Information for Authors

(Revised January 2010)

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SCOPE

ACS Nano is an international forum for the rapid publication of peer-reviewed research that embraces the interfaces between chemistry, physics, materials science, biology, and engineering. The mission of the journal is to facilitate communication among scientists from these fields that will translate into new research opportunities and discoveries. *ACS Nano* includes definitive and comprehensive articles on the following topics:

- Synthesis, assembly, characterization, dynamics, measurement, theory, and simulation of
  - nanostructures
  - nanomaterials and nanoassemblies
  - nanodevices
  - self-assembled structures
- Nanobiotechnology, nanomedicine, and nanobiophysics
- Single-molecule methods and measurements
- Toxicity of nanomaterials
- Nanofabrication and novel lithographic methods
- Methods and tools for nanoscience and nanotechnology
- Self-assembly and directed assembly

It is understood that submitted work is based upon original results and has not been published previously.

In addition, invited perspectives and commentaries written by leading researchers in the field and conversations with founders, thought leaders, and public officials provide distinctive views about the future of nanoscience and nanotechnology.

TYPES OF CONTENT

Articles

Concise, yet comprehensive reports of original research presenting an advance of immediate, broad, and lasting impact. Articles are not intended to be follow-up papers, unless they contain new and extensive information that will advance the understanding of the field. Articles contain an abstract of ~250 words, providing a succinct, informative summation of the most important results and conclusions; no references may be cited in the abstract, and abbreviations and acronyms should not be introduced unless essential. An unheaded introduction of ≤ 1000 words should expand on the background of the work, with relevant references but not a complete survey of the literature. The introduction should be followed by Results and Discussion; a detailed Methods section should be presented at the end of the text. Typically, Articles include several graphics (color images are encouraged) and 30 or more references. Supporting Information and Web-Enhanced Objects may be included. Articles include 5–7 keywords and a graphical Table of Contents entry.

Reviews

Topical, brief (~6–10 journal pages), and of general interest to the readership. A good review critically evaluates existing work of multiple groups in a field or across disciplines, provides a logical organization, and makes the material more easily available to those not expert in the area through clear text and figures. Reviews should contain an abstract and appropriate references. The use of graphics to illustrate key concepts is strongly encouraged. Reviews include a graphical Table of Contents entry. Reviews also include ~8–10 keywords and a vocabulary section in which 5–7 terms extracted from the text are defined in one or two sentences.

Perspectives

Brief reports (3–5 journal pages) summarizing a research or finding of particular interest to nanoscientists and nanotechnologists. Perspectives can also elaborate on important unanswered questions and approaches being taken to address them. These reports are not intended to be a comprehensive look at the field, but rather to place a particular research finding into broader context. Perspectives must contain a brief abstract of ~120 words and <20 references. Perspectives include a graphical Table of Contents entry. These papers are written exclusively at the invitation of the Editor.

Conversations

Profiles of people who help advance nanoscience and nanotechnology. These pieces are written by *ACS Nano* science writers. If you know a person who you think should be profiled, please contact the Editor.

Nano Focus

These pieces may focus on meetings, policy, or education. Typically 1–3 journal pages in length, Nano Focus articles alert the readership to interesting developments that may impact the field. Nano Focus pieces must contain a brief abstract of ~120 words and a graphical Table of Contents entry. Nano Focus pieces are written by invitation only. If you have a topic that you think should be covered, please contact the Editor.

Letters to the Editor

ACS Nano will consider Letters to the Editor. Letters to the Editor should be brief (<200 words) and may be edited for conciseness and clarity. Note that Letters to the Editor that comment on research findings previously published in *ACS Nano* will be forwarded to the original author, who may rebut the Letter to the Editor. *ACS Nano* will not accept Letters to the Editor that comment on research published elsewhere.

EDITORIAL POLICY

Presubmission Inquiries

A short presubmission inquiry can be sent by E-mail to the Editor to request feedback on the journal's level of interest in a manuscript; the subject line should indicate that this is a *presubmission* editorial inquiry. This optional process is designed to save authors' time, and decisions about such inquiries are made quickly after submission. Please supply the abstract of the manuscript and a cover letter stating the interest to the broad readership and any additional information that will help the editors determine the appropriateness of the manuscript for the journal. The editors will respond and indicate the journal's level of interest in the manuscript. Manuscripts invited after a presubmission inquiry undergo the same rigorous editorial review, and some may not be sent out for review.

