Scope and Editorial Policy

Chemistry of Materials publishes original contributions on the forefront of research in materials-related chemistry. Studies involving chemistry as a key component, which relate to the design, synthesis, characterization, processing, understanding and application of functional, or potentially functional, materials will be considered. Among the areas of interest are inorganic and organic solid-state chemistry, composite materials, nanomaterials, biomaterials, thin films and polymers, especially when focused on the creation or innovative development of materials with novel and potentially useful optical, electrical, magnetic, catalytic, or mechanical properties. We emphasize, however, that manuscripts on these topics must focus on fundamental aspects of the chemistry of materials and describe a significant advance compared with prior published work. Before solicitation of external reviews, submitted manuscripts are typically examined by at least two Editors to determine their appropriateness for the journal and whether there is sufficient evidence for a significant advance that is likely to be of broad interest in materials chemistry.

Prior Publication Policy

Chemistry of Materials authors are allowed to deposit an initial draft of their manuscript in ChemRxiv, bioRxiv, and arXiv, prior to submission. Please note that the use of any other preprint server must be indicated in the cover letter and include a link to the preprint, and as appropriate, state how the manuscript has been adjusted/updated between deposition and submission. All other prior/redundant publication is forbidden. Reprinting of text and data from student theses is permitted. For the ACS Publications policy on theses and dissertations, click here: http://pubs.acs.org/pb-assets/acspubs/Migrated/dissertation.pdf

Upon publication in Chemistry of Materials, authors are advised to add a link from the preprint to the published paper via the Digital Object Identifier (DOI). For further details, see Author Guidelines or contact the Editorial Office.

Types of Manuscripts

Chemistry of Materials publishes six types of manuscripts: Communications, Articles, Reviews, Comments, Perspectives, and Methods/Protocols.

Communications are brief, preliminary reports of unusual urgency, significance, and interest to the materials chemistry community. Specific requirements for submittal of Communications are described in a separate section below.

Full-length Articles should describe original, significant, complete studies and are typically less
than 7 journal pages in length (30 pages of double-spaced manuscript, including tables, figures, and schemes - see the **Review of Manuscripts** section). If more space is needed to adequately describe and discuss the findings, justification should be included in the cover letter accompanying the manuscript.

**Reviews** are limited to a maximum of 10 journal pages (approximately 50 pages of double-spaced manuscript), including tables, figures, and references. These should constitute concise, yet complete, surveys of the literature written by experts for non-experts. Their purpose is to acquaint readers of the journal with recent progress in key research areas. They should be written for a more general audience of materials chemists and provide a balanced view of the topic in question. Exclusive (or near exclusive) focus on the author’s research is discouraged. Invited and contributed reviews will be considered for publication and will be reviewed in the same manner as Communications and regular Articles.

**Comments** are technical contributions that provide new information or an alternative perspective regarding a prior publication in the journal. These may include additional information from one or more of the original authors that changes or modifies the conclusions reached in their prior publication, as well as comments, reinterpretations, or corrections that are provided by others. The original authors are given the opportunity to provide an appropriate rebuttal or addendum. The final decision regarding publication of a Comment will rest with the assigned Editor, who may choose to seek the advice of one or more expert reviewers before reaching this decision. The submission of supporting data, figures, etc. that might be useful to the Editor and/or the reviewers in evaluating the case for publication of the Comment is encouraged.

**Perspectives** are to be submitted only by invitation of the Editor-in-Chief. They are personal, yet balanced, overviews of particular research areas by acknowledged experts. More importantly, they should provide *a forward-looking view* of the field, critical knowledge gaps and obstacles to progress, suggestions for advancing the field, and the impact of the field on science, technology, and society. Authors of Perspectives should strive to reach experts and non-experts alike. Perspectives are limited to 10 journal pages. The principal author(s) are requested to include a brief (<75 word) biographical sketch, which will be published with the manuscript.

**Methods/Protocols** are articles describing methods and protocols of broad interest to the materials chemistry community. The goal of this manuscript is the promotion of reproducibility and facile duplication of research by those skilled in the art, and to encourage and promote high standards. These Methods/Protocols manuscripts will start with a short review of the area, followed by detailed descriptions of procedures that include videos and photographs of apparatus (for laboratory research) or in-depth information about computational methods (for modeling of materials, materials genomics, etc.), helpful insights, “insider” advice, and warnings about potential pitfalls and safety concerns. There is no set length, but it is anticipated that each article will comprise 4–10 published pages, and perhaps longer if necessary.

**Submission of Manuscripts**
Manuscripts must be submitted electronically via the journal web site at [http://pubs.acs.org/CM](http://pubs.acs.org/CM).
Authors must provide their telephone, fax, and e-mail information when submitting manuscripts.

Correspondence concerning accepted papers, proofs, and reprints should be directed to acsproof@acs.org or Journal Publications, American Chemical Society, 2540 Olentangy River Road, P.O. Box 3330, Columbus, OH 43210.

There are no page charges for Chemistry of Materials.

