

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

## **TYPES OF ARTICLES**

The journal classifies article submissions as follows:

- **Original Research Articles:** Full-length manuscripts that present new and original research work.
- **Review Articles:** Lengthy articles that cover a specific area of research in great depth. (Specific requirements for this article type are explained below.)
- **Invited Review Article:** A separate classification of review article that is by invitation only.
- **Brief Communications:** Short articles intended to communicate exciting new findings that will have a high impact in the field of electronic materials. Such articles should not exceed a limit of 4,000 words, including abstract, introduction, and all other sections of the article. These articles should include no more than 7 figures and/or tables, which together should 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:** An article that 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.
- **Topical Collection Articles:** Articles concerned with research on the selected topic, presented in a dedicated section of a journal issue. The same requirements for Original Research Articles and Review Articles apply to this article type.

## **MANUSCRIPT SUBMISSION**

Submission of a manuscript implies that the work described has not been published before, and that it is not under consideration for publication elsewhere.

### **Coauthor Guidelines**

When an article is submitted, it is implied that publication has been approved by all coauthors, if any, as well as by the responsible authorities—tacitly or explicitly—at the organization where the work has been done. The coauthors of a manuscript must be persons who have participated sufficiently in the work reported to take public responsibility and be accountable for appropriate portions of the content. Authors are encouraged to include a statement before the References section that specifies the contribution of every author to the research and preparation of the manuscript. Any change to the author names listed in the original manuscript in a subsequent version of the manuscript, including additions, deletions, and/or a change in order of appearance, requires proof of agreement of all coauthors. Further, **changes to the author list are not permitted after the manuscript has been accepted**. Exceptional cases may be considered by the Editor. A change to the corresponding author can be made in a revised manuscript or accepted article with proof of agreement of only the new corresponding author.

### **Conflict of Interest**

Authors must indicate whether 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 as follows: 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 (simultaneous submission to multiple journals), plagiarism, and self-plagiarism. Manuscripts that are proven to be duplicate submissions will be rejected immediately and future work by the authors will not be considered by the journal.

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 and highlights published text. During the submission process authors will be asked to answer a question to confirm the manuscript does not contact excessive overlap with previously published work. Authors are encouraged to use iThenticate ([www.ithenticate.com](http://www.ithenticate.com)) to screen their work before submission.

Large Language Models (LLMs), such as ChatGPT, do not currently satisfy the journal's [authorship criteria](#). Notably, an attribution of authorship carries with it accountability for the work, which cannot be effectively applied to LLMs. Use of an LLM should be properly documented in the Methods section and if a Methods section is not available, in a suitable alternative part of the manuscript.

## English Language Support

For editors and reviewers to accurately assess the work presented in a manuscript, authors should ensure that the English language is of sufficient quality to be understood. If help is needed with writing in English, authors should consider obtaining assistance from a professional language editing service such as the following:

- <http://www.aptaracorp.com>
- <http://www.prof-editing.com>
- <https://www.internationalscienceediting.com/>
- <https://asiascienceediting.com/>
- <http://www.edanzediting.com>
- <http://www.aje.com>
- <https://authorservices.springernature.com/>

TMS members are entitled to a 15% discount with Springer Author Services. Members should first log in on [this page](#), at which point a link will be visible.

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 will be accepted. If your manuscript is accepted, it will be checked by copyeditors before publication.

## 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 manuscripts. Any material received without such evidence will be assumed to originate from the authors.

## Online Submission

Authors should register or log in at the submission site (<https://www.editorialmanager.com/jems>) and choose the option "Submit New Manuscript."

### **Suggesting Reviewers**

At least three potential reviewers must be suggested at the time of submission and specific support regarding technical expertise should be provided for each person. Ideally the support should include a link to the person's publication list on Google Scholar or ResearchGate and/or titles of articles related to the manuscript topic that were authored by the candidate reviewer. Please note that the editors may choose to not use the suggestions; however, the suggestions may expedite the reviewer assignment process and thus shorten the time for reaching a publication decision.

### **Review Articles**

The authors must answer the following mandatory questions if they choose to submit the article type "Review Article".