Submissions

Authors are required to submit papers online *via* the ACS Paragon Plus Environment at http://paragonplus.acs.org/login. Complete instructions and an overview of the electronic online (Web) submission process are available through the secure ACS Paragon Plus Web site. Authors must also submit all revisions of manuscripts *via* the ACS Paragon Plus Environment. The web submission site employs state-of-the-art security mechanisms to ensure that all electronically submitted papers are secure. These same security mechanisms are also utilized throughout the peer-review process, permitting access only to editors and reviewers who are assigned to a particular paper.

It is understood that submitted work is based upon original results and has not been published previously. Papers are handled expeditiously, and full advantage is taken of Web technology in the submission and review of papers. *ACS Nano* is pleased to publish papers without page or color charges to authors.

The Peer Review Process

Editors evaluate submitted manuscripts, and only those judged to fall within the scope of the journal and to be of potential interest to *ACS Nano* readers are sent for external evaluation.

Authors are urged to suggest in the cover letter accompanying the submitted manuscript a minimum of six to eight persons competent to review the manuscript. An author may request that a certain person not be used as a reviewer. The request will generally be honored by the Editor, unless the Editor feels this individual's opinion, in conjunction with the opinions of other reviewers, is vital in the evaluation of the particular manuscript.

Reviewers will evaluate the manuscript on the basis of originality, technical quality, clarity of presentation, and importance to the field. The editors evaluate the reviewers' arguments in the context of the scope and aims of the journal and make the final decision on each manuscript. The possible decisions will be:

- accept;
- revise to address the concerns of the reviewers before the editors make a final decision;
- reject but consider a resubmission if significant additional work is completed; or
- decline on the grounds of major technical or interpretational flaws, insufficient advance, or lack of novelty and interest.

Editorial decisions are based on many factors, and reviewers' concerns are taken seriously. In cases when reviewers suggest different decisions, the editors may request additional information from the reviewers, consult other experts, and/or ask the authors to clarify sections in question. Some manuscripts that are declined may be considered upon resubmission if significant additional work is completed.

Reviewers may be asked to review subsequent versions of the manuscript, especially if new data have been added to the paper, to evaluate whether the authors have addressed the scientific concerns. In such cases, blind copies of all reviewers' comments are normally sent to the reviewers. This practice allows the reviewers to understand the expectations of the editors. The editors will expedite any additional rounds of reviews to ensure timely publication.

Any appeals should be addressed to the Editor and should include a concise statement of the specific reason for appeal.

The editors strongly disapprove of any attempts by authors to determine the identity of reviewers or to confront potential reviewers. The editorial policy of this journal is neither to confirm nor to deny any speculation about the identities of our reviewers. The journal will not release the identity of a reviewer to the authors or to other reviewers. Authors whose manuscripts are published in *ACS Nano* will be expected to review manuscripts submitted by other researchers from time to time. Information for Reviewers is published separately online.

Professional Ethics

All parties—editors, reviewers, and authors—are expected to adhere to the standards embodied in the American Chemical Society's Ethical Guidelines to Publication of Chemical Research. Those guidelines are available on the Web submission site (http://paragonplus.acs.org). Authors are reminded of their obligation to obtain the consent of all coauthors before submitting a paper for publication. If any change in authorship is necessary after a paper has been submitted, the corresponding author must mail or fax a signed letter to the Editor confirming that all of the original coauthors have been notified and have agreed to the change.

Publication Date and Patent Dates

Manuscripts accepted for publication in ACS journals will be published on the Web as soon as they are ready for publication, that is, when galley proofs are corrected and all author concerns are resolved. Authors should take this policy into account when planning their intellectual-property and patent activities related to a manuscript and should ensure that all patent information is available at the time they finalize their proofs. The actual date on which the paper is published on the Web is recorded on the first page of the published document.

Proofs

The corresponding author of an accepted manuscript will receive E-mail notification and complete instructions when page proofs are available for review *via* a secure Web site. The PDF proof made available for review is of publication quality so that authors may see a true representation of both the text and the graphics prior to Web and issue publication.

Page proofs should be checked carefully against the manuscript, as this is not done by the Journal Publications office, and the corrections should be returned as soon as possible. Routine rephrasing of sentences or additions are not permitted at the page proof stage. Alterations should be restricted to serious changes in interpretation or corrections of data. No paper is released for publication until the corresponding author's changes have been made or the author's approval is received. Extensive or important changes on page proofs, including changes to the title or list of authors, are subject to Editorial review. Authors should not request that their page proofs be held for an extended period of time.

