



## IEEE Future Networks Tech Focus Template

The articles should be approximately 1000-2000 words in length. Each article should consist of a title, authors' names with affiliations and email addresses, and an abstract of 50 to 100 words. A general guideline is given in the following template.

### Title: Wireless Technologies for 5G (example)

Author's Name

Affiliation

Email address

#### Abstract

The abstract must be a concise yet comprehensive reflection of what is in your article and it must be self-contained, without abbreviations, footnotes, or references. It should be a microcosm of the full article. The abstract must be between *50 to 100 words*. Be sure that you adhere to these limits; otherwise, you will need to edit your abstract accordingly. The abstract should include three or four different keywords or phrases, as this will help readers and search engines to find it. Ensure that your abstract reads well and is grammatically correct.

#### 1. Introduction

Please make sure your opening paragraphs communicate your main message, and convey why that message is relevant or important for readers to appreciate right now. For example, in [1], the article starts with: The wireless industry must develop fifth-generation (5G) millimeter-wave (mmWave) wireless communication networks to keep up with consumer demand for content and the generated traffic. Major standard bodies like the 3rd Generation Partnership Project (3GPP) and the International Telecommunication Union (ITU) are voting on wideband channel models — a necessary first step in developing and comparing different air interface protocols and determining spectral efficiency (SE) of advanced mmWave physical (PHY) layer concepts such as beamforming and massive multiple-input multiple-output (MIMO) ... ..

#### 2. Section 2 Title

The main ideas/topics and results of the research work should be presented in a constructive way and possibly in separate sections. The IEEE Future Networks Tech Focus articles should be of interest to a broad audience and understandable by non-experts in the field. The language of the article can be less formal than that desired for IEEE Transactions. Liberal use of headings and subheadings that may include "catchy" phrases are encouraged. Equations should be used sparingly. Specialised terms should be avoided, and abbreviations and acronyms should be clearly defined before they are used in the text. The use of diagrams or illustrations to explain the main concepts is encouraged. A general IEEE style guide on how to prepare your graphs is available at [www.ieee.org/authortools](http://www.ieee.org/authortools).

### 3. Section 3 Title

### 4. Section 4 Title

... ..

### 5. Conclusion

A conclusion may review the main points of the paper; however, do not replicate the abstract as the conclusion. In the conclusion, you might further elaborate on the importance of the work and give future outlooks.

### References

The references should be numbered consecutively within brackets [1]. Refer simply to the reference number, as in [3]—do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] was the first ...”. Papers that have not been published, even if they have been submitted for publication, should be cited as “unpublished”. Papers that have been accepted for publication should be cited as “in press”. A general IEEE style guide on references is available at [www.ieee.org/authortools](http://www.ieee.org/authortools).

1. T. S. Rappaport, S. Sun, and M. Shafi, “5G Channel Model with Improved Accuracy and Efficiency in mmWave Bands,” *IEEE Future Networks Tech Focus*, vol. 1, no. 1, Mar. 2017.
2. J. S. Turner, “New directions in communications,” *IEEE J. Sel. Areas Commun.*, vol. 13, no. 1, pp. 11-23, Jan. 1995.
3. M. Young, *The Technical Writer’s Handbook*, Mill Valley, CA: University Science, 1989.
4. New York University, NYUSIM, 2016. [Online]. Available: <http://wireless.engineering.nyu.edu/5g-millimeter-wave-channelmodeling-software/>.



**First A. Author** (M’78–SM’81–F’87) and all authors shall include short biographies, in approximately 100 words. The first sentence may contain the author’s educational background. 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 second part lists work experience and job titles. Current and previous research interests may be included. The third part may list memberships and contributions for IEEE committees and publications. A photograph shall also be provided and it should be of good quality, and professional-looking.

### Additional Notes

*The article should be approximately 1000-2000 words in length. Please also provide one representative image or drawing in a separate file that can be put on the abstract webpage to help illustrate your article.*