- I have provided a cover letter that explains the author's expertise in the subject and includes a list of at least ten relevant publications by the authors in the article's topical area.
- The manuscript includes a comprehensive reference list (approximately 20 or more entries) in which the majority of the items are authored by others in the field and not the coauthors of the submitted work.

### **Manuscript Checklist**

Before you submit your manuscript, please make sure it 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 should be submitted in either Word or LaTeX format. If the manuscript is submitted as a LaTeX file, upload a PDF version of the manuscript as supplemental material.
2. 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.
3. An abstract of 150–250 words and 4 to 6 keywords must be included.
4. All lines should be double spaced.
5. Page numbers are required and should be inserted in the manuscript. Including line numbers is preferred but optional.
6. 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).
7. Variables must be italicized in the equations and in the text.
8. Equations must be numbered in order to the right of the equation with the number in parentheses: (1), (2), etc.
9. SI units of time are required: Use (h) for hours, (min) for minutes, and (s) for seconds.
10. Torr units should be converted to kPa.
11. References must be in the style of the journal with all author names cited (et al. is not permitted), journal article titles included, and journal titles correctly abbreviated.
12. 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.
13. Figures must be uploaded as separate high-resolution files. Tables must be uploaded as original source files (doc or LaTeX format).
14. If any figures and/or tables are being reprinted or modified from another source, it must be noted in the caption(s) and permission paperwork must be uploaded.

15. Multi-part figures should be labeled as (a), (b), (c), etc., and a brief description of each figure part must be provided in the figure caption.
16. 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.
17. 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.)
18. If an appendix is part of the article, place it at the end of the manuscript text before the reference list.

### **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 of the corresponding author

### **Graphical Abstract**

A graphical abstract is encouraged (but not required) with submissions to this journal. The graphical abstract should be a single, concise pictorial of the main findings of the article, and it should facilitate readers' understanding of the importance of the article content in an accessible and rapid way. Authors may include a key figure from the manuscript or create a separate image for this purpose. The use of color to enhance the value and quality of the graphic is encouraged.

The graphical abstract should be included as part of the manuscript file and also submitted as a separate image file. The same artwork and illustration guidelines offered below (see p. 6) should be referenced in the preparation of graphical abstracts.

### **Abstract**

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**

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

### **Cover Letter (for Review Articles only)**

A cover letter should be submitted with Review Articles and should address the following issues:

- Explain the novelty of the review article after considering the other published literature on the subject. Note other recent review articles that have been published on the topic.
- Explain the author's/authors' expertise on the subject of the review article and include a list of at least ten relevant publications by the authors in the article's topical area.

### **Marked Manuscript (for revised manuscripts only)**

If an author is asked to revise his/her manuscript, a Marked Manuscript file must be submitted in addition to the Manuscript file. The content of these two files should be identical and the

Marked Manuscript file should include highlighted text that shows which changes were made when revising the manuscript. If the track changes function of Word is used to indicate changes, all markings that refer to font and formatting on the right side should be removed so that only edits are called out in the file.

## TEXT PREPARATION

### Formatting

Manuscripts should be submitted in Word.

- 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).
- It is required that the manuscript displays page numbers. The journal recommends that authors use the automatic page numbering function to number the pages; automatic line numbering is preferred but optional.
- Use the table function, not spreadsheets, to make tables. Upload your tables as separate document files.
- Scientific notation should be set as  $1 \times 10^{-7}$  with a superscript -7 as opposed to the computer programming style of  $1E-7$ .

Manuscripts with mathematical content can also be submitted in LaTeX format. See [here](#) for information on creating and uploading LaTeX documents. Templates are available at [LaTeX2e macro package](#). Although the full LaTeX package with source files is encouraged at the time of initial submission, the PDF file of the LaTeX submission is acceptable for peer review purposes only. LaTeX source files are required before a manuscript can be accepted.

### Headings

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 abbreviations 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 and should appear in ascending numerical order. 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 (do not use et al), include article titles, and appropriately abbreviate journal titles. The entries in the list must be numbered consecutively. The journal follows American Physical Society (APS) Reference Style, with the inclusion of the article title. (Note that the EndNote style available for this journal does not include the article title.) Use standard journal abbreviations as given in the current listing of Chemical Abstracts Service at this [link](#).