Manuscripts for which page proofs are not returned in a timely manner may be withdrawn from publication by the Editor.

Online Publication ("Articles ASAP")

ACS Nano will publish papers online within days after the authors return their corrected proofs. Papers published ahead of issue publication are definitive and may be altered only through an addition/correction. All articles published ahead of issue publication receive a unique digital object identifier (DOI), which is used to cite the paper before the issue publication.

Embargo on Release of Information Prior to Publication

Authors must use care in the disclosure of scientific results and conclusions contained in an accepted manuscript before the paper is published on the *ACS Nano* "Articles ASAP" Web site. Publication of these results and conclusions in the public domain constitutes prior publication. As a result, the manuscript may be immediately withdrawn from *ACS Nano* and will not be published.

Additions and Corrections

If errors of consequence are detected in the published paper, a correction should be submitted by the corresponding author for publication in the "Additions and Corrections" section. A properly formatted addition/correction must include the title, list of authors, publication information, and manuscript number of the originally published paper, followed by a detailed description of the error and any impact on the conclusions of the original paper. Additions and Corrections must be submitted online *via* the ACS Paragon Plus Environment (http://paragonplus.acs.org); select "Addition & Correction" as the manuscript type. All Additions and Corrections are subject to approval by the Editor, and minor corrections and additions will not be published. Additions and Corrections may not be submitted by anyone other than the corresponding author of the paper requiring correction. The corresponding author should obtain approval from all coauthors prior to submitting an addition/correction. Readers who detect errors of consequence in the work of others should contact the corresponding author of that work.

ACS Policies for E-prints and Reprints

Under the ACS Articles on Request policy, the Society will provide (free of charge) to all contributing authors a unique URL within the ACS Web site that they may E-mail to colleagues or post on external Web sites. These author-directed links are designed to facilitate the distribution of an author's published work to interested colleagues.

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The ACS AuthorChoice option establishes a fee-based mechanism for authors or their research funding agencies to sponsor the open availability of their articles on the Web at the time of online publication. Under this policy, the ACS as copyright holder will enable unrestricted Web access to a contributing author's publication from the Society's Web site in exchange for a fixed payment from the sponsoring author. ACS AuthorChoice enables participating authors to post electronic copies of published articles on their own personal Web sites and institutional repositories for noncommercial scholarly purposes and allow immediate open access to an article as soon as it is published on the ACS Web site. For more details on ACS AuthorChoice, please visit http://pubs.acs.org/page/4authors/index.html.

For paper reprints, the reprint order form and purchase order or check should be sent prior to the publication date to Cadmus Reprints, P.O. Box 751903, Charlotte, NC, USA 28275-1903. For manuscripts containing color, a surcharge of $100 per 100 reprints will be added to the standard cost of reprints. Reprints will be shipped within two weeks after the issue publication date. Neither the Editors nor the ACS Publications Office keeps a supply of reprints; requests for single copies of papers should be addressed to the corresponding author of the paper concerned.

MANUSCRIPT SUBMISSION

Manuscripts, including any revisions, must be submitted *via* the Web using the ACS Paragon Plus Environment (http://paragonplus.acs.org). Authors review the PDF version of their manuscripts prior to formal submission to the Editor. In order to use Web submission, authors must be able to provide electronic versions of text, graphics, and any supporting documents. Complete instructions, including information on which platforms and word processing packages are supported, are available on the submission site.

The manuscript submission site employs state-of-the-art security mechanisms to ensure privacy for all electronically submitted manuscripts. These same security mechanisms are utilized throughout the peer review process, permitting access only to editors and reviewers who are assigned to a particular paper.

Submission is taken to imply that all coauthors have approved of the content and submission to *ACS Nano* and that the corresponding author is authorized to represent all authors.

Cover Letter

A letter must accompany the submission, and it must contain the following elements:

- the manuscript title;

- the name of the corresponding author, and that person's complete contact information (mailing address, phone, fax, and E-mail);
- the name(s) of any other author(s);
- a statement of why the paper is appropriate for *ACS Nano*; and
- a description of any Supporting Information and/or Review-Only Material.

