[[1]](#footnote-1)

Preparation of Papers for Proceedings of the Technical university of Sofia

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# INTRODUCTION

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## Typesetting

All paragraphs should be indented 3.6 mm.

**Times New Roman 10 pt** font should be used for normal text in the body of the paper.

TABLE I

Units for Magnetic Properties

|  |  |  |
| --- | --- | --- |
| Symbol | Quantity | Conversion from Gaussian andCGS EMU to SI a |
| Φ | magnetic flux | 1 Mx→ 10−8Wb = 10−8 V·s |
| *B* | magnetic flux density,  magnetic induction | 1 G → 10−4 T = 10−4Wb/m2 |
| *H* | magnetic field strength | 1 Oe→ 103/(4π) A/m |
| *m* | magnetic moment | 1 erg/G = 1 emu → 10−3 A·m2 = 10−3 J/T |
| *M* | magnetization | 1 erg/(G·cm3) = 1 emu/cm3→ 103 A/m |
| 4π*M* | magnetization | 1 G → 103/(4π) A/m |
| σ | specific magnetization | 1 erg/(G·g) = 1 emu/g → 1 A·m2/kg |
| *j* | magnetic dipole  moment | 1 erg/G = 1 emu → 4π× 10−10Wb·m |
| *J* | magnetic polarization | 1 erg/(G·cm3) = 1 emu/cm3→ 4π× 10−4 T |
| χ*,*κ | susceptibility | 1 → 4π |
| χρ | mass susceptibility | 1 cm3/g → 4π× 10−3 m3/kg |
| μ | permeability | 1 → 4π× 10−7 H/m  = 4π× 10−7Wb/(A·m) |
| μr | relative permeability | μ→μr |
| *w, W* | energy density | 1 erg/cm3→ 10−1 J/m3 |
| *N, D* | demagnetizing factor | 1 → 1/(4π) |

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, H = henry.

## Title and author name(s)

The paper title and the author names appear on the first page and should be set centered across the full page width. The title is set in 24 pt size. The author names appear below the title in 11 pt size, normal face. 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 complete affiliations of the authors should be set in footnotein the first page of the paper.

## Abstract

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Equations are centered within columns. You will need to determine whether or not your equation should be typed using either the Times New Roman or the Symbol font (please no other font).The equations may have a reference number placed on the right. The reference number should be enclosed in parentheses. For example

 . (1)

Larger equation must be split in multiple lines.

 (2)

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. Italicize symbols (*T* might refer to temperature, but T is the unit tesla). Refer to “(1),” and at the beginning of a sentence “Equation (1) is ....”

## Figures and tables

Figures and tables should be placed as close as possible to the text where they are first referenced to. Figures should be numbered in the order of appearance in the paper. Figures should be positioned within a single column or they can span two columns. In the latter case they should be placed at the top of a page. Place figure captions below the figures; place table titles above the tables. The captions are centered within a column. If your figure has two parts, include the labels “(a)” and “(b)” as part of the artwork. Please verify that the figures and tables you mention in the text actually exist. Use the abbreviation “Fig.” even at the beginning of a sentence. Do not abbreviate “Table.” Tables are numbered with Arabic numerals. Table caption should be written using Times New Roman 9 pt small caps font.



Fig. 1. It is good practice to explain the significance of the figure in the caption.

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When citing a section in a book, please give the relevant page numbers [1]. In sentences, refer simply to the reference number, as in [2]. At the beginning of a sentence use “Reference [2] shows ....” References [4], [5] and [6] representing book (when available online), journal (when available online) and report and handbook (when available online), respectively.

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## 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 CMOS, FPGA, SI, ac, and dc do not have to be defined. Do not use abbreviations in the title unless they are unavoidable.

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Use SI units. If you must use mixed units, clearly state the units for each quantity in an equation.

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Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion.

Appendix

Appendixes, if needed, appear before to write the acknowledgment.

Acknowledgment

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References

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

[2] J. K. Author, “Name of paper,” *Abbrev. Title of Periodical*, vol. *x, no*. *x,* pp*. xxx-xxx,* Abbrev. Month, year, DOI. 10.1109.*XXX*.123456.

[3] J. K. Author, “Title of paper,” in *Abbreviated Name of Conf.*, City of Conf., Abbrev. State (if given), Country, year, pp. *xxxxxx.*

[4] J. K. Author, “Title of chapter in the book,” in *Title of Published Book*, *x*thed. City of Publisher, State, Country: Abbrev. of Publisher, year, ch. *x*, sec. *x*, pp. *xxx–xxx*. [Online]. Available: http://www.web.com

[5] J. K. Author, “Name of paper,” *Abbrev. Title of Periodical*, vol. *x*, no. *x*, pp. *xxx-xxx*, Abbrev. Month, year. Accessed on: Month, Day, year, DOI: 10.1109.*XXX*.123456, [Online].

[6] J. K. Author. “Title of report,” Company. City, State, Country. Rep. no., (optional: vol./issue), Date. [Online] Available: site/path/file

[7] J. K. Author, “Title of paper,” unpublished.

[8] J. K. Author, “Title of paper,” to be published.

[9] J. K. Author, “Title of dissertation,” Ph.D. dissertation, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

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