- **Journal article:** S. Preuss, A. Demchuk Jr., M. Stuke, Sub-picosecond UV laser ablation of metals. *Appl. Phys. A* 61, 33 (1995).
- **Article by DOI:** M.K. Slifka, J.L. Whitton, Clinical implications of dysregulated cytokine production. *J Mol Med.* (2000) doi:10.1007/s001090000086
- **Book:** H. Ibach, H. Lüth, *Solid-State Physics*, 2nd edn. (Springer, Dordrecht, 1996)
- **Book chapter:** D.M. Abrams, in *Conductive Polymers*, ed. by R.S. Seymour, A. Smith (Springer, New York, 1973), p. 307.
- **Conference Proceedings:** R. Zybała, K.T. Wojciechowski, in *AIP Conference Proceedings* (2012), p. 393
- **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.

Reference lists for Review Articles should be comprehensive (containing approximately 20 or more entries) and the majority of the publications must be authored by others in the field and not the coauthors of the submitted work.

## Tables

- Tables must be uploaded as original source files (doc or LaTeX format).
- All tables are to be numbered using Roman numerals.
- Tables should always be cited in the text in consecutive numerical order.
- For each table, supply a 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 ILLUSTRATION GUIDELINES

### Electronic Figure Submission

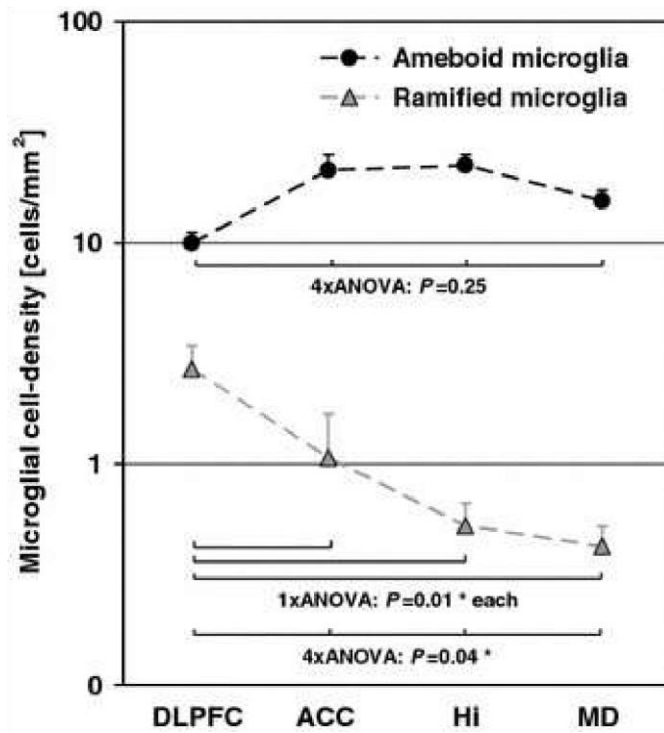
- Supply all figures as separate high-resolution files.
- Indicate what graphics program was used to create the artwork.
- For vector graphics, the preferred format is EPS; for halftones, TIFF format is recommended. Vector graphics containing fonts must have the fonts embedded in the files.
- Name your 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.

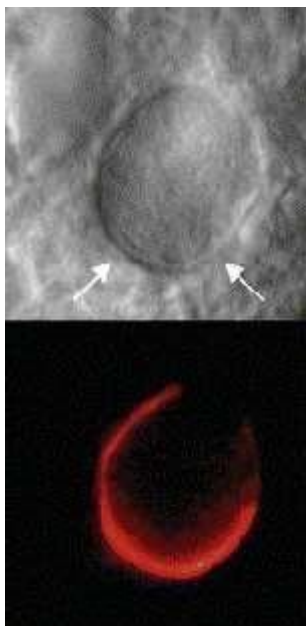


## Line Art



- 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.

