

Guidelines for Manuscript Submission to *IEEE Transactions on Power Electronics*

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II. Scope

IEEE Transactions on Power Electronics' scope includes new results in the field of power electronics. For example, papers that treat original component, device, module, circuit, control, system, or application issues are of interest. Papers that do not show sufficient overlap with interest in the power electronics field (for example, papers on topics such as device physics, component manufacturing technologies, and circuit theory) should be submitted to other *IEEE Transactions* that cover these other fields. Authors should pay particular attention to documenting their work in relationship to the known literature. Papers of a historical or tutorial nature within the scope of this publication will also be considered.

A. Manuscript Types and Length:

Three types of manuscripts are accepted.

- **Regular papers:** Eight pages in final length.
- **Letters:** Three or fewer pages in final form, intended for rapid processing. Typical contributions should focus on a specific, original contribution, with sufficient literature review, analysis, and results to establish clearly its merit and potential value. Clarity is especially important in short papers. Contributions likely to stimulate additional ideas or unusual lines of thought for electronic power conversion are of special interest. Rapid publication is achieved for Letter Papers by means of efficient review and reduced cycles of revision. See Section IV for more details on letter submissions.
- **Correspondence:** These normally address corrections to published papers or substantive technical discussion of papers. They are limited to two pages in final form.

Note that for each type of submission, papers that exceed the page limits above are subject to mandatory overlength page charges, as discussed under Page Charges.

B. Uniqueness

Papers submitted for consideration should report on original results not previously presented in any other archival publication, including but not limited to any *IEEE Transactions*. Papers previously presented and published in a Conference Record or Conference Proceedings sponsored by the IEEE Power Electronics Society, such as the IEEE Energy Conversion Congress and Exposition (ECCE), Applied Power Electronics Conference (APEC), International Telecommunications Energy Conference (INTELEC), and the like can be considered for publication in *IEEE Transactions on Power Electronics* (IEEE TPEL). Improvements and additions beyond the conference paper are required (see IEEE's PSPB Operations Manual sections 8.1.7.E, <http://www.ieee.org/documents/opsmanual.pdf>). In addition, the original conference paper must be listed in the reference section as well as in a footnote to the title on the first page of the manuscript. All results submitted to IEEE TPEL are expected to be cutting-edge research; therefore authors must submit their extensions of their conference papers to TPEL in a timely manner. It is not required for a paper to have been presented or published at a conference to make it eligible for consideration by IEEE TPEL. Copyright release may be required if the conference publication is copyrighted by an entity other than the IEEE. Authors must indicate in their submission any prior presentation and publication at a conference *or prior submission to any other publication*. It is the responsibility of the authors to obtain a copyright release if required for submission to IEEE TPEL.

Papers submitted to IEEE TPEL must be original content and without significant duplication of other papers by the same or different authors. Each manuscript is submitted to a similarity and authentication program, which checks each word in the paper against previously published articles and websites to ascertain the submission's originality. Papers that do not pass this examination will not be reviewed for publication. In addition, by submitting to IEEE TPEL, the author is acknowledging that the paper has not been submitted to any other journal simultaneously, with the exception of conference papers as described above. If related but distinct work has been previously published by the authors, the manuscript must cite that work and make the distinction clear. If related but distinct work is simultaneously under review at another journal, the cover letter must include details of the other submission and explain the distinction. A copy of the other work may be required to verify that there is not significant overlap in the content.

Any graphics that are reused from other publications must include the reference number at the end of the caption. If the original publication is by a different author, permission from the author must be obtained. For IEEE publications email copyrights@ieee.org for approval; for non IEEE publications, permission must be obtained from the copyright holder. That status of these permissions should be stated in the cover letter.

III. Guidelines for Submitting a Paper for Review

The IEEE Power Electronics Society uses *ScholarOne Manuscripts/Manuscript Central*, a professional web-based manuscript submission and peer-review tracking system. Authors must submit manuscripts electronically (as .pdf or .ps files) to <http://mc.manuscriptcentral.com/tpel-ieee>.

