

# ***Journal of Electronic Materials* Instructions for Authors**

## **TYPES OF ARTICLES**

The journal classifies paper submissions as follows:

- **Brief Communications:** Brief Communications are intended to communicate exciting new findings that will have high impact in the field of electronic materials. Brief Communications are to be short. Such articles will not exceed a word limit of 4000 words, including abstract, introduction, and all other sections of the article. Brief Communications may include no more than 7 figures and/or tables, which together may not occupy more than 2 full pages.
- **Editorial Commentaries:** This article type is open only to Editorial Board Members of the journal; all other potential authors should submit articles to one of the journal's other article types. Editorial Commentaries will cover emerging topics in the field, current research, and more.
- **Letters to the Editor:** A Letter to Editor includes specific comments on a previously published *Journal of Electronic Materials* article. The authors of the original article will be given the opportunity to reply to the comments.
- **Regular Issue Papers:** Full-length manuscripts that deal with new and original research work.
- **Review Articles:** Lengthy papers that cover a specific area of research in great depth.
- **Special Issue Papers:** Original research papers on the same topic—usually submitted as a direct result of solicitation for submission to the special issue—that are presented in an issue in which no other regular articles appear. Minimum article requirements for special issues are determined by the editorial team on a case-by-case basis.
- **Special Section Papers:** A collection of papers concerned with research on the same topic, presented in a dedicated section of one issue in which other regular articles appear. Minimum article requirements for special sections are determined by the editorial team on a case-by-case basis.

Authors are responsible for submitting manuscripts in clear English language and should obtain assistance from an independent professional editor, if necessary. A list of independent editing services is provided below:

<http://powerrefine.aptaracorp.com> <http://www.prof-editing.com>

<http://www.internationalscienceediting.com>

<http://asiascienceediting.com>

<http://oleng.com.au>

<http://www.edanzediting.com>

<http://www.journalexerts.com>

## **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 coauthors, 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.

## Co-Author Guidelines

The co-authors of a paper must be persons who have participated sufficiently in the work reported to take public responsibility and be accountable for appropriate portions of the content. **Any change to the author names listed in the original manuscript, including additions, deletions, and/or a change in order of appearance, requires proof of agreement of all co-authors.** Further, changes to the co-author list are **not permitted after the manuscript has been accepted.** Exceptional cases may be considered by the Editor.

## Conflict of Interest

Authors must indicate whether or not they have a financial relationship with the organization that sponsored the research. This note should be added in a separate section before the reference list. If no conflict exists, authors should state: The authors declare that they have no conflict of interest.

## Ethics

Originality of the manuscript submitted is the author's responsibility, and authors must avoid duplicate submission, plagiarism, and self-plagiarism. All manuscript submissions will be screened against the CrossCheck database (powered by iThenticate). iThenticate is a plagiarism screening service that verifies the originality of content submitted. Authors can also use iThenticate to screen their work before submission by visiting [www.ithenticate.com](http://www.ithenticate.com).

## 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

Authors should submit their manuscripts online. Electronic submission substantially reduces the editorial processing and reviewing times and shortens overall publication times. Follow the hyperlink "[Submit online](#)" on the right and upload all your manuscript files following the instructions given on the screen.

## Manuscript Checklist

Before you submit your manuscript, please make sure your paper is properly formatted for the journal. What follows is a basic checklist; additional requirements can be found in the sections that follow.

1. Your manuscript must be submitted in Word or LaTeX format. PDF format is not acceptable. If the manuscript is submitted as a LaTeX file, please upload a PDF version of the manuscript as supplemental material.
2. At least three reviewers must be suggested, with up-to-date contact details, including a current email address, as well as verified links to their recent publications, publication history, or CV. These reviewers should have expertise specific to the manuscript, have recently published, and still be active in the field. Submissions with invalid suggested reviewer information (e.g., contact email, link to scholarly paper) will be returned to the author unreviewed.

