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## Scope of the Journal

*Langmuir* is the leading journal focusing on the science and application of systems and materials in which the interface dominates structure and function. Submissions on original advances in the understanding and particularly the rational design of interfaces, including novel concepts and emerging areas, are welcome. The following topics are examples within the scope of *Langmuir*.

- Surfaces and interfaces (synthetic and natural): adsorption, wetting, adhesion, forces and dynamics, surfactants, emulsions, foams, gels, and ultrathin films.
- Surface chemistry and forces of interface-rich systems and nanoparticles/colloids.
- Interface-driven stability: response, organization and self-organization of (nano)particle suspensions and structures, rheology and mechanics and non-equilibrium thermodynamics.
- Charge regulation and transfer at interfaces, electrochemistry, photocatalysis.
- Interfacial materials (synthesis/characterization) and processes for energy storage and transduction, and catalysis.
- Surface properties and applications of 1D, 2D and layered Van der Waals materials
- Single molecule and particle dynamics under confinement.
- Bio-interfaces: synthetic surfaces in vivo and in vitro, synthetic or membrane surface dynamics or biofouling, anti-microbial membrane interactions, and hydrophobic/hydrophilic interfaces.
- Transformed biointerfaces, such as nanocellulose and adaptive nanoparticles for drug delivery and diagnostics.
- Advanced surface and interface characterization techniques.
- Advanced microscopy.
- Theory & computations of interfacial properties.

This information is also [available on the journal website](#).

## Manuscript Types

*Langmuir* publishes the following types of manuscripts: Research Articles, Invited Feature Articles, Invited Historical Articles, Invited Instructional Articles, Additions and Corrections, and Comments. Letters and Communications are not published, but short, complete articles are appropriate. All manuscripts should be as concise as thoroughness permits.

**1. Research Articles** are original scientific accounts that address contemporary problems and questions relevant to interface science. They should clearly state well-defined claims or hypotheses and support these with appropriate data. Detailed information for preparing Articles is provided below. Although there are no firm limits on the lengths of Articles, authors should strive to maintain the length, including references, to 10 journal pages. A journal page contains approximately 1000 words, with figures, schemes, and tables counting as 250 words. Reviewers will be asked to comment on the length of articles, the quality of the figures, and the appropriateness of the references. During the review process the editor may request that an article be shortened or the number of figures reduced. The length of all other categories of manuscripts will be at the discretion of the editor.

**2. Perspectives** are brief reports (3-5 journal pages) summarizing an emerging research area or finding of particular interest in which the interface dominates structure and function. Perspectives can also elaborate on important unanswered questions and approaches being taken to address them. These reports are not intended to be comprehensive looks at the field, but rather to place a particular research finding or emerging area into broader context.

Perspectives are typically ~4000 words (~4 figures/tables) and must contain a brief abstract of ~120 words and ~20 references. Perspectives include a graphical Table of Contents entry. The articles should also include a brief biography for each author. Portrait photograph(s) are optional but appreciated. Biographies should contain no more than four to five sentences describing the Author's education, previous and current positions, and scientific interests. These articles are written exclusively at the invitation of the Editor and an expert review will be provided.

**3. Invited Feature Articles.** Generally, experts in a field who have made important contributions to a specific topic in recent years will be invited by an editor to contribute an Invited Feature Article to *Langmuir*. Individuals may however send a proposal (one-page maximum) for a Feature Article to the Editor-in-Chief ([eic@langmuir.acs.org](mailto:eic@langmuir.acs.org)) for consideration. The proposal should contain a title, a short description (~400-word) of the topic, and a list of 5-10 lead references that might form the foundation of the final manuscript.

