Paper Title (use style: paper title)

First Author's Name ¹, Second Author's Name ², Third Author's Name ³ (use style: Author)

- ¹ Affiliation, Postal address, e-mail, Web address (URL) (use style: Affiliation)
- ^{2,3} Affiliation, Postal address, e-mail, Web address (URL) (use style: Affiliation)

Abstract—This electronic document is a "live" template. The various components of your paper [title, text, heads, etc.] are already defined on the style sheet, as illustrated by the portions given in this document. (Abstract)

CRITICAL: Do Not Use Symbols, Special Characters, or Math in Paper Title or Abstract.

Please, note that required layout of the papers is the same as for extended abstracts, so you may continue using your extended abstract document template.

Keywords—component; formatting; style; styling (key words)

I. INTRODUCTION (USE STYLE: HEADING 1)

This template is saved as MS Word for the PC, provides authors with most of the formatting specifications needed for preparing electronic versions of their papers. All standard paper components have been specified for three reasons: (1) ease of use when formatting individual paper, (2) automatic compliance to electronic requirements that facilitate the concurrent or later production of electronic products, and (3) conformity of style throughout symposium proceedings. Margins, column widths, line spacing, and type styles are built-in; examples of the type styles are provided throughout this document and are identified in italic type, within parentheses, following the example. Some components, such as multi-leveled equations, graphics, and tables are not prescribed. (Body Text)

The authors should use this file to prepare and submit **Extended Abstract** of *3-4 pages* and a **Camera-Ready Paper** of *4-6 pages* (in English only) using Microsoft CMT online submission system. It should define the *scope of the work*, emphasize on new advances, theories and/or applications and include an analysis of results and findings. The paper must be structured such that the program committee will be able to understand the originality and the value of the work. Identify applicable sponsor/s here¹. If no sponsors, delete this footnote.

II. EASE OF USE

A. Selecting a Template (use style: Heading 2)

First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 $(210 \times 297 \text{ mm})$ paper size.

In case you prefer the LATEX please use our slightly modified template IDAACS.cls based on the IEEEtran LATEX style and the IEEE bibliography template. For details on its usage, please refer to IEEEtran_HOWTO.pdf.

B. Maintaining the Integrity of the Specifications

The template is used to format your paper and style the text. All margins, column widths, line spaces, and text fonts are prescribed; please do not alter them. You may note peculiarities. For example, the head margin in this template measures proportionately more than is customary. This measurement and others are deliberate, using specifications that anticipate your paper as one part of the entire proceedings, and not as an independent document. Please do not revise any of the current designations.

III. PREPARE YOUR PAPER BEFORE STYLING

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

A. Paper Title

In the paper title, capitalize the first letter of the first and last word and all the nouns, pronouns, adjectives, verbs, adverbs, and subordinating conjunctions (*If, Because, That, Which*). Capitalize abbreviations that are otherwise lowercase (e.g., use DC, not dc or Dc) except for unit abbreviations and acronyms.

Articles (a, an, the), coordinating conjunctions (and, but, for, or, nor), and most short prepositions are lowercase unless they are the first or last word. Prepositions of more than three letters (Before, Through, With, Without, Versus, Among, Under, Between) should be capitalized.

B. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc,

¹ Identify applicable sponsor/s here. If no sponsors, delete this footnote. (sponsors)

dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

C. 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.
- Do not mix complete spellings and abbreviations of units: "Wb/m²" or "webers per square meter", not "webers/m²". Spell out units when they appear in text: "... a few henries", not "... a few H".
- Use a zero before decimal points: "0.25", not ".25". Use "cm³", not "cc". (bullet list)

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.

$$\lambda_i = \lim_{p \to \infty} \frac{1}{p} \sum_{t=1}^p \ln \frac{|w_i(t)|}{|w_i(t-1)|}$$
 (1)

For Office 2016 and higher versions use the built-in Equation Editor (e.g., $A = \pi r^2$). Match the main text size 12 pt. Subscripts and symbols scaled automatically.

Note that the equation is centered using a center tab stop. Be sure that the symbols in your equation have been defined before or immediately following the equation. Use "(1)", not "Eq. (1)" or "equation (1)", except at the beginning of a sentence: "Equation (1) is ..."

E. Some Common Mistakes

- The word "data" is plural, not singular.
- The subscript for the permeability of vacuum μ_0 , and other common scientific constants, is zero with subscript formatting, not a lowercase letter "o".
- In American English, commas, semi-/colons, periods, question and exclamation marks are located within quotation marks only when a complete thought or name is cited, such as a title or full quotation. When quotation marks are used, instead of a bold or italic typeface, to highlight a word or phrase, punctuation should appear outside of the quotation marks. A parenthetical phrase or

- 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 really mean something that alternates).
- Do not use the word "essentially" to mean "approximately" or "effectively".
- In your paper title, if the words "that uses" can accurately replace the word "using", capitalize the "u"; if not, keep using lower-cased.
- 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].

IV. USING THE TEMPLATE

After the text edit has been completed, the paper is ready for the template. Duplicate the template file by using the Save As command, and use the naming convention prescribed by your symposium for the name of your paper. In this newly created file, highlight all of the contents and import your prepared text file. You are now ready to style your paper; use the scroll down window on the left of the MS Word Formatting toolbar.

