**Preparation of Papers for IEEE Instrumentation & Measurement Magazine**

[[1]](#footnote-1)

First Author, Second Author, and Third Author

This document is a template for preparing a submission for *IEEE Instrumentation & Measurement Magazine*. The Magazine has the goal of providing readable introductions and overviews of methodologies, technologies and applications in the field of Instrumentation and Measurement to a wide engineering audience. To such aim, many special issues are dedicated to specific hot and challenging topics in the Instrumentation and Measurement framework. The introductory paragraph should not be labeled abstract, as the Magazine is not a technical journal.

**Guidelines for Manuscript Preparation**

Articles submitted to the Magazine must be framed in the proper context of Instrumentation and Measurement. This could be achieved by properly structuring sections that review of the state of the art and motivations of the work, with the aim of properly highlighting the subject addressed by the paper and demonstrating its contextualization in the framework of IM. It is expected that sufficient references be made to articles published in Instrumentation and Measurement venues (journals and conferences).

Although feature articles are expected to have technical content, they must have a broader appeal and not be too specialized (e.g., without many equations or detailed code), since they should primarily present to the wide audience a general overview of the scientific subject addressed. A section describing SHORT case studies are encouraged, to demonstrate applications of the methodology/technology addressed by the article.

Articles are NOT expected to necessarily bring meaningful novelties. Review articles and overviews on IM methodologies/technologies/applications are very welcome, as well as contributions dealing with Open Problems in IM, to present challenging and ambitious topics which could be assisted by current and advanced technology.

In line with the I&MM mission, articles must be more tutorial in nature and written to appeal to non-experts as well as experts in the field.

**Paper style**

Notice that the article should not be organized in an outline format with Roman numerals. Please use a one-column format in Word, and present the complete manuscript in 12-point Times New Roman font. Use margins of 2.5 cm on each side and left justify the text. The article will be formatted as a two-column layout by the printer; for submitting an article, please do not add any special spacing or formatting. The *Magazine* does not include footnotes or page numbers, and author information should be placed in the bio.

The Magazine may include an introductory paragraph that acts as an abstract. It does not need to be labeled with a heading. Submit a paper that has no more than 3,500 words (5000 words for review articles) including tables. Submit a paper with no more than five figures, if possible.

***Figures and Tables***

Please limit the total number of figures to 5-6, if possible.

Please number figures sequentially, provide a call-out in the text, and include a brief figure caption with each figure. The description for a figure belongs in the text. Similarly, descriptions of data and information presented in a table should be given in the text.

***Fig. 1.*** Figures should be formatted in line with the text and have a caption. Make sure that you provide a citation if a figure is based on a previous publication and obtain permission to reuse a figure, so that the appropriate credit can be listed in the caption.

Number all equations, references, tables, and figures in consecutive, numerical order.

***Subheadings***

Write **Headings** in bold font and ***Subheadings*** in bold italic font with no numbering or outline formatting. *Third level headings*: should be incorporated in the first paragraph of that heading.

## **Abbreviations and Acronyms**

Define abbreviations and acronyms the first time they are used in the text. Abbreviations such as IEEE, SI, ac, and dc do not have to be defined. Do not use abbreviations in the title unless they are unavoidable (for example, “IEEE” in the title of this article). The *IEEE Editorial Style Manual for Authors* is available at <https://journals.ieeeauthorcenter.ieee.org/create-your-ieee-journal-article/create-the-text-of-your-article/ieee-editorial-style-manual/>. This contains a formal set of editorial guidelines for IEEE Transactions, Journals, and Letters, including:

* punctuation;
* capitalization;
* abbreviations;
* section headings;
* numbers, equations;
* footnotes;
* biographies;
* some common mistakes;
* units of measurement.

Communicate your work clearly. If you are not fully proficient in English, consider using an English language editing service before submitting your article. An expert editing service can help you refine the use of English in your article, so you can communicate your work more effectively.

## **Other Recommendations**

Use one space after periods and colons. Hyphenate complex modifiers: “zero-field-cooled magnetization.” Use a zero before decimal points: “0.25,” not “.25.” Use “cm3,” not “cc.” Indicate sample dimensions in metric measurements such as 0.1 cm × 0.2 cm.

A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.) In American English, periods and commas are generally placed within quotation marks, like “this period.” Avoid contractions; for example, write “do not” instead of “don’t.” The serial comma is preferred: “A, B, and C” instead of “A, B and C.”

**Math**

If you are using *Word,* use either the Microsoft Equation Editor or the *MathType* add-on (http://www.mathtype.com) for equations in your paper (Insert | Object | Create New | Microsoft Equation *or* MathType Equation).

## **Equations**

Number equations consecutively with equation numbers in parentheses flush with the right margin. To make your equations more compact, you may use the solidus ( / ), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. In the text, refer to “(1),” not “Eq. (1)” or “equation (1),” except at the beginning of a sentence. Be sure that the symbols in your equation have been defined before the equation appears or immediately following.

**Publishing Policies**

IEEE Publication Policies: Please familiarize yourself with and strictly follow relevant IEEE policies in the IEEE Publication Services and Products Board Operations Manual (PSPB Manual), in particular, Sections 8.2.1A (Authorship), 8.2.1.B (Responsibilities of Authors), 6.3.1 + 8.1.4 (Copyright), and 8.2.4 (Author misconduct and plagiarism). Please take very seriously author misconduct and plagiarism.

***Publication Principles***

Please strictly follow the Ethical Requirements, including the definition of authorship, the appropriate citation of sources, the accurate reporting of data and the publishing of original research.

The author is responsible for obtaining permission to re-use figures in the *Magazine* so that appropriate credit is given in the figure caption.

## **Copyright Form**

If accepted for publication, authors must submit a copyright form. Authors are responsible for obtaining any necessary approvals and/or security clearances. For additional information on intellectual property rights, visit the IEEE Intellectual Property Rights department web page at

http://www.ieee.org/publications\_standards/publications/rights/index.html.

**Acknowledgment**

Should authors need to recognize a corporation or funding organization, please include a brief acknowledgment statement.

**References**

Please limit the number of references to 10-12 (15-18 for review articles), if possible.

Keeping the numbers in sequential order as they appear in the text, the reference number should appear on the line, in square brackets, and inside the punctuation. Multiple references are each numbered with separate brackets, i.e. [14], [16]. In the text, do not use “Ref.” or “reference” except at the beginning of a sentence, if needed.

Please do not use automatic numbering or endnotes; please type the reference list at the end of the paper using the IEEE guidelines shown below. They should be left-justified with no hanging indentation. Please use author’s first initial, last name and list all of the authors, if available. If the list exceeds 5, please use *et al*. The *Magazine* does not include DOIs.

If the paper has no references, please supply three “For Further Reading” sources. These should be added at the end of the article and be in the format for references but do not need to be cited in the text and are not numbered.

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***First A. Author*** (M’76–SM’81–F’87) (first.author@university.edu) bio should be brief (3-4 lines) and include current affiliation: employer or university and job title. Job titles are capitalized. The current job must have a location; previous positions may be listed without one. Next, the author’s educational background is listed. The degrees should be listed with type of degree in what field, which institution, city, state, and country, and year the degree was earned. The author’s major field of study should be lower-cased. The final details should include current areas of research. Please do not include information about publications, patents or awards. The *Magazine* does not include photos.

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