3. The affiliation information for all authors must be listed on the title page; the corresponding author must be identified and that author's email address must be provided.
4. The abstract and 4 to 6 keywords must be present on the title page.
5. All lines should be double spaced.
6. Page numbers (required) and line numbers (preferred but optional) should be included.
7. Abbreviations must be defined on first use in the abstract and then redefined again in the body of the manuscript using this style: molecular beam epitaxy (MBE).
8. Variables must be italicized in the equations and in the text.
9. Equations must be numbered in order to the right of the equation with the number in parentheses: (1), (2), etc.
10. SI units of time are required: Use (h) for hours, (min) for minutes, and (s) for seconds.
11. Torr units should be converted to kPa.
12. Scientific notation should be set as  $1 \times 10^{-7}$  with a superscript -7 as opposed to the computer programming style of 1E-7.
13. References must be in the style of the journal with all author names cited (et al. is not permitted), no article titles listed, and journal titles correctly abbreviated.
14. All tables and figures must be numbered and cited in numerical ascending order in the text. Roman numerals (i.e., I, II) are used for table numbers, and Arabic numbers (i.e., 1, 2) are used for figure numbers.
15. Figures must be uploaded as separate high-resolution (at least 300 dpi) jpg, tiff, or eps files. Tables must be uploaded as original source files (doc or LaTeX format).
16. If any figures and/or tables are being reprinted or modified from another source, it must be noted that in the caption(s) and permission paperwork must be uploaded.
17. Multi-part figures must be labeled as (a), (b), (c), etc., and a brief description of each figure part must be provided in the figure caption.
18. Micrographs must have scale markers that will be readable in a printed journal. Place scale markers and units on micrographs in a white box within the image using a thicker line for the scale and a larger font size used for the units for better readability.
19. Color figures must be understandable if printed in black and white. (If you have used color figures, they will be printed in black and white in the print issue and appear in color online, so please be sure they will convey the needed information without the use of color. Various types of lines [dash, dotted, long dash, etc.] and/or symbols can be used to delineate differences in addition to colors.)
20. Electronic Supplementary Material: Additional materials, including figures, tables, datasets, and videos, can be included as electronic supplementary material. This material is accessible online but not in print. Be sure to label the items as supplementary and cite them as supplementary in the text (for example, "see supplementary data file," "see supplementary figure S1," "see

supplementary table SI"). Please upload one supplementary PDF file that contains all supplementary text, figures, and tables, including figure captions and table titles. The first page should include "Supplementary Material for:" at the top of the page followed by the manuscript title, author names, and affiliations. No editing or formatting will be done to supplementary material.

### **Title Page**

The title page should include:

- A concise and informative title, with correct capitalization of chemical symbols
- The name(s) of the author(s)
- The affiliation(s) and address(es) of the author(s)
- The e-mail address, telephone number, and fax number of the corresponding author

### **Abstract**

Please provide an abstract of 150 to 250 words. The abstract should be one paragraph and should not contain any undefined abbreviations or any reference citations.

### **Keywords**

Please provide 4 to 6 keywords that can be used for indexing purposes. These keywords should be added after the Abstract section of the manuscript.

## **TEXT PREPARATION**

### **Formatting**

Manuscripts must be submitted in Word or LaTeX.

- Use single column, double line spacing
- Use a normal, plain font (e.g., 10-point Times Roman) for text.
- Use italics for variables and equations (e.g.,  $ZT$ ,  $p$ -type,  $n$ -type).
- Use the automatic page numbering function to number the pages; automatic line numbering is preferred but optional.
- 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. Upload your tables as a separate document files.
- Use the equation editor or MathType for equations.
- Manuscripts with mathematical content can be submitted in LaTeX but also upload a copy of your manuscript as a pdf file (supplemental file). 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, in the abstract and again in the body of the manuscript using this style: molecular beam epitaxy (MBE), and used consistently thereafter. Even commonly known terms should be defined.

## 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 and tables are numbered consecutively, indicated by superscript lowercase 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.

## Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section before the reference list. The names of funding organizations should be written in full.

