

## **DEVELOPING A MANUSCRIPT FOR IEEE MICROWAVE MAGAZINE**

IEEE Microwave Magazine is a publication of the IEEE Microwave Theory and Techniques Society (MTT) that focuses on the publication of general interest review, tutorial, and survey papers rather than new research, and that are within the MTT Society's field of interest (<https://www.mtt.org/field-interest-statement/>). Technical features should present a balanced picture of the state-of-the art, rather than focusing on the research from your lab or company only.

The magazine contains submitted technical articles, either as features or application notes. The technical content of the magazine is about 55 pages per issue, consisting of 4-5 feature articles and 1-2 application notes.

Good magazine articles differ from technical journal articles in several ways. Articles should be of interest to a broad audience and understandable by non-experts in the field. Equations should be used sparingly. Qualitative descriptions or graphs are preferred tools for explaining relationships. When mathematical development is used, it is often useful to include it in separate sidebars that will be published with the article and can be referred to in the main text. The use of diagrams or illustrations to explain qualitative concepts is encouraged. Full color illustrations are also encouraged.

The language of the article can be less formal than that desired for our journals. Liberal use of headings and subheadings that may include "catchy" phrases or questions are appropriate. A reader should be able to get a good impression of what the article contains by briefly examining the figures and headings/subheadings of the article. While the article should not be a commercial for your organization, it can present results from your labs, along with photos and descriptions of your products.

All technical articles undergo peer review before being accepted. Sometimes an article will require multiple review/revision cycles prior to acceptance for publication. For example, a manuscript that will appear in the December issue of the magazine needs to be submitted by mid June to provide enough time for review, revision, acceptance, and production. Our production schedule includes roughly ten weeks of review cycle and ten weeks of IEEE formatting of the final drafts. Three weeks into the IEEE formatting cycle authors will receive a proof to review. This proof needs to be returned within three days to maintain the production schedule. If your article is part of a "Focus" issue the Guest editor will keep you informed of all the deadlines. If your article is not part of the issue "Focus" then it is called "loose" and will be placed in either the next issue or the most appropriate upcoming issue. If you have any questions about when your article will appear please contact the Editor-in-Chief ([microwave.editor@ieee.org](mailto:microwave.editor@ieee.org)).

### **ARTICLE PREPARATION GUIDELINES and FAQs**

#### **What are the guidelines for feature articles?**

Feature articles are review or overview papers, or tutorial articles. The primary goal of a review feature is to provide an overview or survey of a topic, describing the state of the art, citing examples from several sources, and providing some comparative description or analysis of these various examples. Authors may highlight their own work, but the more general context needs to be included in some depth, as well; the usual 1-2 paragraph introduction found in a research paper will not suffice.

Feature articles are typically about 8-10 pages in length, which is around 6,000 words, including references. This roughly translates to 16-20 pages of double-spaced, single column narrative. Authors of overlength manuscripts will be strongly encouraged to meet this target word length, to produce a punchier article more suited to the magazine.

#### **What are the guidelines for an Application Note?**

The primary goal of an application note could be to describe how to accomplish a specific task, or to describe a particular piece of equipment or software. This should include the illustration of a technique, measurement, or product application that will be newsworthy and of benefit to our readers as microwave engineers. It should also try to show the problem being solved is general, that several alternative

techniques (i.e., products) exist; the application note may be using one product as an illustration. Application notes tend to run two or three pages, but can run as high as five: this is about 3,000 words.

### **Is it alright to use figures from prior publications?**

Previously published figures can be used as long as they are referenced. Figures used previously by IEEE publications, such as Transactions, do not need further permission. **If the figures are from a non-IEEE source, written permission must be obtained from the copyright holder that allows the IEEE to republish them; this may be in the form of an email message.** The responsibility to obtain permissions lies with the author. Be forewarned that while the internet can be a great source of figures some of those figures can be very time consuming to track down the permission to use. While the staff and the MM can help you with this you may need to look into alternate figures or redraw figures.