From this entry page, authors can initiate submission of a new manuscript and will be prompted for all the information required for a submission. **First-time users must create a new account.** All authors are responsible for understanding these guidelines before submitting a manuscript for consideration. Help is available on the web site, including telephone contacts.

A. Manuscript Format

The paper should be prepared based on letter-size paper (either 8.5" x 11" or A4 sizes), and should be in **single-column, double-spaced format** for regular paper submissions. Papers in the two-column, single-spaced format common for conference publication are not acceptable, as this form is difficult for reviewers. (See Section IV for format for submitting Letters.) The paper should include all figures, tables,

captions, and references, as well as an author byline beneath the paper title (author bylines are required by IEEE at all stages of the review process). Author biographies, photos, and copyright form should **not** be included in the initial submission. Do not include page numbers in the uploaded file—ScholarOne Manuscripts/Manuscript Central automatically adds page numbers and having two sets of page numbers could cause confusion.

At the present time, there are no Transactions templates suitable for single-column submission. However, when it comes time for double-column submission some authors find the templates at the following link helpful: http://www.ieee.org/publications_standards/publications/authors/author_templates.html

A template for letters submissions:

https://www.ieee-pels.org/images/files/governing_documents/Publications/2_columns_template-for-PELS-letters_final_for-authors.pdf

For increased readability during the review process, figures and tables should be interspersed throughout the text of the manuscript, accompanied by captions if possible. Authors should avoid using color in the manuscript unless the resulting graphics are fully legible and clear in monochrome reproduction. The final manuscript can include color content only if the authors intend to use and pay for color pages in the final paper as required by IEEE (see below).

Creating the best figures possible

When it comes to submission, the quality of your images can reflect just as well, or poorly, on your work as proper punctuation (perhaps even more). To help you make the best impression, please make sure you do the following:

Submit the highest quality files you can

- Sharp, noise free, and of good contrast in a format suitable for final publication (TIFF).
- The quality of your graphics is important! IEEE's graphics teams will do their best, but they cannot "improve" a graphic that is submitted at low quality (low resolution or in a low quality format such as GIF or JPEG).
- Do not take your graphics from online! Graphics developed for use on the internet are designed to have high download speeds and are therefore of low resolution (72 dpi). The *minimum* resolution for your figures should be 300 dpi. Also note that *increasing* the resolution of a low resolution image **will not** improve the quality of the image.
- See the list below for tips on how to create the best graphics from various programs and for various figure types.

Don't submit a figure that is a scan of a printed version or in the form of preview or display-type versions converted by various types of software.

Photographs should be in their original digital format if at all possible

- If a scan is necessary, the resolution must be *at least* 300 dpi.

Use lettering on figures only where necessary and then use as large a font as possible

- All lettering on figures in the final double-column, single spaced format must be *at least* 8 points in the final printed size—even if the figure's size must be reduced (super- and subscripts will be proportionally smaller). Maintaining this font size ensures that everything on the figure is clearly legible to readers.
- Use the largest possible font size on your figures. In particular, when the figures are submitted in full-size mode, the print should be so big that when figures are reduced to fit in double-column format the smallest font size within the figure appears similar to 8 pt font. If the font is too small, the copyeditor will have to leave the figure in single-column size so that the wording will remain legible. This may increase the page count of the final paper and is undesirable.

- Make sure the font on your figures is consistent with the font that appears in the text. For instance, resistor 'R' in the text should not be labeled 'r' in the figure.

Think about your figures' colors

- Grayscale
 - Remember to make sure your figures are clear and readable when reproduced in grayscale
 - This means, within your text DO NOT refer to figures (or any part of your figures) by color because, if accepted for publication, figures will be printed in black and white and the colors will not be there! Instead, make sure to distinguish between different elements in the figures by text labels, figure keys, or different patterning.
 - Also make sure any colors you use in creating your figures are clear and readable in grayscale (especially any labels or text that may appear in different colored font). Dark colors are always easier to see—so steer well clear of colors like yellow.