Invited Feature Articles are intended to be a general overview of the authors' own work or a critical survey of recent work in the subfield of interface science, written to capture interest and inform specialists in other subfields as well. A Feature Article consists of either of the following: (a) clear and concise summary of the most recent activity of the author and their research group with the broad readership of *Langmuir* in mind; or (b) a concise review of a rapidly changing or emerging area. The latter type is intended to be suitable for early-career authors, and should give a snapshot of key contributions to the well-defined topic that is the subject of the Feature Article. These articles should contain the following: (1) an introduction that familiarizes readers with the presented work and outlines the important questions to which answers are being sought; (2) a critical evaluation of interesting, new, and recent contributions by the author, or others to the field; (3) a summary that mentions possible future directions and some speculation about the most important of these.

The maximum limit on these articles are 12 journal pages, ~ 120 references, and 15 graphical elements (including figures, charts, tables, etc.). The Abstract, placed immediately after the listing of authors, should briefly summarize in less than 300 words the results and significance of the review.

**4. Invited Historical and Instructional Articles.** Generally, appropriate authors will be invited by an editor to contribute an Invited Historical or Instructional Article to *Langmuir*. Individuals may, however, send a proposal (two-page maximum) for such an article to the Editor-in Chief for consideration. Upon invitation, the editor will provide detailed instructions for preparing the invited article.

- **Invited Historical Articles** provide a historical perspective on the development of an interesting aspect of interfacial science. They are intended to provide the community with a balanced view of seminal advances in the field, including the chronology of those advances. A section speculating on future trajectories may be included.
- **Invited Instructional Articles** are practical guides on performing specific types of experimental procedures relevant to interface science. Generally these will be relatively new

types of experimental procedures that have not been widely adopted but that could be broadly useful to the community served by *Langmuir*. A successful Instructional Article will lead the uninitiated reader (perhaps in the initial stages of graduate studies) through the steps necessary to obtain reliable data from an experimental procedure without focusing on one model or type of equipment.

The maximum limit on these articles are 12 journal pages, ~ 120 references, and 15 graphical elements (including figures, charts, tables, etc.). The Abstract, placed immediately after the listing of authors, should briefly summarize in less than 300 words the results and significance of the review.

**5. Comments** are brief responses to articles published in *Langmuir* and should be no more than two manuscript pages in length. A Comment could be a respectful presentation of an alternative points of view to one that has appeared in a recent issue of *Langmuir*. It could point out perceived errors in approaches, results, or conclusions. The authors of the original Article will be offered the opportunity to submit a response to the Comment, but the thread will be terminated at that point. Both Comments and responses to Comments will be peer-reviewed, and the author(s) of the original Article will be invited to review the Comment and the author of the Comment will be invited to review the response.

## ACS Publishing Center

While this document will provide basic information on how to prepare and submit the manuscript as well as other critical information about publishing, we also encourage authors to visit the [ACS Publishing Center](#) for additional information on everything that is needed to prepare (and review) manuscripts for ACS journals and partner journals, such as

- [Mastering the Art of Scientific Publication](#), which shares editor tips about a variety of topics including making your paper scientifically effective, preparing excellent graphics, and writing cover letters.
- Resources on [how to prepare and submit a manuscript](#) to ACS Paragon Plus, ACS Publications' manuscript submission and peer review environment, including details on selecting the applicable [Journal Publishing Agreement](#).
- [Sharing your research](#) with the public through the ACS Publications open access program.
- [ACS Reviewer Lab](#), a free online course covering best practices for peer review and related ethical considerations.

## Manuscript Preparation

### Submit with Fast Format

All ACS journals and partner journals have simplified their formatting requirements in favor of a streamlined and standardized format for an initial manuscript submission. Read more about the requirements and the benefits these serves authors and reviewers [here](#).

Manuscripts submitted for initial consideration must adhere to these standards:

- Submissions must be complete with clearly identified standard sections used to report original research, free of annotations or highlights, and include all numbered and labeled components.

- Figures, charts, tables, schemes, and equations should be embedded in the text at the point of relevance. Separate graphics can be supplied later at revision, if necessary.
- When required by a journal's structure or length limitations, manuscript templates should be used.
- References can be provided in any style, but they must be complete, including titles. For information about the required components of different reference types, please refer to the [ACS Style Quick Guide](#).
- Supporting Information must be submitted as a separate file(s).