Additionally, authors should note whether the manuscript was discussed with an *ACS Nano* editor before submission. Authors are urged to suggest six to eight persons competent to review the manuscript. Requests for hardcopy proofs should also be indicated in the cover letter.

Related Work by Author

All related work under consideration for publication in any medium must be cited in the manuscript and the Editor informed at the time of submission. When related work by any of the authors is not available because it is in press (accepted), submitted, or in preparation for submission to *ACS Nano* or another journal, a copy of each related paper should be uploaded as "Review-Only Material" at the time of submission for use by the reviewers and the Editors. If a cited reference has already appeared on the Web, indicate that it is published electronically ("ASAP" for ACS journals) and give the DOI for convenient access. The full journal citation should be completed during manuscript revision or page proof correction, if possible.

Copyright

A properly completed Copyright Status Form must accompany each submitted paper. General information and a blank form are available at http://pubs.acs.org/copyright. The completed form should be uploaded to the ACS Paragon Plus Environment at the time of submission.

Conflict-of-Interest Disclosure

Include a statement describing all potential sources of bias, including affiliations, funding sources, and financial or management relationships, that may constitute conflicts of interest. The corresponding author should provide a statement on behalf of all authors of a paper.

Material and Data Availability

ACS Nano understands that communication and collaboration among chemists, physicists, biologists, and engineers are significantly enhanced when materials and data can be exchanged. Therefore, a condition of publication is that authors are required to make materials, data, and protocols available to readers through deposition in a publicly used database. Hosting on an author's Web site is not an acceptable substitute. Authors also agree to make available to interested academic researchers for their own use any materials reported in their manuscript that are not otherwise obtainable. Any restrictions to the availability of materials or information must be stated at the time of submission.

Security Concerns

Certain papers may represent a potential security risk for the public. Such papers will be brought to the attention of the editors of the journal. If necessary, outside reviewers with expertise in security matters will be consulted.

Received Date

The receipt date will be recorded as the date the complete manuscript is received in the Editor's office. Manuscripts that are ready to be reviewed when first submitted will receive priority for initial processing.

MANUSCRIPT PREPARATION

Acceptable File Formats

Manuscript text, references, and figure legends should be prepared in Microsoft Word or LaTeX. LaTeX users should follow the guidelines at http://pubs.acs.org/page/4authors/submission/tex.html. EPS and TIF are the preferred file formats for graphical objects.

Writing Style and Language Usage

Scientists and engineers from several disciplines, with distinct training, read *ACS Nano*. Therefore, it is essential that all manuscripts be accessible to all readers interested in nanoscience and nanotechnology. The editors will request that authors rewrite portions of a submitted manuscript if it is not accessible to a broad audience.

Clarity and conciseness are critical requirements for publications. Authors should consult *The ACS Style Guide* (3rd ed., 2006) for guidance on style, word-usage conventions, nomenclature, physical quantity symbols and units, abbreviations, use of italics, and punctuation. *The ACS Style Guide* also provides information about copyrights and insight on what editors and reviewers look for in evaluating papers. Spelling and use of periods and commas in numbers should conform to U.S. usage.

Any author who is not fully fluent in idiomatic English is urged to obtain assistance with manuscript preparation from a colleague whose native language is English. Manuscripts that do not meet these criteria will be returned without review.

Nomenclature

Use abbreviations and acronyms sparingly, and all usage should be defined at the first occurrence in the text. Whenever possible, use systematic nomenclature as recommended by IUPAC and IUBMB for chemical compounds and biomolecules, respectively. Names of organisms should comply with genetic conventions, with genus and species names written in italics and spelled out in full on first appearance. Registered trademark names should be capitalized whenever used. Trade and trivial names should not be capitalized. It is not necessary to use the trademark, registered trademark, or service mark symbol to ensure legal protection for the trademark.

Organization of Paper

Title. Titles should clearly and concisely reflect the emphasis and content of the paper. Titles of manuscripts may not contain words like "First" or "Novel" or any part number or series number. Titles are of great importance for current awareness and information retrieval and should be carefully constructed for these purposes.

Author List. Include the name and institutional affiliation of 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 surnames (*e.g.*, J. Robert Smith). At least one author must be designated with an asterisk as the person to whom correspondence should be addressed.

Abstract. All Articles, Reviews, Perspectives, and Nano Focus papers must contain an abstract, which should provide a succinct, informative summation of the most important results and conclusions. Abstracts are optional for Conversations. Authors must adhere to the following word limits for abstracts: Articles, 250 words; Reviews, 250 words; Perspectives, 120 words; Nano Focus, 120 words.