## Citations

Reference citations in the text should be identified by numbers in square brackets. Some examples:

- Negotiation research spans many disciplines [3].
- This result was later contradicted by Becker and Seligman [5].
- This effect has been widely studied [1-3, 7].

## 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 as a substitute for a reference list. Be sure to include all authors' names (don't use et al), do not include article titles, and appropriately abbreviate journal titles. The entries in the list must be numbered consecutively.

- **Journal article:** S. Preuss, A. Demchuk Jr., and M. Stuke, *Appl. Phys. A* 61, 33 (1995).
- **Article by DOI:** M.K. Slifka and J.L. Whitton, *J Mol Med.* (2000) doi:10.1007/s001090000086.
- **Book:** H. Ibach and H. Lüth, *Solid-State Physics*, 2nd edn. (Springer, Dordrecht, 1996), pp. 45–56.
- **Book chapter:** D.M. Abrams, in *Conductive Polymers*, ed. By R.S. Seymour, A. Smith (Springer, New York, 1973), p. 307.
- **Conference Proceedings:** R. Zybala and K.T. Wojciechowski, in *AIP Conference Proceedings* (2012), pp. 393–396.
- **Online document:** J. Cartwright, Big stars have weather too. (IOP Publishing PhysicsWeb, 2007), <http://physicsweb.org/articles/news/11/6/16/1>. Accessed 26 June 2007.

Always use the standard abbreviation of a journal's name according to the ISSN List of Title Word Abbreviations. For a list of journal abbreviations, see one of these sites:

- ISSN.org
- [cassi.cas.org/](http://cassi.cas.org/)
- [library.caltech.edu/reference/abbreviations/](http://library.caltech.edu/reference/abbreviations/)

## Tables

- All tables are to be numbered using Roman numerals.
- Tables should always be cited in the 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

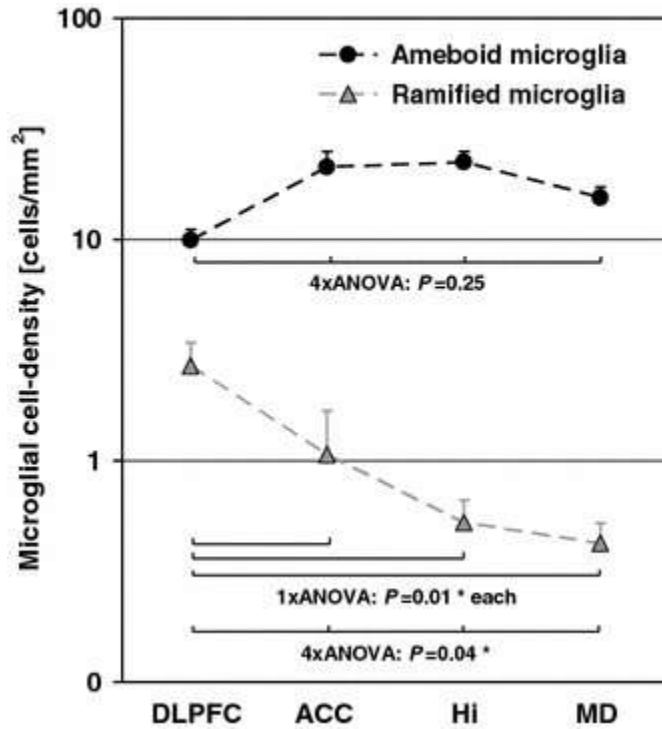
- Supply all figures electronically in a high-resolution (at least 300 dpi) .jpg, tiff, or .eps format. Each figure file should be uploaded individually. Do not upload the figure files in a Word document file.
- Indicate what graphics program was used to create the artwork.
- For vector graphics, the preferred format is EPS; for halftones, please use TIFF format. 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.

### Micrographs

All micrographs must have scale markers. Scale markers and units on micrographs should be placed in a white box within the image using a thicker line for the scale and a larger font size used for the units for better readability.