## Document Templates and Format

The templates facilitate the peer review process by allowing authors to place artwork and tables close to the point where they are discussed within the text. Learn more about document templates [here](#).

General information on the preparation of manuscripts may also be found in the [ACS Guide to Scholarly Communication](#).

## Acceptable Software, File Designations, and TeX/LaTeX

See the list of [Acceptable Software](#) and appropriate [File Designations](#) to be sure your file types are compatible with ACS Paragon Plus. Information for manuscripts generated from [TeX/LaTeX](#) is also available.

## Cover Letter

A cover letter must accompany every manuscript submission. During the submission process, you may type it or paste it into the submission system, or you may attach it as a file.

A letter to the Editor-in-Chief should accompany the manuscript and contain the following elements in addition to a general description of the submission:

- A short explanation of why the manuscript is appropriate for *Langmuir*.
- A description of any Supporting Information and/or review-only material.

## Manuscript Text Components

The elements of a *Langmuir* Article are provided below. The order of the sections indicated in this list should be the same as those appearing in the manuscript. Manuscripts may be single or double spaced, or authors may use a special template provided [here](#). The preparation of Invited Feature Articles, Invited Historical and Instructional Articles, Additions and Corrections, and Comments may vary, and authors of these types of articles should consult the previous section and/or the appropriate editor for detailed guidance.

## Title

Titles are of great importance for information retrieval and should be carefully constructed for this purpose. They should be clear, concise, and reflect the emphasis and content of the manuscript. Avoid acronyms and words such as “First”, “Novel”, “Facile”, and “One-Pot”.

## Author List

Bylines should include all those who have made substantial contributions to the work. To facilitate indexing and retrieval and for unique identification of an author, use first names, initials, and surnames (e.g., John R. Smith) or first initials, second names, and last names (e.g., J. Robert Smith). At least one author must be designated with an asterisk to indicate the person to whom readers may send correspondence.

The author who submits the manuscript for publication accepts the responsibility of notifying all co-authors that the manuscript is being submitted. Deletion of an author after the manuscript has been submitted requires a confirming letter to the Editor-in-Chief from the author whose name is being deleted. For more information on the ethical responsibilities of authors, see the [Ethical Guidelines to Publication of Chemical Research](#).

## Abstract

The abstract should state concisely the scientific problem(s) or hypotheses addressed in the Article, the approach taken to resolve it, and the key results.

## Text

The text of Articles should be subdivided into the following sections: Introduction, Experimental Section, Results and Discussion, and Conclusions. These sections should not be numbered in the manuscript. The Introduction should explicitly state the scientific problem(s) or hypotheses described in the article, and it should explain why this problem is of fundamental importance to the field of interface science. The Introduction should also give a concise and balanced account of the scientific literature that frames the content of the Article. The Experimental Section should contain a complete description only of the procedures and materials that are essential to understanding the Results and Discussion. Authors must emphasize any unexpected, new, and/or significant hazards or risks associated with the reported work. This information should be in the experimental details section of the article. Additional experimental details and lengthy discussions of procedures should be placed in the Supporting Information. The results and discussion should be combined within a single section.

## References and Footnotes

**References and explanatory notes should be grouped after the main text.** They should be numbered consecutively in the order in which they are first mentioned in the text. References must be individually numbered. Unpublished references must be provided as Information for Review Only during the submission process. Self-citations are limited to 25% of the total, though exceptions can be made upon consultation with the editor. Editors reserve the right to limit the total number of citations and the number of self-citations.

References upon initial submission should adhere to the guidelines for Review Ready Submission (page 4 of this document). For publication, references should adhere to the normal ACS journal format and should include the following components: author names, article titles, [CAS Source Index](#) (CASSI) journal abbreviations, proper punctuation and arrangement, and full page ranges. Examples are provided below.