Section Headings. Informative section headings and subheadings are encouraged for Articles and Reviews; the "Introduction" heading is not used. Sections are not numbered.

Introduction. Clearly state the purpose and significance of the research, and put it into the context of earlier work in the area. Historical summaries are seldom warranted. Do not attempt a complete survey of the literature. If a recent article has adequately summarized work on the subject or a part thereof, cite that article without repeating its individual citations. In general, an introduction should be ≤ 1000 words for an Article.

Results and Discussion. Present this section concisely. The first paragraphs should explain the motivation for the work and how it combines relevant disciplines. Use tables and figures only if they are essential for the comprehension of the data. Do not present the same data in more than one figure or in both a figure and a table. The purpose of the discussion is to interpret the results and to relate them to existing knowledge in the field. To save space in the issue publication version, submit supplemental or peripheral information in a separate file for publication online as Supporting Information (also subject to review).

Papers reporting new small 3D structures from crystallographic analyses should include structural figures with probability ellipsoids and CIF files. Those reporting NMR or X-ray crystal structures of larger assemblies or macromolecules must include a table with relevant data collection and refinement statistics. Templates for such tables are provided to authors in order to speed the production process. For papers reporting structures derived from electron microscopy experiments, authors must provide one image showing the distribution of particles being analyzed, the percentage of the particles being used in the reconstruction, and a correlation coefficient plot (or equivalent data) to indicate the resolution of the presented structure. Upon request from the Editor, the authors must provide sequence or structure data (including coordinate files and structure factors) to the editors and reviewers for the purpose of evaluating the manuscript. See "Characterization and Database Deposition" below for further details.

Methods. Articles must include, as the last text section, a clear, unambiguous description of materials, methods, and equipment in sufficient detail to permit repetition of the work elsewhere. Novel experimental procedures must be described in detail, but published procedures may be referred to by literature citation of both the original paper and any published modifications.

Papers reporting data from experiments on live animals must include a statement identifying the approving committee and certifying that such experiments were performed in accordance with all national or local guidelines and regulations. Results from experiments involving

humans or tissue samples must additionally include a statement that informed consent was obtained from the subject or from the next of kin.

Precautions for handling dangerous material or for performing hazardous procedures must be explicitly stated.

Tables. Tables may be created using a word-processor's text mode or table format feature; the table format feature is preferred. Ensure that each data entry is in its own table cell. If the text mode is used, separate columns with a single tab and use a line feed (return) at the end of each row.

Tables must be numbered consecutively with Arabic numerals, and each table must be placed in the text following the paragraph in which it is first mentioned. 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 as narrative, when many numbers must be presented, or when more meaningful interrelationships 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. Place crystallographic and NMR data tables last in a series of tables in a manuscript, because they are generally placed in the Methods section.

Define nonstandard abbreviations in footnotes. Footnotes in tables should be given letter designations and be cited in the table by italic superscript letters. The sequence of letters should proceed by line rather than by column. If a reference is cited both in the text and in a table, a lettered footnote that refers to the numbered reference in the text should be placed in the table.

Acknowledgment. Include financial support, technical assistance, advice from colleagues, gifts, *etc*. Dedications may appear only in the Acknowledgment section and are subject to approval by the Editor.

References. References to the literature are cited by superscript number at appropriate locations in the text. All literature citations are compiled in a numbered References list at the end of the manuscript text, in the order of their first citation in the text. Each numbered reference may contain only one literature citation. In the published version of the paper on the Web, many of them will be linked to other Web resources, such as the corresponding abstracts in Chemical Abstracts and the full text on publisher Web sites. Because of this electronic linking, and because the references are not checked in detail by editors or reviewers, it is crucial that authors verify their accuracy.

Unnecessarily long lists of references are to be avoided; however, authors must reference all previous publications in which portions of the present work have appeared. Additional data and peripheral discussion should be placed in the Supporting Information rather than in references. Supplementary references may be placed in Supporting Information. Please use the following reference styles.

For journals (include article titles):

> 1. Besteman, K.; Lee, J.-O.; Wiertz, F. G. M.; Heering, H. A.; Dekker, C. Enzyme-Coated Carbon Nanotubes as Single- Molecule Biosensors. *Nano Lett.* **2003**, *3*, 727–730.

