

## TYPES OF ARTICLES

JOM authors can select from a variety of options for articles that fall within the journal's [Editorial Calendar topics](#). These article types include, but are not limited to:

**Original Paper:** Describes a novel, technically in-depth investigation from the minerals, metals, and materials community.

- 3,000-9,000 words (including abstract and references) and a maximum of 12 figures/tables.
- Additional materials, including figures, tables, datasets, and videos can be included as Electronic Supplementary Material. These are accessible online but not in print. They are exempt from the word count limit.

**Review Paper:** A thorough compilation and succinct summary of research performed in an area of interest to JOM readers.

- Although lengths can vary depending on subject matter, the typical review paper ranges from 6,000 to 11,000 words (including abstract and references) and has no more than 20 figures/tables.
- Additional materials, including figures, tables, datasets, and videos can be included as Electronic Supplementary Material. These are accessible online but not in print. They are exempt from the word count limit.

**Editorial Notes:** (800–1,600 words) Reserved for Guest Editors to summarize the theme of a special topic.

## AUTHOR OBLIGATIONS

### **Manuscript Submission**

Submission of a manuscript implies:

- The work has not been published before.
- It is not under consideration for publication anywhere else.

**No author may submit more than two manuscripts to a special topic.**

Multipart papers with divisions such as Part I, Part II, etc. may not be submitted. Papers with such divisions will be returned to the author unreviewed. If an author submits a series of papers on the same topic, each paper must be complete on its own, and if accepted be able to stand alone as a published paper without regard to other papers in the series. Further, the journal will not make any allowances to publish the accepted papers together or in a particular order.

If part of manuscript has been published or has been submitted elsewhere, the submission is not automatically rejected so long as the main result, conclusion, and implications are substantially enhanced or different as compared to the other work. In this situation, the corresponding author must specify in the cover letter which part of the manuscript will appear or has appeared elsewhere, in what publication, and how the submitted

manuscript differs from previously disseminated versions.

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 (this list is not comprehensive, but a sampling of available services):

<http://www.aje.com>

<http://www.editage.com>

<http://www.edanzediting.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.

### **Manuscript Resubmission**

Authors of manuscripts containing any amount of material previously rejected by this journal must identify the manuscript number of the previously rejected submission in the cover letter. In addition, the cover letter must list the reviewer comments of the prior submission and present a point-by-point response to those comments.

### **Permissions**

Authors wishing to include figures, tables, or text passages that have been published elsewhere are required to obtain permission from the copyright owner(s) and to include evidence that such permission has been granted when submitting their manuscripts. Any manuscript content received without such evidence will be assumed to originate from the authors.

### **Conflict of Interest**

Authors of original papers and review papers 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 and publication, 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 may use iThenticate to screen their work before submission.

*JOM* ascribes to the codes of conduct and best practices guidelines of the Committee on Publication Ethics.

### **Co-Author 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. 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 coauthor 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.

### **Suggested Reviewers**

Suggesting three reviewers is required at the time of submission. These reviewers should have expertise specific to the manuscript, have recently published, and still be active in the field. Please note that the editorial office may not use your suggestions but providing names of reviewers may expedite the selection of appropriate reviewers.

### **Online Submission**

All *JOM* authors submit their manuscripts online. Please go to [JOM Editorial Manager](#) to upload all your manuscript files, following the instructions on the screen.

## **JOM STYLE GUIDE**

### **Title Page**

The title page should include:

- A concise and informative title (do not use all

uppercase text in the title).

- The name(s) of the author(s) [(first name (given name) followed by last name (family name)]
- The affiliation(s) of all authors with their city, state, and zip code if U.S., or city, country, country code if outside the U.S.
- The e-mail address of the corresponding author.

### **Abstract**

Provide an abstract of between 150 and 200 words. The abstract should not contain any undefined abbreviations or cite any references.

### **Text**

#### **Text Formatting**

Manuscripts should be submitted in Word.

