numerals.

Figures should always be cited in text in consecutive numerical order.

Figure parts should be denoted by lowercase letters (a, b, c, etc.).

If an appendix appears in your article and it contains one or more figures, continue the consecutive numbering of the main text. Do not number the appendix figures,

"A1, A2, A3, etc." Figures in online appendices (Electronic Supplementary Material) should, however, be numbered separately.

Figure Captions

- ⌘ Each figure should have a concise caption describing accurately what the figure depicts. Include the captions in the text file of the manuscript, not in the figure file.
- ⌘ Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type.
- ⌘ No punctuation is to be included after the number, nor is any punctuation to be placed at the end of the caption.
- ⌘ Identify all elements found in the figure in the figure caption; and use boxes, circles, etc., as coordinate points in graphs.
- ⌘ Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption.

Figure Placement and Size

Figures should be submitted separately from the text, if possible.

When preparing your figures, size figures to fit in the column width.

For most journals the figures should be 39 mm, 84 mm, 129 mm, or 174 mm wide and not higher than 234 mm.

For books and book-sized journals, the figures should be 80 mm or 122 mm wide and not higher than 198 mm.

Permissions

If you include figures that have already been published elsewhere, you must obtain permission from the copyright owner(s) for both the print and online format. Please be aware that some publishers do not grant electronic rights for free and that Springer will not be able to refund any costs that may have occurred to receive these permissions. In such cases, material from other sources should be used.

Accessibility

In order to give people of all abilities and disabilities access to the content of your figures, please make sure that

All figures have descriptive captions (blind users could then use a text-to-speech software or a text-to-Braille hardware)

Patterns are used instead of or in addition to colors for conveying information (colorblind users would then be able to distinguish the visual elements)
Any figure lettering has a contrast ratio of at least 4.5:1

ELECTRONIC SUPPLEMENTARY MATERIAL

Springer accepts electronic multimedia files (animations, movies, audio, etc.) and other supplementary files to be published online along with an article or a book chapter. This feature can add dimension to the author's article, as certain information cannot be printed or is more convenient in electronic form.

Before submitting research datasets as electronic supplementary material, authors should read the journal's Research data policy. We encourage research data to be archived in data repositories wherever possible.

Submission

Supply all supplementary material in standard file formats.

Please include in each file the following information: article title, journal name, author names; affiliation and e-mail address of the corresponding author.

To accommodate user downloads, please keep in mind that larger-sized files may require very long download times and that some users may experience other problems during downloading.

Audio, Video, and Animations

Aspect ratio: 16:9 or 4:3

Maximum file size: 25 GB

Minimum video duration: 1 sec

Supported file formats: avi, wmv, mp4, mov, m2p, mp2, mpg, mpeg, flv, mxf, mts, m4v, 3gp

Text and Presentations

Submit your material in PDF format; .doc or .ppt files are not suitable for long-term viability.

A collection of figures may also be combined in a PDF file.

Spreadsheets

Spreadsheets should be submitted as .csv or .xlsx files (MS Excel).

Specialized Formats

Specialized format such as .pdb (chemical), .wrl (VRML), .nb (Mathematica notebook), and .tex can also be supplied.

Collecting Multiple Files

It is possible to collect multiple files in a .zip or .gz file.

Numbering

If supplying any supplementary material, the text must make specific mention of the material as a citation, similar to that of figures and tables.

Refer to the supplementary files as "Online Resource", e.g., "... as shown in the animation (Online Resource 3)", "... additional data are given in Online Resource 4".

Name the files consecutively, e.g. "ESM_3.mpg", "ESM_4.pdf".

Captions

For each supplementary material, please supply a concise caption describing the content of the file.

Processing of supplementary files

Electronic supplementary material will be published as received from the author without any conversion, editing, or reformatting.

Accessibility

In order to give people of all abilities and disabilities access to the content of your supplementary files, please make sure that

The manuscript contains a descriptive caption for each supplementary material
Video files do not contain anything that flashes more than three times per second (so that users prone to seizures caused by such effects are not put at risk)

ENGLISH LANGUAGE EDITING

For editors and reviewers to accurately assess the work presented in your manuscript you need to ensure the English language is of sufficient quality to be understood. If you need help with writing in English you should consider:

Asking a colleague who is a native English speaker to review your manuscript for clarity.

Visiting the English language tutorial which covers the common mistakes when writing in English.

Using a professional language editing service where editors will improve the English to ensure that your meaning is clear and identify problems that require your review. Two such services are provided by our affiliates Nature Research Editing Service and American Journal Experts. Springer authors are entitled to a 10% discount on their first submission to either of these services, simply follow the links below.

English language tutorial

Nature Research Editing Service

American Journal Experts

Please note that the use of a language editing service is not a requirement for publication in this journal and does not imply or guarantee that the article will be selected for peer review or accepted.

If your manuscript is accepted it will be checked by our copyeditors for spelling and formal style before publication.