For books:

> 2. Craighead, H. G. Nanostructures in Electronics. In *Nanomaterials: Synthesis, Properties and Applications*; Edelstein, A., Cammatata, R., Eds.; Taylor and Francis: New York, 1998; pp 565–566.

References with more than 10 authors must list the first 10 authors, followed by "*et al.*" Titles of journals are abbreviated according to Chemical Abstracts Service Source Index (CASSI, www.cas.org/products/print/cassipr/index.html). Papers accepted for publication are cited as "in press"; the DOI should be given if the paper is published online. Cite papers that are in preparation or have been submitted but not yet accepted in the text, not in the References list, as unpublished experiments or personal communications.

Graphics. Major graphics may take three forms, as described below. Each type of graphics should be numbered consecutively and independently. Each graphic should be placed in the manuscript following the paragraph in which it is first mentioned. On submission, indicate those graphics that require special attention during production.

Figures. All figures must be mentioned in the text in consecutive order and must be numbered with Arabic numerals. 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.

Schemes. Sequences of reactions are called schemes and must be numbered consecutively with Arabic numerals. Schemes may have brief titles describing their contents and footnotes, if needed, for further detail.

Charts. Groups of structures that do not show reactions are called charts and must be numbered consecutively with Arabic numerals. Charts may have brief titles describing their contents and footnotes, if needed, for further detail.

Characterization and Database Deposition

Within research papers, authors are expected to provide firm evidence to establish both the identity and the purity of new substances. *ACS Nano* adheres to the Guidelines for Characterization of Organic Compounds set forth by *Journal of the American Chemical Society* and *Journal of Organic Chemistry*. Include the completed *J. Org. Chem.* Excel spreadsheet with the submitted manuscript. The criteria for other substances vary, but may include spectroscopic, crystallographic, chromatographic, electrophoretic, or other analytical methods. Supply sequencing or functional data for all biological constructs, such as fusion proteins, plasmids, *etc.*

Crystal and NMR Structures. Small molecular crystallographic data should be submitted, prior to publication in *ACS Nano*, to the Cambridge Structural Database (www.ccdc.cam.ac.uk). For papers reporting macromolecular NMR or crystal structures, the atomic coordinates must be deposited in the Protein Data Bank (PDB) (www.rcsb.org/pdb) or the Nucleic Acid Database (http://ndbserver.rutgers.edu). In all cases the accession code(s) must be listed in the published paper. These coordinates must be designated "for immediate release upon publication". Authors of papers reporting X-ray crystal structures are encouraged to deposit the structure factor files in the PDB. No formal requirement exists for deposition of NMR assignments and constraints (see Biological Magnetic Resonance Data Bank at www.bmrb.wisc.edu).

Electron Microscopy Data. No formal requirement exists for deposition of molecular envelope reconstruction from electron microscopy data, but authors are encouraged to deposit relevant information in appropriate databases. Approved databases for deposition of electron miscroscopy data are the

Worldwide Protein Data Bank (www.wwpdb.org), the Protein Data Bank Japan (www.pdbj.org), or the Macromolecular Structure Database–EMBL–European Bioinformatics Institute (www.ebi.ac.uk/msd).

Single Crystal Diffraction Data. Manuscripts reporting the determination of one or more structures by X-ray diffraction must adhere to the following requirements:

Abstract. The abstract may summarize geometric features of unusual interest but should not contain unit cell parameters.

Main Body of Manuscript. Tables of essential interatomic distances and angles are *not required* but may be submitted (metric information for standard structural components should not be included).

For structures with anisotropically refined atoms, a figure displaying the thermal ellipsoids should ordinarily be presented; a spherical-atom representation may be substituted if necessary for clarity. If a spherical-atom view is chosen for the manuscript, a thermal ellipsoid figure should be included in the Supporting Information. In cases where intermolecular interactions are relevant to the discussion, a view of the unit cell may be included.

An Article should list for each structure the formula, formula weight, crystal system, space group, color of crystal, unit-cell parameters, temperature of data collection, and values of Z, R, and GOF; a brief description of data collection, and solution and refinement of the structure, should be placed in the Methods section. Tables of atom coordinates and thermal parameters will not be printed.

Supporting Information. Complete detailed data for each structure must be submitted in the electronic Crystallographic Information File (CIF) format. Deposition of CIF files in the Cambridge

Crystallographic Data Centre (CCDC) does not eliminate the *ACS Nano* requirement to submit the CIF files as Supporting Information.