Submission of a manuscript to Chemistry of Materials implies that the work reported therein has not been published, or is under consideration for publication, elsewhere in any medium of a public nature, including electronic journals and computer databases. Duplication of content from previously published work, by the author or others, in terms of data, figures, or significant portions of text, must be avoided or specifically acknowledged through appropriate citations. Discovery of plagiarism in any form may result in a ban on future publication in the journal as well as other penalties. Moreover, authors are obliged to cite and to acknowledge specifically in the manuscript and cover letter all relevant published or submitted papers, including those of the authors, which are closely related to the submitted paper. Related manuscripts under review or in press must be included as part of the submission packet. Authors are expected to adhere to the “Ethical Guidelines to Publication of Chemical Research”, which are available through the Chemistry of Materials homepage or directly via http://pubs.acs.org/page/policy/ethics/index.html.

Conflict of Interest Disclosure
A statement describing any financial conflicts of interest or lack thereof is published with each manuscript. During the submission process, the corresponding author must provide this statement on behalf of all authors of the manuscript. The statement should describe all potential sources of bias, including affiliations, funding sources, and financial or management relationships, that may constitute conflicts of interest (please see the ACS Ethical Guidelines). The statement will be published in the final article. If no conflict of interest is declared, the following statement will be published in the article: “The authors declare no competing financial interest.”

General Considerations
Authors are expected to provide a cover letter that includes a summary of the main findings and a statement explaining why they represent a significant advance in the particular area of materials chemistry involved. This facilitates the editorial prescreening of the manuscript and determination of suitability for external review. Submissions that clearly do not meet the criterion of forefront research in the view of the editors will be returned to authors without external review. In general, authors should present their findings and conclusions concisely, and with clarity. Articles and Short Reviews that significantly exceed the respective length guidelines (7 journal pages for Articles and 10 journal pages for Short Reviews) should be accompanied by an adequate justification in the cover letter for the additional length.

The following order of presentation is preferred in an Article: Title page, Abstract, Introduction,

1 “Materials chemistry comprises the application of chemistry to the design, synthesis, characterization, processing, understanding and utilization of materials, particularly those with useful, or potentially useful, physical properties” (Pure Appl. Chem. 2009, 81 (9), 1707-1717).
Experimental Section, Results, Discussion (these last two sections may be separate or combined, depending on the clarity and conciseness of presentation), Conclusions, Acknowledgement (if needed), Supporting Information description (if needed), References and Table of Contents/Abstract graphic. Schemes, tables and figures with their captions should be embedded or placed near their reference in the text. The title should be a brief, accurate description of the contents of the paper. Acronyms and abbreviations are not permitted in manuscript titles, unless they are broadly familiar to readers in all disciplines of chemistry. The name of the author(s) to whom inquiries about the published paper (i.e., the ‘Corresponding Author(s)’) may be addressed must be marked with an asterisk. All papers (except Communications) must be accompanied by a brief (less than 200 words), informative abstract, which should be self-contained for direct use in Chemical Abstracts or other secondary services. In the case of Articles, the Introduction should begin with a brief statement outlining the scientific motivation for the research and should accurately present the study in the context of previous and current work in the field. The Experimental Section should provide a clear, unambiguous description of materials, methods, and equipment in sufficient detail to permit reproduction of the results elsewhere, while avoiding unnecessary repetition or presentation of superfluous data. In the Results and Discussion section(s) the results should be presented and discussed in the context of existing knowledge in the field in as clear and concise a fashion as possible. The Conclusions section should provide a brief summary of the main conclusions of the work. A Conclusions section that simply restates the Abstract verbatim, in whole or in part, is not acceptable. Figures, Tables, and Schemes should be added as needed to illustrate and present the results or clarify the discussion. Routine data that are not essential to either identification or discussion of the important properties of materials should be avoided. In some cases, it may be necessary to present such data as appendices to be deposited on the ACS website (see section on Supporting Information).

All references should include the title of the paper being cited and the full page range, as shown:


Special Instructions for Communications (~4,500 words)

Communications should be restricted to reports of unusual urgency, timeliness, significance, and broad interest. Please include, in your cover letter, a short explanation stating how the manuscript meets the criteria of urgency and significance, to justify the brevity of this format. Please be sure to include detailed experimental procedures in your Supporting Information to enable future readers to easily reproduce your results. Authors are encouraged to use the Communication template for preparing manuscripts, but it is not required.

Supporting Information

Occasionally manuscripts are submitted with extensive tabular, graphical, or spectral data that are of primary interest only to those readers who may need more complete data for comparison purposes. Such data may also be needed by reviewers, particularly in the case of Communications and crystal structure studies, to properly evaluate the significance of the work or the accuracy of the conclusions reached. This material can be designated as “Supporting Information”. It will be available to interested readers free of charge on the Web. Authors are urged to make use of this resource in the interest of shorter articles, which not only save journal space but also result in
clearer and more readable presentations. Supporting Information must be submitted at the same time as the manuscript and uploaded separately to the ACS Paragon Plus Environment. Material deposited as Supporting Information is considered to be part of the publication and should not be submitted for republication as part of a future paper. When a paper contains Supporting Information, a statement of availability is required at the end of the manuscript.