为便于编辑和评审专家准确评估您稿件中陈述的研究工作，您需要确保您的英语语言质量足以令人理解。如果您需要英文写作方面的帮助，您可以考虑：

- 请一位以英语为母语的同事审核您的稿件是否表意清晰。
- 查看一些有关英语写作中常见语言错误的教程。
- 使用专业语言编辑服务，编辑人员会对英语进行润色，以确保您的意思表达清晰，并识别需要您复核的问题。我们的附属机构 Nature Research Editing Service 和合作伙伴 American Journal Experts 即可提供此类服务。

教程

Nature Research Editing Service

American Journal Experts

请注意，使用语言编辑服务并非在期刊上发表文章的必要条件，同时也并不意味或保证文章将被选中进行同行评议或被接受。

如果您的稿件被接受，在发表之前，我们的文字编辑会检查您的文稿拼写是否规范以及文体是否正式。

エディターと査読者があなたの論文を正しく評価するには、使用されている英語の質が十分に高いことが必要とされます。英語での論文執筆に際してサポートが必要な場合には、次のオプションがあります：

- ・英語を母国語とする同僚に、原稿で使用されている英語が明確であるかをチェックしてもらう。
- ・英語で執筆する際によくある間違いに関する英語のチュートリアルを参照する。
- ・プロの英文校正サービスを利用する。校正者が原稿の意味を明確にしたり、問題点を指摘し、英語の質を向上させます。Nature Research Editing Service と American Journal Experts の2つは弊社と提携しているサービスです。Springer の著者は、いずれのサービスも初めて利用する際には10%の割引を受けることができます。以下のリンクを参照ください。

英語のチュートリアル

Nature Research Editing Service

American Journal Experts

英文校正サービスの利用は、投稿先のジャーナルに掲載されるための条件ではないこと、また論文審査や受理を保証するものではないことに留意してください。

原稿が受理されると、出版前に弊社のコピーエディターがスペルと体裁のチェックを行います。

영어 원고의 경우, 에디터 및 리뷰어들이 귀하의 원고에 실린 결과물을 정확하게 평가할 수 있도록, 그들이 충분히 이해할 수 있을 만한 수준으로 작성되어야 합니다. 만약 영작문과 관련하여 도움을 받기를 원하신다면 다음의 사항들을 고려하여 주십시오:

- 귀하의 원고의 표현을 명확히 해줄 영어 원어민 동료를 찾아서 리뷰를 의뢰합니다.
- 영어 튜토리얼 페이지에 방문하여 영어로 글을 쓸 때 자주하는 실수들을 확인합니다.
- 리뷰에 대비하여, 원고의 의미를 명확하게 해주고 리뷰에서 요구하는 문제점들을 식별해서 영문 수준을 향상시켜주는 전문 영문 교정 서비스를 이용합니다. Nature Research Editing Service와 American Journal Experts에서 저희와 협약을 통해 서비스를 제공하고 있습니다. Springer 저자들이 본 교정 서비스를 첫 논문 투고를 위해 사용하시는 경우 10%의 할인이 적용되며, 아래의 링크를 통하여 확인이 가능합니다.

영어 튜토리얼 페이지

Nature Research Editing Service

American Journal Experts

영문 교정 서비스는 게재를 위한 요구사항은 아니며, 해당 서비스의 이용이 피어 리뷰에 논문이 선택되거나 게재가 수락되는 것을 의미하거나 보장하지 않습니다.

원고가 수락될 경우, 출판 전 저희측 편집자에 의해 원고의 철자 및 문체를 검수하는 과정을 거치게 됩니다.

AFTER ACCEPTANCE

Upon acceptance of your article you will receive a link to the special Author Query Application at Springer's web page where you can sign the Copyright Transfer Statement online and indicate whether you wish to order OpenChoice and offprints.

Once the Author Query Application has been completed, your article will be processed and you will receive the proofs.

[Copyright transfer](#)

Authors will be asked to transfer copyright of the article to the Publisher (or grant the Publisher exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws.

[Offprints](#)

Offprints can be ordered by the corresponding author.

[Color illustrations](#)

Publication of color illustrations is free of charge.

[Proof reading](#)

The purpose of the proof is to check for typesetting or conversion errors and the completeness and accuracy of the text, tables and figures. Substantial changes in content, e.g., new results, corrected values, title and authorship, are not allowed without the approval of the Editor.

After online publication, further changes can only be made in the form of an Erratum, which will be hyperlinked to the article.

[Online First](#)

The article will be published online after receipt of the corrected proofs. This is the official first publication citable with the DOI. After release of the printed version, the paper can also be cited by issue and page numbers.

COPYRIGHT

Articles in SpringerOpen journals do not require transfer of copyright as the copyright remains with the author. In confirming the publication of your article with open access you agree to the Creative Commons Attribution License.

[Find more about the license agreement](#)

READ THIS JOURNAL ON SPRINGERLINK

[All Volumes & Issues](#)

FOR AUTHORS AND EDITORS

2017 Impact Factor

1.497

[Aims and Scope](#)

[Submit Online](#)

[Open Choice - Your Way to Open Access](#)

[General Instructions for Authors](#)

[Specific Instruction for Authors \(pdf, 3...](#)

SERVICES FOR THE JOURNAL

[Contacts](#)

[Download Product Flyer](#)

[Shipping Dates](#)

[English Language Editing](#)

ALERTS FOR THIS JOURNAL

Get the table of contents of every new issue published in [3 Biotech](#).

LOGIN

Please send me information on new Springer publications in [Biotechnology](#).

ADDITIONAL INFORMATION

Springer's Cooperation with KACST