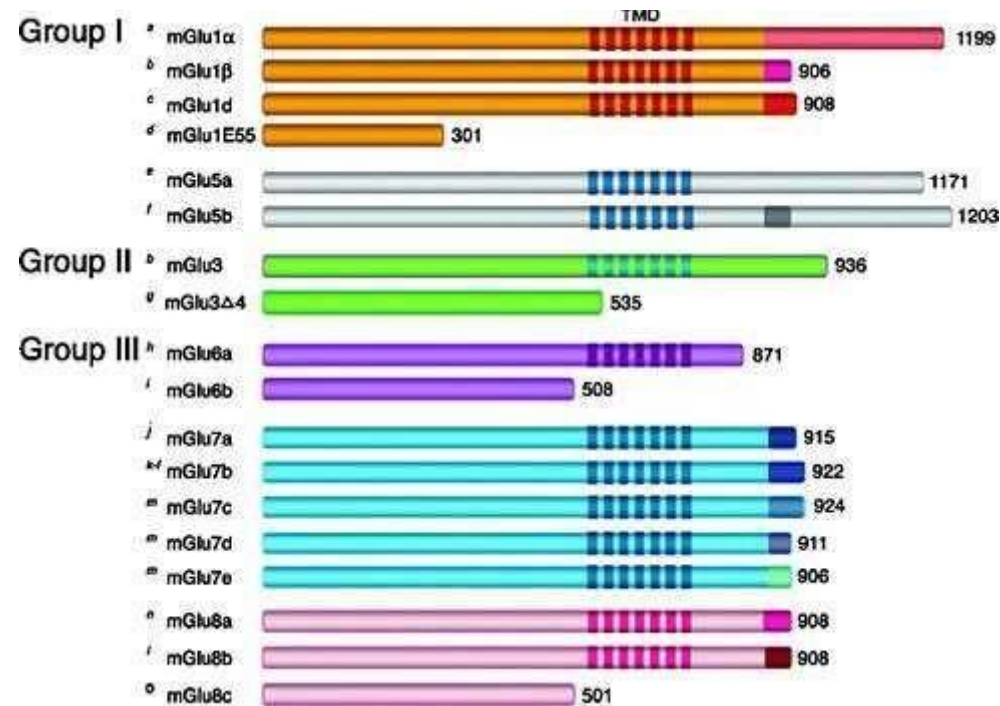
## Halftone Art





- Definition: Photographs or drawings with fine shading.
- 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, and color diagrams, etc.
- Combination artwork should have a minimum resolution of 600 dpi.

### Color Art

- Color art is free of charge for online publication.
- Because only black and white is shown in the print version, be sure that the main information will still be visible and that figure captions do not reference specific colors. Many colors are not distinguishable from one another when converted to black and white.

### 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 and outline letters.
- 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 Electronic Supplementary Material should, however, be numbered separately.)

### **Figure Captions**

- Each figure should have a concise caption accurately describing what the figure depicts. Add the figure caption as Word or LaTeX text below the figure in the manuscript file. If the figures are not included in the manuscript file, add a list of figure captions at the end of the manuscript.
- Figure captions begin with the term Fig. in bold type, followed by the figure number, also in bold type.
- 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.

### **Electronic Supplementary Material**

Additional materials that are not appropriate for placement in the main article, 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 S1"). Upload one 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.

### **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)

## **AFTER ACCEPTANCE**

Upon acceptance, your article will be exported to Production to undergo typesetting. Once typesetting is complete, you will receive a link asking you to confirm your affiliation, choose the publishing model for your article, as well as arrange rights and payment of any associated publication cost. Once you have completed this, your article will be processed, and you will receive the proofs.

### **Open Choice**

In addition to the normal publication process (whereby an article is submitted to the journal and access to that article is granted to customers who have purchased a subscription), Springer provides an alternative publishing option: [Springer Open Choice](#). A Springer Open Choice article receives all the benefits of a regular subscription-based article, but in addition is made available publicly through Springer's online platform SpringerLink.

### **Copyright Transfer**

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

Open Choice articles do not require transfer of copyright as the copyright remains with the author. In opting for open access, the author(s) agree to publish the article under the Creative Commons Attribution License.

### **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**

Authors should check the page proofs 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, or authorship, are not permitted.

### **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 complete online issue, the article also can be cited by issue and page numbers.