A separate CIF file for each structure should be uploaded. *ACS Nano* requires authors to run the CheckCIF program for each crystallographic structure and to correct any syntax errors in the CIF files prior to submission.

Structure factors (except for proteins and nucleic acids) should not be submitted as Supporting Information. However, one printed table of structure factors should be retained in case it is requested by the Editor for review purposes only.

Powder Diffraction Data. The presentation of X-ray powder diffraction data for new materials or for materials previously uncharacterized by this technique is encouraged. Data from X-ray powder measurements should be accompanied by details of the experimental technique: source of X-rays, the radiation, its wavelength, filters or monochromators, camera diameter, the type of X-ray recording, and the technique for measuring intensities. In cases of unindexed listing of the data, the *d* spacings of all observed lines should be listed in sequence, together with their relative intensities. In cases where filtered radiation is used, every effort should be made to identify residual β lines. Where resolution into α_1-α_2 doublets occurs, the identification of the *d* spacing for each line as $d\alpha_1$, $d\alpha_2$ gives a measure of the quality of the diffraction pattern. When an indexing of the data is offered, the observed and calculated $1/d^2$ values should be listed along with the observed relative intensities (it is superfluous to give *d* spacings in this instance). All calculated $1/d^2$ values should be listed (exclusive of systematic absences), to the limit of the data quoted. If possible, the crystal system should be specified. Possible space groups may also be listed if the data warrant it. Relevant information about the specimen used should be included.

Magnetic Measurements. Fits of magnetic data [$X(T)$, $X^{-1}(T)$, $XT(T)$, $\mu(T)$, $M(H)$, *etc.*] to an analytical expression must include both the Hamiltonian from which the analytical expression is derived and the final analytical expression and fitting parameters. When the value of an exchange coupling constant, *J*, is given in the abstract, the form of the Hamiltonian must also be included. The expressions may be included in the manuscript or, if long and complex, as Supporting Information; if the latter method is used, it should be noted in the "Supporting Information Available" paragraph at the end of the manuscript. In addition, how the sample was measured (in a gelatin capsule, Teflon capsule, *etc*.) and the diamagnetic correction for the sample holder, as well as the diamagnetic correction for the material, must be provided and the manner in which it was calculated (Pascal's constants) or measured must be stated.

Computations. When computational results are an essential part of a manuscript, sufficient detail must be given, either within the paper or in the Supporting Information, to enable readers to reproduce the calculations. This includes data such as force field parameters and equations defining the model (or references to where such material is available in the open literature). Authors who report the results of electronic structure calculations are requested to provide as Supporting Information the geometries (either as Cartesian coordinates or Z matrices) of all the stationary points whose relative energies are given in the manuscript. The absolute energies in hartrees that are computed at these geometries should not be given in the manuscript but should be included in the Supporting Information. Where applicable, the number of imaginary frequencies should be reported to identify stable structures and transition states.

Large datasets for which an approved database has not yet been established must be housed as online Supporting Information at *ACS Nano.*

Supporting Information

Material that is not needed for reading the paper but which should be available to document experiments or calculations for future researchers should be put into the Supporting Information. This material may include tables, illustrations, derivations, experimental procedures, analytical and spectral characterization data, spectra, modeling coordinates and programs, and crystallographic information files. The Supporting Information may also include additional material or discussion that is primarily of interest to specialized readers.

The Supporting Information format of this journal can accommodate and make readily available almost any type of supplementary figures or data (*e.g.*, reproductions of spectra, experimental procedures, tabulated data, or expanded discussion of peripheral findings). Text and tabular material should be double spaced; graphics should be saved at a resolution that allows clear viewing over the Web. The page size should be (U.S. Letter) 8.5 in. × 11 in. (22 cm × 28 cm), and the readable material should be aligned parallel with the 8.5 in. (22 cm) dimension wherever possible.

All pages should be numbered consecutively starting with page S1. Pages of CIF and plain text documents should not be numbered.

Include a paragraph at the end of the manuscript indicating the nature of the material and the means by which an interested reader may obtain copies directly. Use the following format:

> ***Supporting Information Available:*** Description of the material. This material is available free of charge *via* the Internet at http://pubs.acs.org.

