

Sample manuscript as a guide for submission to *AIP Advances*^a

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^aContributed paper, published as part of the Proceedings of the 17th International Conference on Physics, Anytown, State, January 2011.

^bJane A. Author and Yiu-Lam Author contributed equally to this work.

^cThis research was performed while John B. Author was at Anywhere National Laboratory, City, State, Postal code, Country.

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the body of the paper, tables and figures, if any, included, and the reference section. Consecutively number all tables (I, II, III, etc.) and figures (1, 2, 3, etc.), including those in an Appendix. All figure source files must be uploaded separately upon submission. To aid the reviewer, authors may choose to also embed the figures in text. Figure captions must be included in the manuscript. Number all pages consecutively, beginning with 1.

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All files must be submitted through the online system: aipadvances.peerx-press.org/. Each version of the manuscript (the original and subsequent revisions) should be submitted with its own complete set of files: a cover letter (indicating the title, authors, and contact information), a complete article file, and separate figure files (see Sec. IX—FIGURES). When uploading a revised manuscript, also include a response/rebuttal letter (indicating the changes made to address the Editor's and Reviewers' comments).

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Make the title as concise as possible but informative enough to facilitate information retrieval. Only the most common acronyms and abbreviations are allowed in the title. Use acronyms with considerable moderation and always define at first use.

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V. FOOTNOTES

Footnotes are generally unacceptable in *AIP Advances*, with the exception of footnotes to the title or authors' names. All other footnotes should be converted to text or should be included in the reference section. Use a, b, c, etc., for footnotes to the title or authors. The following list shows some examples:

^aContributed paper, published as part of the Proceedings of the 17th International Conference on Physics, Anytown, State, January 2011.

^bA. Author and B. Author contributed equally to this work.

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VI. HEADINGS

Headings are not mandatory. Maintain a consistent heading style within the article. Sections are numbered in *AIP Advances* in the following order:

I. PRINCIPLE HEADING

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1. Second subheading

a. Third subheading.

VII. EQUATIONS

Equations should be punctuated and aligned to bring out their structure and numbered consecutively throughout on the right. Mathematical operation signs indicating continuity of the expression should be placed at the left of the second and succeeding lines. Use (×) rather than a centered dot, except for scalar products of vectors. Use a solidus (/) instead of built-up fractions in running text, and in display wherever clarity would not be jeopardized. Use “exp” for complicated exponents.

$$B_i = \begin{pmatrix} 1 & 2 & \cdots & N \\ B_i 1 & B_i 2 & \cdots & B_i N \end{pmatrix}, \quad (1)$$

$$I_D \theta = \frac{a}{2} + \sum_{n=1}^2 \cos 2n\theta + \sin 2n\theta . \quad (2)$$

In appendices, the numbering sequence (A1), (A2), (A3), etc., is acceptable.

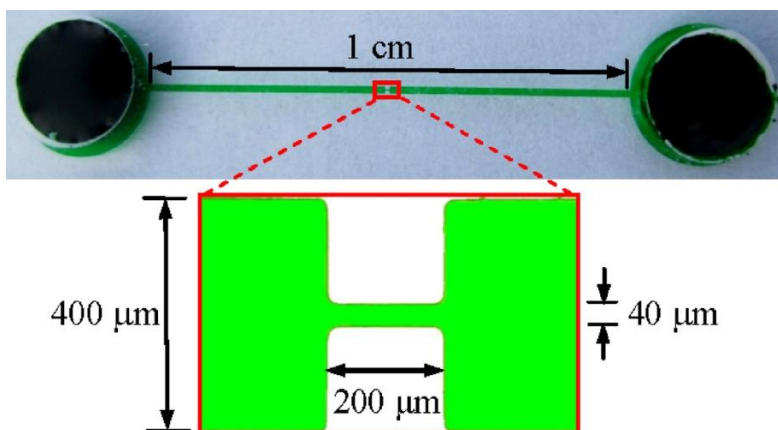


FIG. 1. This figure will appear in color. Color figures should be created and submitted at 300 dpi for the best presentation.