Type the text of the paper in two columns. Balance the length of the columns, especially on the last page of the paper. Left- and right-justify your columns. Use tables and figures to adjust column length. On the last page of your paper, adjust the lengths of the columns so that they are equal. Use automatic hyphenation and check spelling. Digitize or paste down figures.

A. Authors and Affiliations

The template is designed so that author affiliations are not repeated each time for multiple authors of the same affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization).

B. Identify the Headings

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include Acknowledgments and References and, for these, the correct style to use is "Heading 5". Use "figure caption" for your Figure captions, and "table head" for your table title. Run-in heads, such as "Abstract", will require you to apply a style (in this case, italic) in addition to the style provided by the drop down menu to differentiate the head from the text.

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced. Styles named "Heading 1", "Heading 2", "Heading 3", and "Heading 4" are prescribed.

C. Positioning Figures and Tables

Place figures and tables after they are first cited in the text. Large figures and tables may span across both columns. Figure captions should be centered below the figures; table heads should appear above the tables. Use the abbreviation "Fig. 1", even at the beginning of a sentence.

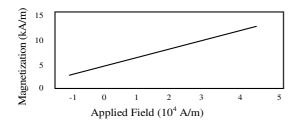


Figure 1. Magnetization as a function of applied field. Note how the caption is centered in the column. (use style: figure caption)

TABLE I. TABLE TYPE STYLES (USE STYLE: TABLE HEAD)

| Type size (pts.) | Appearance (table col head) | | |
|------------------------|--|-----------------------|---------------------------------|
| | Regular | Bold | Italic |
| 8 | References, table header, footnotes, text subscripts, and superscripts | | |
| 9 | Table captions and table names – uppercase. Table superscripts, figure captions | Abstract, keywords | Words "Abstract" and "Keywords" |
| 10 | Authors' affiliations, main text, equations | | Subheading |
| 11 | Authors' names | | |
| 20 | Paper title | | |

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity "Magnetization", or "Magnetization, M", not just "M". If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write "Magnetization (A/m)" or "Magnetization

 $\{A[m(1)]\}$ ", not just "A/m". Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)", not "Temperature/K".

D. References

Number citations consecutively in square brackets [1]. The sentence punctuation follows the bracket [2]. 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 ..."

Grammatically, they may be treated as if they were footnote numbers, e.g., as shown by Clerk Maxwell [2]; as mentioned earlier [2], [4]–[7]; Jacobs and Bean [5]; Yorozu et al. [7]

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors' names; do not use "et al." 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]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

For papers published in translation journals, please give the English citation first, followed by the original foreignlanguage citation [6]. If paper was published in other than English, please translate it and provide original-language title in round brackets, like in [8].

V. GUIDELINES FOR GENERATIVE AI USAGE

Authors must comply with the guidelines on the use and disclosure of content generated by artificial intelligence (AI) specified in the <u>IEEE Publication Services and Products Board Operations Manual</u>:

8.2.1.B.10:

The use of content generated by artificial intelligence (AI) in an article (including but not limited to text, figures, images, and code) shall be disclosed in the acknowledgments section of any article submitted to an IEEE publication. The AI system used shall be identified, and specific sections of the article that use AI-generated content shall be identified and accompanied by a brief explanation regarding the level at which the AI system was used to generate the content.

The use of AI systems for editing and grammar enhancement is common practice and, as such, is generally outside the intent of the above policy. In this case, disclosure as noted above is recommended.

8.2.1.C.5:

Information or content contained in or about a manuscript under review shall not be processed through a public platform (directly or indirectly) for AI generation of text for a review. Doing so is considered a breach of

confidentiality because AI systems generally learn from any input.

ACKNOWLEDGMENT (USE STYLE: HEADING 5)

Sample where Some Content was Generated by AI

During the preparation of this work, the authors used ChatGPT to improve the wording of certain paragraphs (for example, Sections 2.A and 3.B). No AI-generated content was used in the formulation of original scientific results, analyses, or conclusions. All technical contributions, data interpretations, and algorithmic developments are solely those of the authors. Any content generated with the assistance of this tool was subsequently reviewed and edited by the authors, who take full responsibility for the final content of the publication.

Formatting Requirements

References and Acknowledgment headings are not enumerated. They are simply primary headings without labels, regardless of whether the other headings in the papers are enumerated.

The placement of the Acknowledgment appears after the final text of the paper, just before the References section, and after any Appendix(es).

All acknowledgment of financial support must be removed from the Acknowledgment section, and placed in the first paragraph of the first footnote.

Write the Acknowledgment section to be read in the third person.

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 \dots " Instead, try "R.B.G. thanks \dots "

When citing names within the Acknowledgment, use first initials only, not full names. Do not use Mr., Mrs., Ms., or Miss (list first initial and last name only). Use the Dr. or Prof. title with each name separately; do not use plural Drs. or Profs, with lists of names.

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. (references)
- [2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd 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 9th Annual Conf. Magnetics Japan, p. 301, 1982].
- [7] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.
- [8] Annual Report of Research Institute of Intelligent Computer systems, 2009, 71 p. (in Ukrainian)
- [9] G. Richenhagen, Teamwork and other competences in agile organisations - Why too many cooks not always spoil the broth, in Knowledge is tasty, (in German): Springer, Wiesbaden, 2018, pp. 319–334.