The quality of your graphics is important. For more information about figures, visit IEEE's Frequently Asked Questions page about Author-Supplied Graphics and Multimedia at <http://www.ieee.org/documents/graphicsfaq.pdf>

References should be indicated using numbers in square brackets (e.g. [1], [2], and [3]), should be in a separate section at the end of the paper, and should be in IEEE style:

- **Style for conference publications:** Authors (first initials followed by last name), title of paper, in title of conference, date of conference, and page numbers (inclusive). Example: A. B. Researcher and I. N. Elper, "Loss-based analysis of switching converters under closed-loop controls," in *Proc. IEEE Applied Power Electronics Conf.*, 2010, pp. 3917-3926.
- **Style for periodical journal publications:** Authors (first initials followed by last name), title of paper, title of periodical, volume, page numbers (inclusive), month and year. Example: C. D. Aodiet, R. G. Gue, and P. R. Phakter, "The Ran-Duga method for ac-ac converter operation," *IEEE Trans. Power Electronics*, vol. 37, pp. 7721-7727, October 2014.
- **Style for books:** Authors (first initials followed by last name), book title. Publisher location: publisher name, year, chapter or page numbers. Example: B. B. Eriffel, *The Design of Microwatt Power Devices*. London: Energy Unit Publishers, 2012, Chap. 72.

Details of IEEE style for other reference types are available in the document *Information For IEEE Transactions, Journals, and Letters Authors*, http://www.ieee.org/documents/info_authors_kit.pdf

The first page should contain the paper title, full first and last names of all authors (do not use an initial for the first name), and each author's organizational affiliation. Paper titles should avoid extraneous words such as "new" or "novel" that have limited search value. The first page should indicate whether or not the paper has been presented at a conference or submitted elsewhere previously, and if so should specify the conference name, dates, and location. Per IEEE policy, the conference paper should also be listed in the reference section with any proper discussion. If a related but distinct manuscript has been submitted elsewhere, this must also be listed, with an explanation of the distinction between the paper topics. The editors may request a copy of such a manuscript if they have questions about the overlap. The first page should also contain an abstract. The abstract must be a concise yet comprehensive reflection of what is in your article. In particular:

- The abstract must be self-contained, without abbreviations, footnotes, or references.
- The abstract must be between 150 and 250 words. Be sure that you adhere to these limits; otherwise, you will need to edit your abstract accordingly.
- The abstract should not only indicate the subject and scope of the paper but should summarize, if possible, the authors' conclusion, so that the abstract itself may be a useful document in an information-retrieval system.
- The abstract must be written as one paragraph, and should not contain displayed mathematical equations or tabular material.
- Ensure that your abstract reads well and is grammatically correct.

The cover page should also include a list of up to five keywords; these keywords are entered on ScholarOne Manuscripts/Manuscript Central. Begin the main text of the paper on the second page.

B. Electronic File Format Details

Manuscripts should be submitted as .pdf files. Although this allows authors to create manuscripts with many different word processing systems, compatibility problems sometimes arise. It is the authors' responsibility to make sure the ScholarOne Manuscripts/Manuscript Central system PDF (the consolidated and converted file that will be sent to reviewers) renders correctly and is in the correct format. **The maximum file size limit on Manuscript Central is 40 MB; all files submitted for consideration for publication should be under 40 MB.**

To avoid problems, standard fonts such as Times Roman (serif), Helvetica or Arial (sans serif), and Symbol are recommended. Unusual fonts may create incompatibilities with ScholarOne Manuscripts/Manuscript Central that delay processing. If special symbols require other fonts, the font should be embedded in the pdf document.

