

Preparation of Papers for IEET JOURNAL

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Abstract: (The abstract should not exceed 250 words. It should briefly summarize the essence of the paper and address the following areas without using specific subsection titles.): Objective: Briefly state the problem or issue addressed, in language accessible to a general scientific audience. Technology or Method: Briefly summarize the technological innovation or method used to address the problem. Results: Provide a brief summary of the results and findings. Conclusions: Give brief concluding remarks on your outcomes. Clinical Impact: Comment on the translational aspect of the work presented in the paper and its potential clinical impact. Detailed discussion of these aspects should be provided in the main body of the paper.

(Note that the organization of the body of the paper is at the authors' discretion; the only required sections are Introduction, Methods and Procedures, Results, Conclusion, and References. Acknowledgements and Appendices are encouraged but optional.)

Index Terms—At least four keywords or phrases in alphabetical order, separated by commas.

Note: There should no nonstandard abbreviations, acknowledgments of support, references or footnotes in in the abstract. This format is adjusted from IEEE format.

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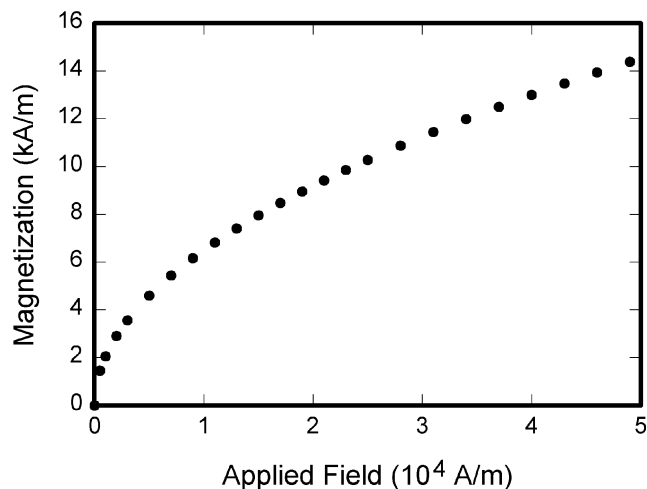


Fig. 1. Magnetization as a function of applied field. Note that “Fig.” is abbreviated. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption.

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accepted for author photos.

TABLE I
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 \cdot 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 \cdot m ² = 10^{-3} J/T
M	magnetization	1 erg/(G \cdot 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 \cdot g) = 1 emu/g \rightarrow 1 A \cdot m ² /kg
j	magnetic dipole moment	1 erg/G = 1 emu \rightarrow $4\pi \times 10^{-10}$ Wb \cdot m
J	magnetic polarization	1 erg/(G \cdot cm ³) = 1 emu/cm ³ \rightarrow $4\pi \times 10^{-4}$ T
χ, κ	susceptibility	1 \rightarrow 4π
χ_p	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 \cdot 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 π)

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 cgs 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.

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IV. 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). **This applies to papers in data storage.** For example, write “15 Gb/cm² (100 Gb/in²).” An exception is when English units are used as identifiers in trade, such as “3½-in disk drive.” Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

The SI unit for magnetic field strength H is A/m. However, if you wish to use units of T, either refer to magnetic flux density B or magnetic field strength symbolized as $\mu_0 H$. Use the center dot to separate compound units, e.g., “A \cdot m².”

In American English, periods and commas are within quotation marks, like “this period.” Other punctuation is “outside”! 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.”

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Be aware of the different meanings of the homophones “affect” (usually a verb) and “effect” (usually a noun), “complement” and “compliment,” “discreet” and “discrete,” “principal” (e.g., “principal investigator”) and “principle” (e.g., “principle of measurement”). Do not confuse “imply” and “infer.”

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IX. CONCLUSION

Please include a brief summary of the possible clinical implications of your work in the conclusion section. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. Consider elaborating on the translational importance of the work or suggest applications and extensions.

ACKNOWLEDGMENT

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