Further information regarding the preparation and uploading of Supporting Information can be found in the Preparation of Manuscripts document available on this website.

**Review of Manuscripts**

Upon receipt, all papers will be reviewed by the Editor-in-Chief and typically one other Editor, to determine whether they are appropriate for the journal in terms of subject matter, overall quality, and significance in the context of past and current forefront materials chemistry research. Papers that do not meet the description of a “significant advance in approach and/or fundamental understanding that is likely to be of broad interest to the materials chemistry community” will be returned to the author without further evaluation. After assignment to a subject Editor, further screening is carried out to determine if the paper meets our requirements for publication. Generally, after both levels of screening are completed, less than one-half of the papers received are sent to external reviewers for a detailed technical evaluation.

Authors are requested to recommend five reviewers. It should be recognized that the reviewers act only in an advisory capacity and that the final decision concerning a manuscript is the responsibility of the Editors. In addition to the following criteria, reviewers will be asked to determine whether the information reported in the manuscript represents a significant advance in the field of materials chemistry. Other criteria include relevance of the work to the fields of both chemistry and materials science; its overall quality and completeness; its originality and significance; the quality, clarity, and conciseness of the manuscript; the quality and appropriate use of figures, tables, etc.; whether the conclusions reached are adequately supported by the data; the use of satisfactory nomenclature; whether the potential hazards have been adequately described; and whether the references given are appropriate and adequate. In the case of Communications, the completeness of the work will not be among the criteria, but the additional requirement of unusual urgency, significance, and interest to the materials chemistry community will be applied in addition to the limitation on length. All manuscripts will be handled expeditiously to ensure rapid consideration for publication; however, Communications will be given special consideration in both the reviewing and publication processes to minimize the time from receipt to publication.

In addition to applying these criteria, reviewers will be asked to determine whether or not the paper constitutes a significant advancement in the state of understanding, or development, of the particular area of materials chemistry concerned. To assist the reviewers and Editors in determining which papers meet this criterion, **authors are requested to describe in the paper, as well as in the cover letter accompanying the submitted paper, how these findings constitute a significant advance in the particular area of materials chemistry involved.** In general, papers that are judged by the reviewers and/or the Editors to be of high quality but of a more routine or incremental nature will be referred elsewhere for publication.
Revised Manuscripts
A manuscript sent back to an author for revision must be returned to the Editor within 1-2 months, depending upon the nature of revisions; otherwise, it will be considered withdrawn. In addition to a ‘clean’ copy, a copy in which all changes are highlighted should be uploaded under “Other Files for Editors Only”. The revised manuscript must be accompanied by a letter from the author, which contains a detailed point-by-point account of how the author has responded to the reviewers’ comments. In the event of extensive revisions, revised manuscripts may be sent back to the original reviewers, who will be asked to comment on the revisions. If only minor revisions are involved, the Editors examine the revised manuscript in light of the recommendations of the reviewers without seeking further opinions.

Additions and Corrections
Additions and Corrections may be used to address important issues or correct errors and omissions of consequence that arise after publication of an article. Additions and Corrections may be requested by the author(s) or initiated by the Editor after discussions with the corresponding author. Readers who detect errors of consequence in the work of others should contact the corresponding author of that work. All Additions and Corrections are subject to approval by the Editor, and minor corrections and additions will not be published. Additions and Corrections from authors should be submitted via the ACS Paragon Plus environment by the corresponding author for publication in the “Addition/Correction” section of the Journal. The corresponding author should obtain approval from all of the article coauthors prior to submitting an Addition and Correction, or provide evidence that such approval has been solicited. The Addition and Correction should include the original article title and author list, citation including DOI, and details of the correction. For proper formatting, see examples in a current issue of the Journal.

Retractions
Articles may be retracted for scientific or ethical reasons. Articles that contain seriously flawed or erroneous data such that their findings and conclusions cannot be relied upon may be retracted in order to correct the scientific record. Retractions may be requested by the article author(s) or by the journal Editor(s), but are ultimately published at the discretion of the Editor. When an article is retracted, a notice of Retraction will be published containing information about the original article title, author list, and the reason for the Retraction. Retracted articles will be accompanied by the related Retraction notice and will be marked as “Retracted”. The originally published article will remain on the web except in extraordinary circumstances (e.g. where deemed legally necessary, or if the availability of the published content poses public health risks). The American Chemical Society follows guidance from the Committee on Publication Ethics (COPE) when considering retractions; for more information see: http://publicationethics.org/.

Expressions of Concern
The American Chemical Society (ACS) follows guidance from the Committee on Publication Ethics (COPE) when considering expressions of concern; for more information see: http://publicationethics.org/. In accordance with COPE guidelines, expressions of concern may be issued if:

- there is inconclusive evidence of research or publication misconduct by the authors;
• there is evidence that the findings are unreliable but the authors’ institution will not investigate the case;
• an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive;
• an investigation is underway but a judgment will not be available for a considerable time.

Expressions of concern are published at the discretion of the Editor-in-Chief. Upon completion of any related investigation, and when a final determination is made about the outcome of the article, the expression of concern may be replaced with a retraction notice or correction.

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