Please note that you must use MathType or the Microsoft[®] Equation Editor 3.0. Use of Microsoft[®] Math Editor is not recommended.

VIII. NOTATION

Notation must be legible, clear, compact, and consistent with standard usage. Choose commonly used symbols from your discipline. All unusual symbols whose identity may not be obvious must be identified the first time they appear, and at all subsequent times when confusion might arise.

IX. FIGURES

Cite figures in text in numerical order. Figures in Appendices will be renumbered following the sequence in text. It is vital that you prepare your illustrations so that they are legible when reduced. Figures 1–4 show examples of various types of publication-ready illustrations: color, line art, halftone, and combination (line art and halftone). Table I gives (a) general guidelines for preparing your illustrations and (b) guidelines for the preparation of electronic files.

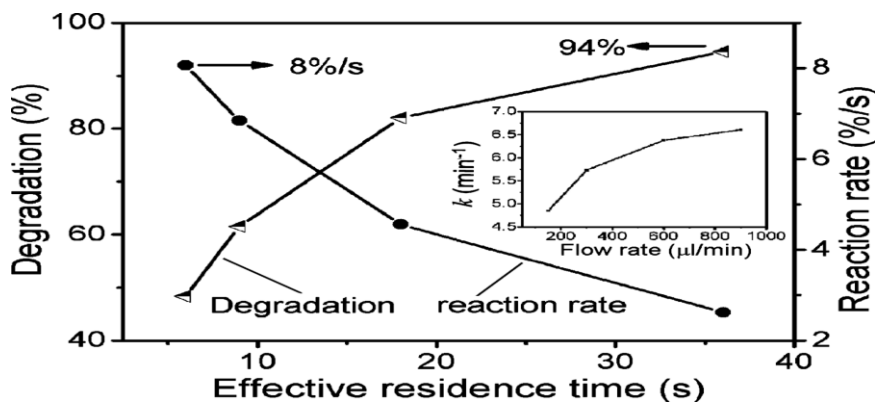


FIG. 2. This is an example of line art. Figures should be created at 600 dpi and submitted at 600 dpi for the best presentation. Save line art as black/white bitmap, not grayscale.

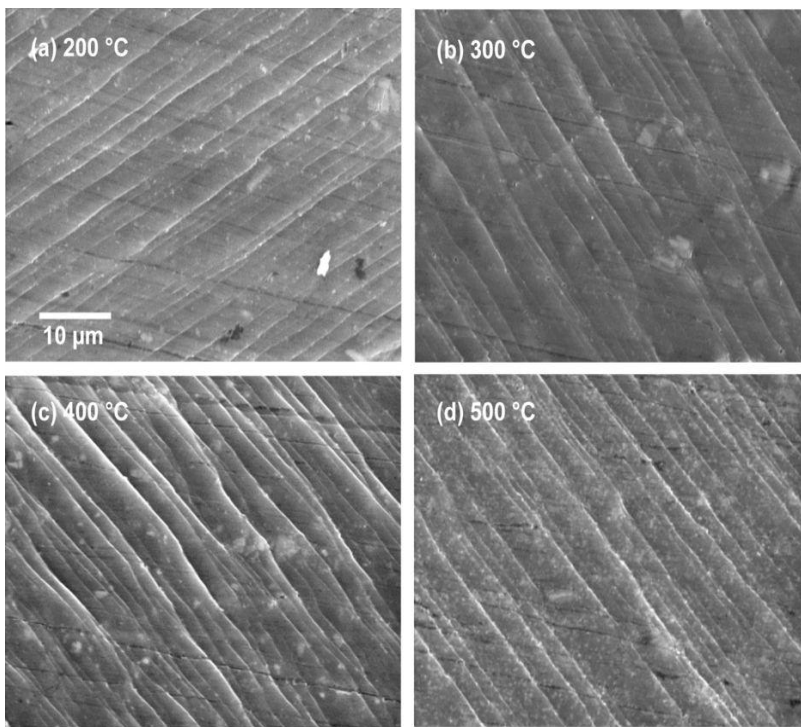


FIG. 3. This is an example of a half-tone. Figures should be created and submitted at 300 dpi for the best presentation.