## Reference Format:

1. Boisselier, E.; Astruc, D. Gold Nanoparticles in Nanomedicine: Preparations, Imaging, Diagnostics, Therapies and Toxicity. *Chem. Soc. Rev.* **2009**, *38*, 1759–1782.
2. Ghosh, P.; Han, G.; De, M.; Kim, C. H.; Rotello, V. M. Gold Nanoparticles in Delivery Applications. *Adv. Drug Delivery Rev.* **2008**, *60*, 1307–1315.
3. Sperling, R. A.; Rivera, P.; Gil, Zhang, F.; Zanella, M.; Parak, W. J. Biological Applications of Gold Nanoparticles. *Chem. Soc. Rev.* **2008**, *37*, 1896–1908.
4. Giljohann, D. A.; Seferos, D. S.; Daniel, W. L.; Massich, M. D.; Patel, P. C.; Mirkin, C. A. Gold Nanoparticles for Biology and Medicine. *Angew. Chem., Int. Ed.* **2010**, *49*, 3280–3294.
5. Thomas, M.; Klibanov, A. M. Enhancing Polyethylenimine's Delivery of Plasmid DNA into Mammalian Cells. *Proc. Natl. Acad. Sci. U.S.A.* **2012**, *100*, 9138–9143.
6. Rosi, N. L.; Giljohann, D. A.; Thaxton, C. S.; Lytton-Jean, A. K. R.; Han, M. S.; Mirkin, C. A. Oligonucleotide-Modified Gold Nanoparticles for Intracellular Gene Regulation. *Science* **2006**, *312*, 1027–1030.

Authors are responsible for the accuracy of the references. Because subscribers to the Web editions of ACS journals are now able to link directly to the “CAS” tag following each reference to retrieve the corresponding abstract at Chemical Abstracts Service, the accuracy of references is critical. Further guidance on references is available in the [References chapter](#) of [The ACS Style Guide](#).

## Nomenclature

Nomenclature should conform to current American usage. If possible, authors should use systematic names similar to those in Chemical Abstracts Service and the International Union of Pure and Applied Chemistry. Chemical Abstracts (CA) nomenclature rules are described in Appendix IV of the Chemical Abstracts Index Guide. For CA nomenclature advice, consult the Manager of Nomenclature Services, Chemical Abstracts Service, P.O. Box 3012, Columbus, OH 43210-0012. A name generation service is available for a fee through CAS Client Services, 2540 Olentangy River Road, P.O. Box 3343, Columbus, OH 43210-0334, telephone: (614) 447-3870, fax: (614) 447-3747, e-mail: [answers@cas.org](mailto:answers@cas.org).

## Graphics

Graphics guidelines are available below.

## Supporting Information for Publication

Authors are strongly encouraged to use Supporting Information to submit tables, graphs, spectra, mathematical derivations, experimental details, expanded discussion of peripheral points, and other information that is essential for expert reviewers to judge the work and for the work to be reproduced. Detailed information of this type may hinder the effective presentation of the main scientific points.

Note, however, that a general reader should be convinced that the data presented in the main text of the Article fully supports the conclusions. The Supporting Information will be included in the Web edition of the journal and is available free of charge. Material deposited as Supporting Information is considered to be part of the publication and should not be submitted for re-publication as part of a future manuscript.



Figures, tables, and other display items in the Supporting Information should be numbered in consecutive order (Figure S1, Figure S2... or Table S1, Table S2...). These identifiers may be referred to in the main text (e.g., "see Figure S1"). The pages in the Supporting Information should also be numbered consecutively (S1, S2, etc.).

Supporting Information must be submitted at the same time as the manuscript and uploaded separately to the ACS Paragon Plus Environment. A [list of acceptable file types](#) is available on the Web. All Supporting Information files of the same type should be prepared as a single file (rather than submitting a series of files containing individual images or structures). For example, all Supporting Information available as PDF files should be contained in a single PDF file. A cover page that provides the Article title, author names, and corresponding author's contact information should precede the Supporting Information. A table of contents should also be included on the cover page.

If the manuscript is accompanied by any supporting information files for publication, a brief description of **each** file is required. The Supporting Information paragraph and descriptions should be placed at the end of the manuscript before the list of references.