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Web-Enhanced Objects

The Web editions of the ACS journals allow authors to use multimedia attachments such as animations and movies. These objects should complement a reader's understanding of the research being reported. The types of objects suitable for this form of publication should be viewable with Java or with commonly available plug-ins or helper applications. With the appropriate plug-ins or helper applications, one can view and manipulate these objects within the HTML file itself or in a separate window. File size should be ≤ 5 MB. Complete specifications for Web-Enhanced Objects are given on the online manuscript submission site (http://paragonplus.acs.org).

Graphics Quality and Format

The quality of the graphics in *ACS Nano* depends on the quality of the artwork provided by the author. Figures cannot be modified or enhanced by the journal production staff.

EPS and TIF are the preferred file formats for graphical objects.

- Figures containing photographic material should be in TIF format.
- Line-art figures should be submitted as EPS files.
- Images produced from continuous-tone graphics such as photographs should have high contrast.

Each graphic should be placed in the manuscript following the paragraph in which it is first mentioned in order to facilitate review and composition of page proofs. Individual graphic files, created by the author according to the following guidelines, will be used for production and should be uploaded to the ACS Paragon Plus Environment with the submitted manuscript:

- Minimum resolution requirements are as follow:

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

- Place panel labels in the upper left-hand corner of the panel.
- Do not place a rule around the entire graphic.
- Place legends for graphs within the main body of the graph, whenever possible.
- Graphics representing similar types of data should be of a uniform size.
- Name graphics files Figure 1, Figure 2, *etc*.
- Indicate any graphics that require special handling.

Size. Graphics must be submitted at the actual size at which they should appear in the printed edition. Lettering must be no smaller than 6 points at final printed size. Arial font should be used for lettering. Lines must be no thinner than 0.5 point at final printed size. Lettering and lines in all graphics should be of uniform density and the lines unbroken.

Color. The use of color is encouraged. Color graphics must be submitted in CMYK color scheme and at 300 dpi resolution. Macromolecular structures should not be placed on any background. Choose colors that will allow all features to be clearly visible on white paper.

Chemical Structures. Structures should be produced with the use of a drawing program such as ChemDraw. Authors using the current versions of ChemDraw will find the necessary parameters incorporated into this program ("ACS Document 1996"). Authors using older versions of ChemDraw should use the following settings:

(1) As drawing settings select:

chain angle	120º
bond spacing	18% of width
fixed length	14.4 pt (0.508 cm, 0.2 in.)
bold width	2.0 pt (0.071 cm, 0.0278 in.)
line width	0.6 pt (0.021 cm, 0.0084 in.)

margin width	1.6 pt (0.056 cm, 0.0222 in.)
hash spacing	2.5 pt (0.088 cm, 0.0347 in.)

(2) As text settings select:

font	Arial/Helvetica
size	10 pt

(3) Under the preferences choose:

units	points
tolerances	5 pixels

(4) Under page setup choose:

Paper	US Letter
Scale	100%

(5) Use the ChemDraw ruler or appropriate margin settings to create structure blocks, equations, and schemes with maximum widths of 8.25 cm (one-column format) or 17.8 cm (two-column format). If the foregoing drawing-setting lengths and widths are selected in centimeters rather than in points or inches, the ChemDraw ruler will be calibrated in cm.

(6) Save files as EPS or TIF images.

(7) Supply the native EPS or TIF image in addition to pasting the structure into the body of the manuscript.

Graphical Table of Contents. Each Article, Perspective, and Review must include a graphic for the Table of Contents. This graphic should capture the readers' attention and, in conjunction with the manuscript title, give readers a visual impression of the essence of the paper without providing specific results. Labels, formulas, or numbers within the graphic must be legible at publication size. Tables or spectra are not acceptable. Color graphics are highly encouraged, with text kept to a minimum. At final printed size, all text should be ≥ 6 points. These graphics should be ≤ 9 cm in width (≤ 4.5 cm for Perspectives and Nano Focus) and ≤ 4 cm in height, and must be ≥ 300 dpi in resolution at final printed size.

Covers. Authors are encouraged to submit images suitable for publication on the journal cover. Covers should be visually arresting and scientifically interesting. In general, the editors discourage submissions of structures, graphs, and chemical schema. The editors prefer artistic renditions of structures, function, and data. Please submit electronic files and a short (~30-word), clear legend explaining the image. Cover images should be ~21.5 cm in width and ~28 cm in height and at ≥300 dpi resolution at this size (file should be ≥8 MB). TIF images in CMYK format are preferred.