Some issues with specific file formats are as follows:

- **Quartz PDF or GhostScript PDF files.** ScholarOne does not fully support PDF files created in Quartz or Ghostscript PDF Writer at this time, and those file types may not properly convert. If your Quartz or GhostScript PDF file fails to convert, you should open it in Adobe Acrobat or Adobe Reader, choose the Save As option for PDF, then try re-uploading.
- **pdfTeX files and TeX Live 2011 files.** ScholarOne Manuscripts accepts PDF files up to version 1.7. The latest versions of the pdfTeX compiler for Mac (starting with pdfTeX-1.40.11) and TeX Live 2011 output PDF files in a version not currently supported by ScholarOne Manuscripts.

To resolve this and have a PDF file that will convert properly, the PDF file will need to be distilled to Adobe version 1.7 or earlier. There are some types of 1.7 and 1.6 files that still may not work. Therefore, if you receive an error please downgrade to a 1.5 version.

C. Content Notes

1. Language

It is the responsibility of authors to ensure that papers submitted for review are formulated in acceptable English. Inadequate English obscures the technical content of the manuscript and will be grounds for rejection. Authors who need assistance in polishing the English in their manuscripts should obtain this help before the initial submission. Submissions are reviewed by volunteers who are leading international experts in the technical content of the paper. Authors should not expect these volunteers to assist in correcting their language.

2. Literature Review

An effective literature review is essential to any submission. Inadequate references are grounds for rejection. The author is referred to the editorial by the Editor-in-Chief of TPEL in the January 2016 issue for suggestions on how to properly cite past relevant research.

3. Multi-part Papers

The submission of papers in a series (Part I, Part II, etc.) on the same subject is normally discouraged as a matter of policy. In such cases the authors may be asked to consolidate the work into a single submission. If multi-part papers are submitted, then each individual paper must be evaluated on its own merits for its individual publication.

D. Active Content/Multimedia

Supplemental digital content may be submitted with a paper. Examples of such content include multimedia files (e.g., a video demonstration or presentation) and datasets. For more details on this option, refer to “Preparing Multimedia Materials” from the IEEE Transactions and Journals Department, <http://www.ieee.org/documents/MMdocumentation.pdf> and/or read our instructions for submitting Active Content/Multimedia files “*IEEE Transactions on Power Electronics* Guidelines for Active Content/Multimedia Material.”

IV. Letter Submissions

Papers indicated by authors as “Letters” submissions are considered through an expedited review process by a special team of associate editors. The objective is to provide the quickest possible route to publication for short, focused papers on topics of current interest. The process is accelerated because only short manuscripts are considered and because a publication decision is made after the first set of reviews become available. Letters should be no longer than three when published; therefore manuscript submissions should be limited to three double-column, single-spaced pages in addition to the title page described above. Please indicate on both the title page and ScholarOne Manuscripts/Manuscript Central that the paper is to be considered for Letters. The Power Electronics Society continues to actively support and encourage submissions of this type as a way to reduce publication time.

V. Page Charges

In final format, regular papers nine pages and above will incur an excess page charge, currently \$162 per page. For letters, pages five and above will incur this page charge. After the final paper proof has been approved and the paper has been assigned to an issue and scheduled for publication, the IEEE Reprints department will prepare an invoice and notify the corresponding author of potential excess page charges. Authors must commit to paying excess page charges before the paper is sent to IEEE for publication. While failure to pay mandatory page charges in a timely fashion will not prevent publication of the subject paper, the IEEE TPEL Editor reserves the right to refuse subsequent paper submissions from authors who are in arrears on mandatory page charges.

VI. Final Hints for Submitting the Best Papers Possible

Some authors may find this 2018 webinar, which outlines hints for getting papers published in *IEEE Transactions on Power Electronics*, helpful. The presentation is free for all IEEE PELs members. <http://resourcecenter.ieee-pels.org/category/webinars>

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