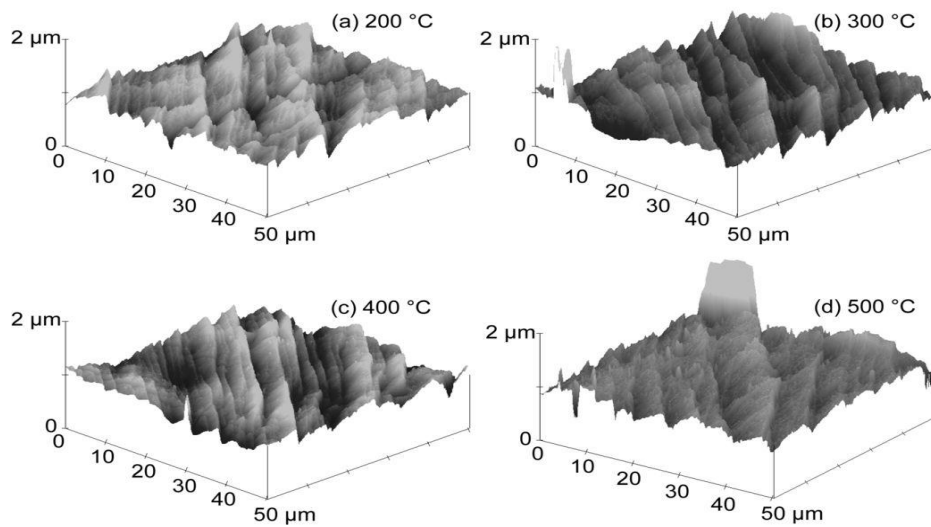


FIG. 4. This is an example of a combination figure (line art and half-tone). Figures should be created and submitted at 600 dpi for the best presentation.

TABLE I. This table provides instructions on how to prepare figures.

(a) General guidelines for preparing illustrations

- Number figures in the order in which they appear in the text.
- Label all figure parts with (a), (b), etc. Each figure file should contain all parts of the figure. For example, if Fig.1 contains three parts [(a), (b), and (c)], then all parts should be combined in a single file for Fig. 1.
- Avoid any large disparity in size of lettering and labels used within one illustration.
- All figures submitted should be in the final published size as they will appear in the PDF:
 - Width of figures should be a maximum of 32.5 pica (5 3/8 in. or 13.3 cm).
 - Maximum depth of figures should be 50 pica (8 1/4 in. or 21.1 cm).
 - Legends or labels within figures should be a minimum of 8-point type size (2.8 mm high; 1/8 in. high).
 - A minimum of 0.5 point width for lines.
- Ensure that lettering and lines are dark enough, and thick enough, to reproduce clearly.

The figures may be imbedded in the manuscript in the approximate position and size you think is appropriate.

In addition, separate figure files must be provided (see below for accepted file formats) along with the manuscript.

(b) Guidelines for preparation of electronic graphics files

- Acceptable formats for figures: Portable Document Files (PDF), Encapsulated PostScript Files (EPS), PostScript, Tagged Image File format (TIF), or JPEG (.jpg) files. EPS (using Arial or Times Roman fonts) is preferred graphic format when preparing illustrations. Microsoft Word (.doc or .docx) files are **NOT** acceptable.
 - More detailed information is given about figure preparation on the *AIP Advances* website in the [Information for Contributors](#) tab.
 - Settings: Set the graphic for 600 dpi resolution for line art, 300 dpi for halftones, and 600 dpi for combinations (line art + halftone).
 - Save line art as black/white bitmap, not grayscale.
 - Save halftones and combinations as grayscale, not black/white bitmap.
 - Submit color files at 300 dpi in one of the accepted file formats: PDF, EPS, PS, TIF, or JPG. No other type of color illustration is acceptable. When selecting a file mode choose RGB (red, green, blue).
 - PDF files should be vector files.
 - In the PDF illustration, resolution of any shaded or photographic images must be 600 pixels per inch (PPI).
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Separate tables (numbered with Roman numerals in the order of their appearance in the text) should be used for all but the simplest tabular material. Tables must have captions that make the tables intelligible without reference to the text. The structure should be clear, with simple column headings giving all units. Unaltered computer output and notation should be uploaded as supplemental files. Table captions are positioned above the table and should be styled as “TABLE I. This is a table caption.” Capitalize the first word in the table headings and subheadings. Tables in the Appendix will be renumbered to follow the sequence in text. References within tables are designated by lowercase Roman letter superscripts and given at the end of the table. See Table II for an example of correct table styling.