- Use a normal, plain font (e.g., 10-point Times Roman) for text.
- Use U.S. English spelling.
- 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.

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**

Please use no more than three levels of displayed headings.

### **Abbreviations**

Abbreviations should be defined at first mention and used consistently after that occurrence. If the abbreviation occurs first in the abstract, it should be defined both there and at first mention in the text.

### **Footnotes**

Footnotes can be used to give additional information. This may include the citation of a reference included in the reference list. They should not consist solely of a reference citation and should never include the bibliographic details of a reference. They should also not

contain any figures or tables.

Footnotes to the text are identified in consecutive order using lower-case letters. Footnotes 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.*

### **Acknowledgements**

Acknowledgements 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.

### **Scientific Style**

Please always use internationally accepted signs and symbols for units, SI units.

### **Revised Articles**

When a revision is submitted, you must include a point-by-point response to the reviewer comments. You also must upload a clean version of the revised manuscript and a track changes version showing all changes made during revision.

### **References**

#### **Self-Citations**

To comply with ethical standards as well as to provide appropriate context for published work, citations of the author's own articles should not be excessive.

#### **Citation Style**

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. The entries in the list should be numbered consecutively and cited in ascending numerical order, and citations in the text should be identified by numbers in square brackets.

#### **Reference List**

For authors using EndNote, the JOM style can be downloaded [here](#).

1. Use journal abbreviations as given in the current listing of Chemical Abstracts Service at this [link](#). Article titles are not to be included. List all authors' names with no et al.  
*Format:* Author, abbreviated journal title, volume number, opening page number (year).  
*Example of article with no DOI:* R.M. Horn and R.O. Ritchie, *Metall. Trans. A*, 9A, 1039 (1978).

*Example of article with DOI:* M.K. Slifka and J.L. Whitton, *J. Mol. Med.* (2000).

<https://doi.org/10.1007/s001090000086>

2. References to books should include the italicized book title, and pages within the book:  
*Format:* Author, italicized book title (publisher location: publisher name, date, pages).  
*Example:* G.E. Dieter, *Mechanical Metallurgy*, (McGraw-Hill, New York, 1976), pp. 160-165.
3. Book chapters or sections within a book:  
*Example:* D.M. Abrams, *Conductive Polymers*, ed. R.S. Seymour and A. Smith (Springer, New York, 1973), p. 307.
4. Paper presented at a conference:  
*Example:* S.-T. Chung and R.L. Morris, Isolation and characterization of plasmid deoxyribonucleic acid from *Streptomyces fradiae*. Paper presented at the 3rd international symposium on the genetics of industrial microorganisms, University of Wisconsin, Madison, 4–9 June 1978
5. Online documents:  
*Example:* J. Cartwright, "Big stars have weather too" (IOP Publishing PhysicsWeb, 2007), <http://physicsweb.org/articles/news/11/6/16/1>. Accessed 26 June 2007.
6. "In Press" references must include the name of the journal. Complete publication information should be supplied when available. These details may be added during the review of page proofs.  
*Example:* J.M. Chapman, S.F. Corbin and E.D. Moreau, *Metall. Mater. Trans. A*, (2021, in press)

#### **Data and Code**

As appropriate, authors are strongly encouraged to separately publish the data and code supporting their articles whenever possible. Data should be published in a publicly accessible data repository that is committed to archiving datasets indefinitely, assigns a unique and persistent digital identifier, and allows bi-directional linking between the paper and dataset. The dataset(s) are to be cited, where appropriate in the manuscript, and included in the reference list following the guidelines below. Data citation should be consistent with the Joint Declaration of Data Citation Principles (Data Citation Synthesis Group: Joint Declaration of Data Citation Principles. Martone M. (ed.) San Diego CA: FORCE11; 2014 <https://doi.org/10.25490/a97f-egykh>).

- Online dataset: G. Ozkaya, figshare, <https://doi.org/10.6084/m9.figshare.c.4017808> (2018)
- Online database: Healthwise Knowledgebase (US Pharmacopeia, Rockville, 1998), <http://www.healthwise.org>. Accessed 21 Sept 1998

#### **Tables**

- Tables must be in Word or LaTeX format, not graphics.