### **What is one magazine page?**

Because the magazine uses either a one-column or two-column format for features, along with large headings and at least one graphic on the first page, the first page of a feature runs about 200-300 words. The second page, and all following pages of a regular article, can contain about 800 words each, if no graphs or tables are included. For example, a six page feature article translates into a ~4,000 word document. You need to factor in how much space your figures and tables are going to take.

### **How many figures/tables in a feature article?**

Tables and figures subtract from the word estimates discussed above. Features typically include one or two figures/tables per printed page. Authors of magazine features are encouraged to use full color figures generously to explain concepts. Figure captions should be detailed enough that a reader can understand the article, and hopefully be drawn into reading it, just by looking at the figures.

### **How many words will a figure/table displace?**

Figures and tables vary quite a bit in size. The smallest figure displaces about 80 words, while the largest displaces about 400 words. The size of the figure/table on the final page will be chosen to make it most readable. On average, the ratio of figures/text for a feature article is about one-to-two (that is, figures and tables comprise approximately 1/3 of the final printed page. Some features have fewer figures (1:3 ratio of figures to text) and some features have a figure-to-text ratio as high as 3:2.

### **What about equations?**

The readership is your microwave engineering peers. They understand equations, but many are, perhaps, not familiar with your field of endeavor. This leads us to the conclusion that fewer equations are probably better for a magazine article, as you are not trying to describe or develop new phenomena.

### **Abstract, Footnotes, and References**

Magazine articles do not have an abstract: they are not research papers. Footnotes are not used in the magazine: they tend to distract from the flow of the article. You should find an alternative way to express your comment other than a footnote. References must conform to IEEE format, which can be found in the IEEE Guidelines for Authors, <https://ieeauthorcenter.ieee.org/become-an-ieee-author/> .. Index terms are also not used.

### **What is a sidebar?**

Sometimes it may be necessary to include a technical description of a measurement, or physical phenomenon. For example, you may include a technical description that provides the details behind the topic under discussion, but to include these details in the main flow of the manuscript would be a digression to the main flow, and may distract or even deter some readers from completing the article. This is a good time to think about putting these details into a "sidebar," for the interested reader to pursue. The sidebar is usually one-half to one full page and has a different background color (provided by the IEEE press). To include a sidebar in your article, you should generally put this section at end of your manuscript, under the rubric "sidebar."

### **Why was my title changed?**

Because this is a magazine the title may be changed to appear as eye catching as possible. The full title will appear in the table of contents. You will be able to review your title when you review your proof. You should feel free to suggest a short and catchy title when submitting your article.

### **Why was my grammar changed?**

The magazine has a style which is maintained by the IEEE editors. For consistency all the articles are made to conform to that style. When you get your proof do not try to change your grammar style back to what you originally sent in. You should only try to correct technical errors.

### **Where can I find further guidelines for authors?**

In addition to this set of guidelines, the IEEE has a guide that all authors should read. This document can be found at: <https://www.mtt.org/guidelines-for-magazine-authors/> .

### **SUBMISSION FORMAT**

Microwave Magazine does not use a submission template. Authors are encouraged to prepare their manuscripts using a single column format with double spacing. This makes reading and commenting easy for the reviewers. Don't spend too much time formatting where the figures should go, as in the magazine, the typesetting is handled by the IEEE Publications Editor for best presentation.

Your manuscript can be prepared using Word, RTF, LATEX, Mac Pages, or other common word-processor tools, or in LATEX format. While you may choose to place figures in the text to give the reviewer an idea of what the final article will look like, once your article is accepted for publication, we will ask for the original figures in JPEG, TIFF, or EPS format, with a resolution of at least 300 dpi, for the IEEE Press to typeset the article.

Submissions can be made to [microwave.editor@ieee.org](mailto:microwave.editor@ieee.org) or [microedt@outlook.com](mailto:microedt@outlook.com).

Good luck! We are looking forward to receiving your manuscript!

Best regards,

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