TABLE II. Bond distances for alkene molecules (atomic units).

No. C ^a	$RI,I+1$ ^b	$SRI,I+1$ ^c	$RI-1,I+RI,I+1$	$SRI-1,I+RI,I+1$
2	2.5255
4	2.6175	0.123	5.306	...
6	2.6314	0.0999	5.3025	0.0112
8	2.6368	0.0876	5.3009	0,0111
10	2.6396	0.0795	5.2999	0.0106

^aC is the number of carbon atoms.

^b $RI,I+1$ is the distance between two neighboring carbon atoms, while $\langle RI,I+1 \rangle$ is the average of $RI,I+1$ for a given molecule.

^c $SRI,I+1$ is the standard deviation of $RI,I+1$ within the given molecule.

XI. MULTIMEDIA SUBMISSIONS

Multimedia files can be included in the online version of published papers. All such files are peer reviewed. When published, these files can be viewed by clicking on a link from the figure caption, provided that the reader has a video player installed, such as Windows Media PlayerTM, Quick Time PlayerTM, or RealOne PlayerTM. Please see [Author Guidelines for Multimedia Submissions](#) on the website. Please note the following important information when preparing your manuscript:

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- All multimedia files must be cited in the text, referred to by their figure number.

XII. SUPPLEMENTAL MATERIAL

Text material that may not be of interest to all readers, long data tables, multimedia, and computer programs may be deposited as supplementary materials. Information about depositing supplemental material may be found at the journal's [Information for Contributors](#) section on the website.

ACKNOWLEDGMENTS

Typically, standard acknowledgments include financial support and technical assistance, and may include dedications, memorials, and awards. Check with the Editorial Office for suitability of an acknowledgment if there is any question. To indicate the author, use initials. For example, "J.A. wishes to thank A. Smith for technical assistance. Y.A. wishes to thank Anytown University for use of their equipment." Note: the Acknowledgments section is not a numbered section.

APPENDIX

Appendices are placed after the acknowledgments section and before the listing of references. Appendices must have a Level One heading as illustrated below. They do not follow the sequential heading numbering given in the rest of the paper. If there is only one appendix, then the heading is set as follows:

APPENDIX

If there is more than one appendix, the headings are set as:

APPENDIX A: DESCRIPTION

APPENDIX B: DESCRIPTION

Subheadings in an Appendix are labeled 1, 2, etc.

REFERENCES

References must be numbered consecutively in order of first appearance in the text and should be listed at the end of the text material. Reference citations in text are rendered in several ways, for example:

Voitsenya *et al.*⁴

Kawa and Lin⁸

MOLPRO (Ref. 10)

References within tables are designated by lowercase Roman letter superscripts and given at the end of the table. For the proper reference format, see recent issues of this journal. Preprints of cited unpublished work by the authors should be sent

with the manuscript. “In Press”, “To Be Published”, “Unpublished References”, “Submitted”, “in preparation” or “work in progress” is acceptable as per author’s manuscript.

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¹¹See National Information Technical Service Document No. UCRL-72650 (W. P. Crowley, Lawrence Livermore National Laboratory Report No. UCRL-72650, 1970). Copies may be ordered from National Technical Information Service, Springfield, VA.

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¹⁵S. N. Dorogovtsev, J. F. F. Mendes, and A. N. Samukhin, arXiv:cond-mat/0010329 (to be published).