## Supporting Information

This information is provided to the reviewers during the peer-review process (for Review Only) and is available to readers of the published work (for Publication). Supporting Information must be submitted at the same time as the manuscript. See the list of [Acceptable Software by File Designation](#) and confirm that your Supporting Information is [viewable](#).

If the manuscript is accompanied by any supporting information files for publication, these files will be made available free of charge to readers. A brief, nonsentence description of the actual contents of each file, including the file type extension, is required. This description should be labeled Supporting Information and should appear before the Acknowledgement and Reference sections. Examples of sufficient and insufficient descriptions are as follows:

Examples of sufficient descriptions: "Supporting Information:  $^1\text{H}$  NMR spectra for all compounds (PDF)" or "Additional experimental details, materials, and methods, including photographs of experimental setup (DOC)".

Examples of insufficient descriptions: "Supporting Information: Figures S1-S3" or "Additional figures as mentioned in the text".

When including supporting information for review only, include copies of references that are unpublished or in-press. These files are available only to editors and reviewers.

## Research Data Policy

All ACS journals strongly encourage authors to make the research data underlying their articles publicly available at the time of publication.

*Research data* is defined as materials and information used in the experiments that enable the validation of the conclusions drawn in the article, including primary data produced by the authors for the study being reported, secondary data reused or analyzed by the authors for the study, and any other materials necessary to reproduce or replicate the results.

The [ACS Research Data Policy](#) provides additional information on Data Availability Statements, Data Citation, and Data Repositories.

## Data Requirements

Resources available on the [ACS Publishing Center](#) include the [ACS Math Style Sheet](#) and [NMR Guidelines](#).

## Language and Editing Services

A well-written paper helps share your results most clearly. ACS Publications' [English Editing Service](#) is designed to help scientists communicate their research effectively. Our subject-matter expert editors will edit your manuscript for grammar, spelling, and other language errors so your ideas are presented at their best.

## Preparing Graphics

The quality of illustrations in ACS journals and partner journals depends on the quality of the original files provided by the authors. Figures are not modified or enhanced by journal production staff. All graphics must be prepared and submitted in digital format.

Graphics should be inserted into the main body whenever possible. Please see Appendix 2 for additional information.

Any graphic (figure chart, scheme, or equation) that has appeared in an earlier publication should include a [credit line](#) citing the original source. Authors are responsible for [obtaining written permission](#) to re-use this material.

## Figure and Illustration Services

The impact of your research is not limited to what you can express with words. Tables and figures such as graphs, photographs, illustrations, diagrams, and other visuals can play a significant role in effectively communicating your findings. Our [Figures service](#) generates publication-ready figures that conform to your chosen journal's specifications. This includes changes to file type, resolution, color space, font, scale, line weights, and layout (to improve readability and professional appearance).

## Preparing for Submission

Manuscripts, graphics, supporting information, and required forms, as well as manuscript revisions, must all be submitted in digital format through [ACS Paragon Plus](#), which requires an ACS ID to log in. Registering for an ACS ID is fast, free, and does not require an ACS membership. Please refer to Appendix 1 for additional information on preparing your submission

## Prior Publication Policy

*Langmuir* authors may deposit an initial draft of their manuscript in a preprint service such as [ChemRxiv](#), bioRxiv, arXiv, or the applicable repository for their discipline before the manuscript is accepted for publication in *Langmuir*. Authors may revise the preprint version of their manuscript



up until a final acceptance decision has been issued. The Direct Journal Transfer feature of ChemRxiv is now available and can be used to submit posted preprints to *Langmuir* for editorial consideration and peer review.

Please note any use of a preprint server 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. Upon publication in *Langmuir*, authors should add a link from the preprint to the published article via the Digital Object Identifier (DOI). Some preprint servers, including ChemRxiv and bioRxiv, add this link for authors automatically after publication. For further

For the ACS Publications policy on theses and dissertations, [click here](#).

