

Preparation of Manuscripts for the International Journal of Artificial Intelligence Tools and Applications

F. A. AUTHOR¹ (Student Member, IEEE), B. AUTHOR² (Member, IEEE), C. AUTHOR²

¹First Affiliation

²Second Affiliation

CORRESPONDING AUTHOR: F. A. Author (e-mail: author@serveur.dz).

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ABSTRACT These instructions give you guidelines for preparing papers for AITA. Paper titles should be written in uppercase and lowercase letters, not all uppercase. Full names of authors are preferred in the author field, but are not required. Put a space between authors' initials. 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 150–250 words. Be sure that you adhere to these limits; otherwise, you will need to edit your abstract accordingly. The abstract must be written as one paragraph, and should not contain displayed mathematical equations or tabular material. The abstract should include three or four different keywords or phrases, as this will help readers to find it.

INDEX TERMS Enter key words or phrases in alphabetical order, separated by commas.

I. INTRODUCTION

This document is a template for AITA journal aiming to help authors edit correctly their work prior to submission.

A. ABBREVIATIONS AND ACRONYMS

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations such as IEEE, SI, ac, and dc do not have to be defined. Abbreviations that incorporate periods should not have spaces: write “C.N.R.S.,” not “C. N. R. S.” Do not use abbreviations in the title unless they are unavoidable (for example, “IEEE” in the title of this article).

B. OTHER RECOMMENDATIONS

Use one space after periods and colons. Hyphenate complex modifiers: “zero-field-cooled magnetization.” Avoid dangling participles, such as, “Using (1), the potential was calculated.” [It is not clear who or what used (1).] Write instead, “The potential was calculated by using (1),” or “Using (1), we calculated the potential.”

If you wish, you may write in the first person singular or plural and use the active voice (“I observed that ...” or

“We observed that ...” instead of “It was observed that ...”). Remember to check spelling. If your native language is not English, please get a native English-speaking colleague to carefully proofread your paper.

II. MATH

If you are using Microsoft *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). “Float over text” should *not* be selected.

A. EQUATIONS

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). First use the equation editor to create the equation. Then select the “Equation” markup style. Press the tab key and write the equation number in parentheses. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they

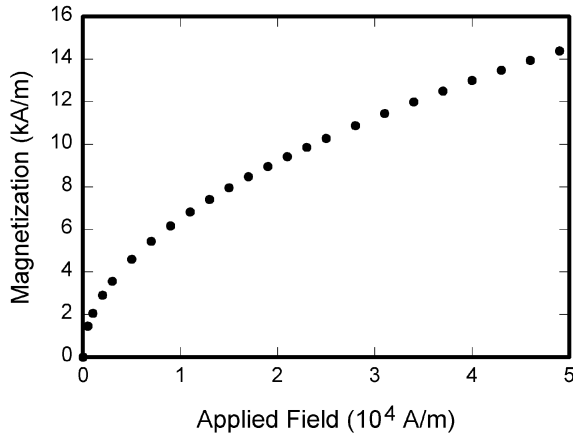


FIGURE 1. Magnetization as a function of applied field. Note that “Fig.” is abbreviated. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption.

are part of a sentence, as in

(1)

III. UNITS

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses).

IV. GUIDELINES FOR GRAPHICS PREPARATION AND SUBMISSION

A. TYPES OF GRAPHICS

The following list outlines the different types of graphics published usually in IEEE journals. They are categorized based on their construction, and use of color / shades of gray:

1) COLOR/GRAYSCALE FIGURES

Figures that are meant to appear in color, or shades of black/gray (unless you really mean something that alternates). Such as figures may include photographs, illustrations, graph and multicolor graphs, and flowcharts.

2) AUTHOR PHOTOS

Head and shoulders shots of authors that appear at the end of our papers.

3) TABLES

Data charts which are typically black and white, but sometimes include color.

B. MULTIPART FIGURES

Figures compiled of more than one sub-figure are presented side-by-side, or stacked. If a multipart figure is made up of multiple figure types (one part is lineart, and another is grayscale or color), the figure should meet the stricter guidelines.

