

Give all authors' names; use "et al." if there are six authors or more. Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [4]. Papers that have been accepted for publication should be cited as

“in press” [5]. In a paper title, capitalize the first word and all other words except for conjunctions, prepositions less than seven letters, and prepositional phrases.

For papers published in translated journals, first give the English citation, then the

original

foreign-language citation

[6].

*C. Abbreviations  
and Acronyms*

Define abbreviations and acronyms the first time they are used in the text, even if they have been defined in the abstract.

Abbreviations such as IEEE,

SI, MKS, CGS,  
ac, dc, and rms

do not have to be defined. Do  
not use abbreviations  
in the title  
unless they are unavoidable.

#### *D. Equations*

Number equations consecutively  
with equation numbers in  
parentheses flush with the  
right margin, as  
in (1). To make

your equations more compact,  
you may use the solidus ( / ),  
the exp function, or  
appropriate exponents.

Italicize Roman  
symbols for quantities and  
variables, but not  
Greek symbols.

Use an en dash (—) rather than  
a hyphen for a  
minus sign. Use  
parentheses to avoid

ambiguities in denominators. Punctuate equations with commas or periods when they are part of a sentence, as in

$$a + b = c.$$

(1)

Symbols in your equation should be defined before the equation appears or immediately following.

Use “(1),” not “Eq. (1)” or “equation (1),” except at the beginning of a sentence: “Equation (1) is ...”

### *E. Other Recommendations*

The Roman numerals used to number the section headings are optional. If you do use them, do not number

ACKNOWLEDGMENT and

REFERENCES, and

begin Subheadings

with letters. Use two  
spaces after  
periods (full stops).

Hyphenate complex  
modifiers:

“zero-field-cooled  
magnetization.” Avoid

dangling participles,

such as, “Using

(1), the potential was  
calculated.” Write

instead, “The



potential was calculated  
using (1),” or  
“Using (1), we  
calculated the potential.”

Use a zero before decimal  
points: “0.25,”

not “.25.” Use  
“cm<sup>3</sup>,” not “cc.” Do not

mix complete spellings and  
abbreviations of units:

“Wb/m<sup>2</sup>,” or  
“webers per square

meter,” not “webers/m<sup>2</sup>.” Spell units when they appear in text: “. . . a few henries,” not “. . . a few H.” If your native language is not English, try to get a native English-speaking colleague to proofread your paper. Do not add page numbers.

### III. UNITS

Use either SI (MKS) or CGS

as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as “3.5-inch 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 that you  
use in an equation.

#### IV. SOME COMMON MISTAKES

The word “data” is plural, not singular. The subscript for the permeability of vacuum<sub>0</sub> is zero, not a lowercase letter “o.” In American English, periods and commas are within quotation marks, like “this period.” A parenthetical statement at the end of a sentence is

punctuated outside  
of the closing  
parenthesis (like this). (A  
parenthetical *sentence*  
is punctuated  
within the parentheses.) A  
graph within a  
graph is an “inset,”  
not an “insert.” The word  
alternatively is  
preferred to the  
word “alternately” (unless

you mean something that alternates). Do not use the word “essentially” to mean “approximately” or “effectively.” Be aware of the different meanings of the homophones “affect” and “effect,” “complement” and “compliment,” “discreet” and “discrete,” “principal” and “principle.” Do not confuse “imply” and

“infer.” The prefix “non” is not a word; it should be joined to the word it modifies, usually without a hyphen.

There is no period after the “et” in the Latin abbreviation

“et al.” The abbreviation “i.e.” means “that is,” and the abbreviation “e.g.” means “for example.” An



excellent style  
manual for science  
writers is [7].

### ACKNOWLEDGMENT

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g.”

Try to avoid the stilted expression, “One of us (R. B. G.) thanks ...” Instead, try “R.B.G. thanks ...” Put

sponsor

acknowledgments in the  
unnumbered footnote  
on the first page.

## REFERENCES

- [1] G. Eason, B. Noble, and I.N. Sneddon, "On certain integrals of Lipschitz-Hankel type involving products of Bessel functions," *Phil. Trans. Roy. Soc. London*, vol. A247, pp. 529-551, April 1955.
- [2] J. Clerk Maxwell, *A Treatise on Electricity and*

*Magnetism*, 3<sup>rd</sup> ed., vol.

2. Oxford: Clarendon, 1892, pp.68-73.
- [3] I.S. Jacobs and C.P. Bean, "Fine particles, thin films and exchange anisotropy," in *Magnetism*, vol. III, G.T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271-350.
- [4] K. Elissa, "Title of paper if known," unpublished.
- [5] R. Nicole, "Title of paper with only first word capitalized," *J. Name Stand. Abbrev.*, in press.

- [6] Y. Yorozu, M. Hirano, K. Oka,  
and Y. Tagawa,  
“Electron spectroscopy  
studies on magneto-optical media  
and plastic substrate interface,” *IEEE  
Transl. J. Magn. Japan*, vol. 2, pp.  
740-741, August 1987 [*Digests 9<sup>th</sup>  
Annual Conf. Magnetism  
Japan*, p. 301, 1982].
- [7] M. Young, *The Technical  
Writer's Handbook*.  
Mill Valley, CA:  
University Science, 1989.