## Editorial Policies

### Peer Review

Manuscripts submitted to *Langmuir* undergo anonymous peer review. The reviewers are asked to comment on the manuscript's significance, originality, scope, technical quality, and relevance to interface science. The reviewers are also asked whether the claims made in the manuscript are fully supported with appropriate and reproducible data. The reviewers act only in an advisory capacity, however, and the final decision of whether to accept or reject a manuscript lies with the editor.

### 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. They are not intended to report subsequent scientific progress or refinements, which often in part consist of reinterpreting previously published data. Additions and Corrections may be requested by the author(s) or initiated by the Editor after discussions with the corresponding author. All Additions and Corrections are subject to approval by the Editor, and minor corrections and additions will not be published. Readers who detect errors of consequence in the work of others should contact the corresponding author of that work.

Additions and Corrections must be submitted as new manuscripts via ACS Paragon Plus 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. For proper formatting, see examples in a current issue of the Journal.

Addition/Corrections should consist of a submitted manuscript document file that contains the following information:

- The document title lines should include title, authors, affiliations and citation (including the DOI) of the original published manuscript.
- The submitted addition/correction manuscript file should contain text that explains exactly what is being corrected and why. A statement should also be included indicating whether the conclusions of the work have been affected, and if so in what way.
- All authors are deemed to be equally responsible for any errors. A statement of regret for the mistake may be included. Statements should not be included that attempt to assign

responsibility for any errors or mistakes to any particular authors or persons.

- If graphics are being corrected, the manuscript file should contain the graphics, along with captions that clearly describe the contents of the figures. The figure(s) should be labeled with numbers consistent with the figure number(s) in the original paper that is (are) being corrected.

## Providing Potential Reviewer Names

Please suggest six reviewers. Authors are encouraged to avoid suggesting reviewers from the authors' institutions. Do not suggest reviewers who may have a [real or perceived conflict of interest](#). Whenever possible, suggest academic email addresses rather than personal email addresses.

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It is the responsibility of the Corresponding Author to ensure that all authors listed on the manuscript agree with the changes made on the proofs. Galley proofs should be returned within 48 hours in order to ensure timely publication of the manuscript.

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Accepted manuscripts will be published on the ACS Publications Web site as soon as page proofs are corrected and all author concerns are resolved. The first date on which the document is published on the Web is considered the publication date.

Publication of manuscripts on the Web may occur weeks in advance of the cover date of the issue of publication. Authors should take this into account when planning their patent and intellectual property activities related to a document and should ensure that all patent information is available

at the time of first publication, whether ASAP or issue publication.

All articles published ahead of print receive a unique Digital Object Identifier (DOI) number, which is used to cite the manuscript before and after the paper appears in an issue. Additionally, any supplemental information submitted along with the manuscript will automatically be assigned a DOI and hosted on Figshare to promote open data discoverability and use of your research outputs.

## **ASAP Publication**

Manuscripts will be published on the “ASAP Articles” page on the web as soon as page proofs are corrected and all author concerns are resolved. ASAP publication usually occurs within a few working days of receipt of page proof corrections, which can be several weeks in advance of the cover date of the issue.

## **Post-Publication Policies**

The American Chemical Society follows guidance from the [Committee on Publication Ethics](#) (COPE) when considering any ethical concerns regarding a published article, Retractions, and Expressions of Concern.

## **Additions and Corrections**

Additions and Corrections may be requested by the author(s) or initiated by the Editor to address important issues or correct errors and omissions of consequence that arise after publication of an article. All Additions and Corrections are subject to approval by the Editor, and should bring new and directly relevant information and corrections that fix scientific facts. Minor corrections and additions will not be published. Readers who detect errors of consequence in the work of others should contact the corresponding author of that work.

Additions and Corrections must be submitted as new manuscripts via ACS Paragon Plus by the Corresponding Author for publication in the “Addition/Correction” section of the Journal. The corresponding author should obtain approval from all coauthors prior to submitting or provide evidence that such approval has been solicited. The manuscript should include the original article title and author list, citation including DOI, and details of the correction.