TABLE 1. Units for Magnetic Properties

Symbol	Quantity	Conversion from Gaussian and CGS EMU to SI ^a
Φ	Magnetic flux	1 Mx \rightarrow 10^{-8} Wb = 10^{-8} V·s
B	Magnetic flux density, magnetic induction	1 G \rightarrow 10^{-4} T = 10^{-4} Wb/m ²
H	Magnetic field strength	1 Oe \rightarrow $10^{-3}/(4\pi)$ A/m
m	Magnetic moment	1 erg/G = 1 emu \rightarrow 10^{-3} A·m ² = 10^{-3} J/T
M	Magnetization	1 erg/(G·cm ³) = 1 emu/cm ³ \rightarrow 10^{-3} A/m
$4\pi M$	Magnetization	1 G \rightarrow $10^{-3}/(4\pi)$ A/m
σ	Specific magnetization	1 erg/(G·g) = 1 emu/g \rightarrow 1 A·m ² /kg
j	Magnetic dipole moment	1 erg/G = 1 emu \rightarrow $4\pi \times 10^{-10}$ Wb·m
J	Magnetic polarization	1 erg/(G·cm ³) = 1 emu/cm ³ \rightarrow $4\pi \times 10^{-4}$ T
χ, κ	Susceptibility	1 \rightarrow 4π
$\chi\rho$	Mass susceptibility	1 cm ³ /g \rightarrow $4\pi \times 10^{-3}$ m ³ /kg
μ	Permeability	1 \rightarrow $4\pi \times 10^{-7}$ H/m $= 4\pi \times 10^{-7}$ Wb/(A·m)
μ_r	Relative permeability	$\mu \rightarrow \mu_r$
w, W	Energy density	1 erg/cm ³ \rightarrow 10^{-1} J/m ³
N, D	Demagnetizing factor	1 \rightarrow $1/(4\pi)$

Vertical lines are optional in tables. Statements that serve as captions for the entire table do not need footnote letters.

^aGaussian units are the same as cg emu for magnetostatics; Mx = maxwell, G = gauss, Oe = oersted; Wb = weber, V = volt, s = second, T = tesla, m = meter, A = ampere, J = joule, kg = kilogram, and H = henry.

C. RESOLUTION

The proper resolution of your figures will depend on the type of figure it is as defined in the “Types of Figures” section. Author photographs, color, and grayscale figures should be at least 300dpi. Line art, including tables, should be a minimum of 600dpi.

D. VECTOR ART

In order to preserve the figures’ integrity across multiple computer platforms, we accept files in the following formats: .EPS/.PDF/.PS. All fonts must be embedded or text converted to outlines in order to achieve the best-quality results.

E. REFERENCING A FIGURE OR TABLE WITHIN YOUR PAPER

When referencing your figures and tables within your paper, use the abbreviation “Fig.” even at the beginning of a sen-

tence. Do not abbreviate “Table.” Tables should be numbered with Roman Numerals.

V. CONCLUSION

A conclusion section is not required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

APPENDIX

Appendixes, if needed, appear before the acknowledgment.

ACKNOWLEDGMENT

REFERENCES

Reference text is 8pt. Reference numbers start at the left margin of the corresponding page column, use no periods, and have the full text portions indented 0.6cm as shown in the examples below.

- [1] G. M. Amdahl, G. A. Blaauw, and F. P. Brooks, “Architecture of the IBM System/360,” *IBM J. Res. & Dev.*, vol. 8, no. 2, pp. 87–101, 1964. (journal)
- [2] G. M. Amdahl, G. A. Blaauw, and F. P. Brooks, “Architecture of the IBM System/360,” *IBM J. Res. & Dev.*, vol. 8, no. 2, pp. 87–101, 1964. (journal)

Basic format for books:

J. K. Author, “Title of chapter in the book,” in *Title of His Published Book*, xth ed. City of Publisher, (only U.S. State), Country: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx-xxx.

Examples:

- [1] G. O. Young, “Synthetic structure of industrial plastics,” in *Plastics*, 2nd ed., vol. 3, J. Peters, Ed. New York, NY, USA: McGraw-Hill, 1964, pp. 15-64.
- [2] W.-K. Chen, *Linear Networks and Systems*. Belmont, CA, USA: Wadsworth, 1993, pp. 123–135.

AUTHORS BIOGRAPHY

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THIRD C. AUTHOR, JR. received the B.S. degree in mechanical engineering from National Chung Cheng University, Chiayi, Taiwan, in 2004 and the M.S. degree in mechanical engineering from National Tsing Hua University, Hsinchu, Taiwan, in 2006. He is currently pursuing the Ph.D. degree in mechanical engineering at Texas A&M University, College Station, TX, USA.

From 2008 to 2009, he was a Research Assistant with the Institute of Physics, Academia Sinica, Tapei, Taiwan. His research interest includes the development of surface processing and biological/medical treatment techniques using nonthermal atmospheric pressure plasmas, fundamental study of plasma sources, and fabrication of micro- or nanostructured surfaces.

Mr. Author’s awards and honors include the Frew Fellowship (Australian Academy of Science), the I. I. Rabi Prize (APS), the European Frequency and Time Forum Award, the Carl Zeiss Research Award, the William F. Meggers Award and the Adolph Lomb Medal (OSA).