- Tables may be either included in the manuscript file or uploaded as separate files.
- All tables are to be numbered using Roman numerals.
- Tables should always be cited in 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.

## Figures

- Figures with captions may be embedded in the manuscript file, but also upload each high-resolution image file separately. For additional details on creating figures, refer to the Artwork and Illustrations section of this document.
- All figures are to be numbered using Arabic numerals (1, 2, 3, etc.) and should be cited in the text in ascending numerical order.
- Figure parts should be denoted by lowercase letters (a, b, c, etc.). Part labels should be added to the image files, and each part must be described in the figure caption.
- If an appendix appears in the 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."
- Each figure should have a concise caption describing what the figure depicts. Include the captions under the embedded figures in the manuscript file or in a separate list at the end of the manuscript if the figures are not embedded. Do not add figure captions to the individual figure files.
- Figure captions begin with the term Fig., followed by the figure number and a period. Also include punctuation at the end of the caption text. Example: Fig. 4. Steady state creep rate vs. applied stress for a P91 steel.
- Identify previously published material by giving the original source in the form of a reference citation at the end of the figure caption. For figures being reprinted, indicate "Reprinted with permission from [reference number]" at the end of the figure caption. For figures being adapted from another source, state "Adapted from [reference number]." For more information, refer to the Permissions sections of this document.

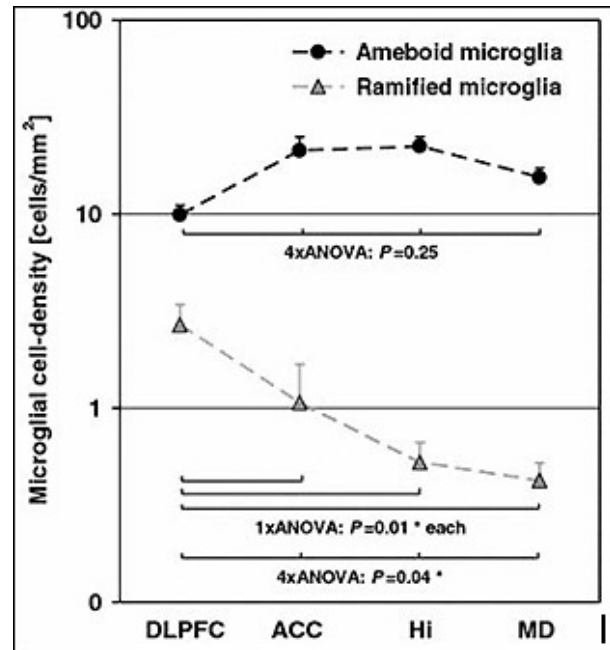
## ARTWORK AND ILLUSTRATIONS

### Preparing Electronic Figure Submission

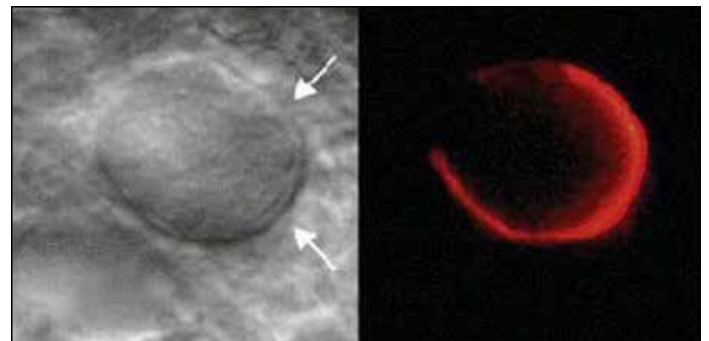
- For vector graphics, the preferred format is

EPS; for halftones, JPG, PNG, or TIFF format are recommended.

- Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

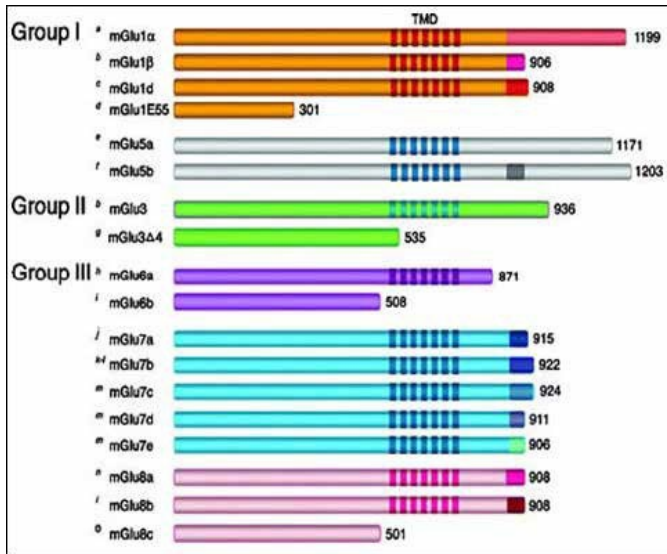


- *Definition:* Black and white graphic with no shading.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
- Vector graphics containing fonts must have the fonts embedded in the files.
- All lines should be at least 0.1 mm (0.3 pt) wide.
- Scanned line drawings and line drawings in bitmap format should have a minimum resolution of 1200 dpi.



- *Definition:* Photographs or drawings with fine shading.
- 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.

- Proof of the subject’s consent to publish must be provided for photographs featuring people.



- **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. Color printing of figures, micrographs, etc. is available for an additional cost.
- 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 printout to see if the necessary distinctions between the different colors are still apparent.

### 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.

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If you include figures that have already been published elsewhere, you must obtain and upload written permission from the copyright owner(s) for both the print and online formats. Upload each permission form as a separate Permission file. Name the file to clearly identify the figure being used in your manuscript (e.g., Permission for figure 1; Permission for figure 2B). 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. When submitting figures adapted from another source, copies of those source images must be uploaded as “permission” files.

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### Accessibility

To give people of all abilities access to your content, please make sure that:

- All figures have descriptive captions to enable visually impaired users to 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.

### **JOM MANUSCRIPT SUBMISSION CHECKLIST**

Before you submit your manuscript online to *JOM*, please review the following checklist to make sure all your information and materials are assembled and readily accessible. This will save time and avoid confusion during the submission and review process.

- Make sure your manuscript is appropriate for publication in *JOM*. Refer to the Types of Articles and Author’s Obligations sections of this

document, as well as the current [JOM Editorial Calendar](#).

- Check the [JOM Editorial Calendar](#) to confirm the special topic's submission deadline has not passed and, if your article was not invited, the topic is open to unsolicited submissions.
- Obtain any necessary permissions. Have your text ready to submit in Microsoft Word or LaTeX. Refer to the *JOM Style Guide* section of this document for specific formatting instructions.
- Make sure you have a maximum 200-word abstract prepared and all information required for the title page discussed in the *JOM Style Guide* section of this document.
- Have your figures ready to submit as separate files in a high-resolution format. (You also may embed your figures in the manuscript file in addition to providing separate files.)

## **AFTER ACCEPTANCE**

### **Author Query Application**

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 costs. Once you have completed this, your article will be processed and you will receive the proofs.

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Authors will be asked to transfer copyright of the article to TMS (or grant TMS exclusive publication and dissemination rights). This will ensure the widest possible protection and dissemination of information under copyright laws. Open Choice articles (see below) do not require transfer of copyright as the copyright remains with the author.

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Online publication of color illustrations is free of charge. For color in the print version, authors will be expected to pay a fee.

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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 *JOM* Editor. To ensure timely publication of the journal, it is important that your proof feedback be returned within 48 hours of receipt.

After online publication, further changes can only be made in the form of a Correction, 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 complete issue, the article also can be cited by issue and page numbers.

# JOM

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