## **Retractions**

Articles may be retracted for scientific or ethical reasons and may be requested by the article author(s) or by the journal Editor(s), but are ultimately published at the discretion of the Editor. 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. When an article is retracted, a notice of Retraction will be published containing information about the reason for the Retraction. The originally published article will remain online except in extraordinary circumstances (e.g. where deemed legally necessary, or if the availability of the published content poses public health risks).

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Expressions of Concern may be issued at the discretion of the Editor 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;
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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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## Appendix 1: PREPARING FOR SUBMISSION

We've developed ACS' publishing and editorial policies in consultation with the research communities that we serve, including authors and librarians. Browse our policies below to learn more.

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ACS editors have provided [Ethical Guidelines](#) for persons engaged in the publication of chemical research—specifically, for editors, authors, and reviewers. Each journal also has a specific [policy](#)

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Authors must emphasize any unexpected, new, and/or significant hazards or risks associated with the reported work. This information should be in the Experimental Section of a full article and included in the main text of a letter. Statement examples can be found in the [Safety Statement Style Sheet](#) and additional information on communicating safety information from the *ACS Guide to Scholarly Communication* [is freely available here](#).

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A statement describing any financial conflicts of interest or lack thereof is published in each ACS journal and partner journal article.

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## Appendix 2: Preparing Graphics

### Resolution

Digital graphics pasted into manuscripts should have the following minimum resolutions:

- Black and white line art, 1200 dpi
- Grayscale art, 600 dpi
- Color art, 300 dpi

### Size

Graphics must fit a one- or two-column format. Single-column graphics can be sized up to 240 points wide (3.33 in.) and double-column graphics must be sized between 300 and 504 points (4.167 in. and 7 in.). The maximum depth for all graphics is 660 points (9.167 in.) including the caption (allow 12 pts. For each line of caption text). Lettering should be no smaller than 4.5 points in the final published format. The text should be legible when the graphic is viewed full-size. Helvetica or Arial fonts work well for lettering. Lines should be no thinner than 0.5 point.

### Color

Color may be used to enhance the clarity of complex structures, figures, spectra, and schemes, etc., and color reproduction of graphics is provided at no additional cost to the author. Graphics intended to appear in black and white or grayscale should not be submitted in color.

### Type of Graphics

#### Table of Contents (TOC)/Abstract Graphic

Consult the Guidelines for [Table of Contents/Abstract Graphics](#) for specifications.

### Figures

A caption giving the figure number and a brief description must be included below each figure. The caption should be understandable without reference to the text. It is preferable to place any key to symbols used in the artwork itself, not in the caption. Ensure that any symbols and abbreviations used in the text agree with those in the artwork.

### Charts

Charts (groups of structures that do not show reactions) may have a brief caption describing their contents.

## Tables

Each table must have a brief (one phrase or sentence) title that describes the contents. The title should be understandable without reference to the text. Details should be put in footnotes, not in the title. Tables should be used when the data cannot be presented clearly in the narrative, when many numbers must be presented, or when more meaningful inter-relationships can be conveyed by the tabular format. Tables should supplement, not duplicate, information presented in the text and figures. Tables should be simple and concise.

## Schemes

Each scheme (sequences of reactions) may have a brief caption describing its contents.

## Chemical Structures

Chemical structures should be produced with the use of a drawing program such as ChemDraw.

## Cover Art

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Cover image submissions should be scientifically and visually exciting. Colorful images without text or structures are preferred. The cover image should not resemble a graphical abstract or data figure, but rather should be an artistic and scientifically accurate representation of the manuscript. For examples of cover art designs, please [refer to recent issues](#).

Image files should be submitted as TIF, JPG, PNG or EPS files with a resolution of at least 300 dpi for pixel-based images. Images should be 8.19 in × 10.00 in. (or 20.80 cm × 25.40 cm). Please note that the journal title will cover the top 2.5 in. (6.35 cm) of the image. Authors should submit the cover image, along with a short, clear legend (less than 50 words) explaining the image, as supplementary files to ACS Paragon Plus with their revised manuscript.

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