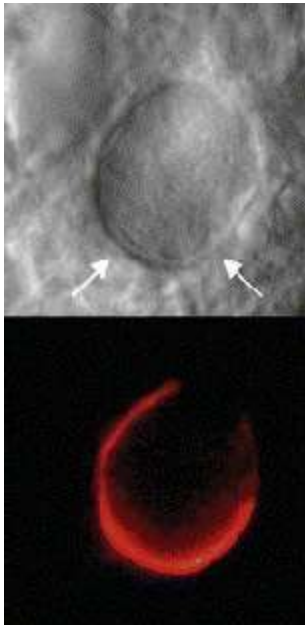


Line Art



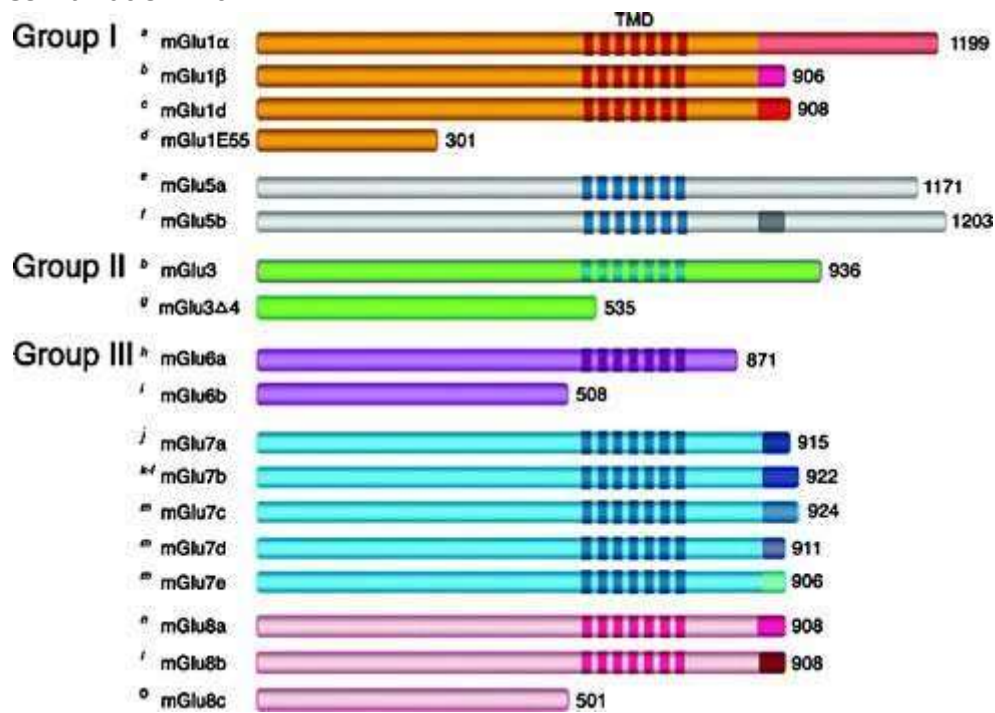
- Definition: Black and white graphic with no shading.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- All lines should be at least 0.1 mm (0.3 pt) wide.
- Scanned line drawings and line drawings in bitmap format should 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.
- 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, be 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 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 (i.e., 1, 2, 3, etc).
- Figures should always be cited in the text in consecutive numerical order.
- Figure parts should be denoted by lowercase letters and the part labels should be added to the figures themselves (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 and also the figure caption.
- Figure captions begin with the term **Fig.** in bold type, followed by the figure number, also in bold type.
- Punctuation is to be included after the number, and punctuation is also to be placed at the end of the figure 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

- 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.

## 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.

## 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

## 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 Open Choice, offprints, or printing of figures in color. Once the Author Query Application has been completed, your article will be processed and you will receive the proofs.

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Offprints can be ordered by the corresponding author.

### **Color illustrations**

Online publication of color illustrations is free of charge. For color in the print version, authors will be expected to make a contribution toward the extra costs.

### **Proofreading**

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.

## **ENGLISH-LANGUAGE SUPPORT**

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.
  - Nature Research Editing Service
  - American Journal Experts

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