



# JKIICE

## Instructions for Authors

Journal of the Korea Institute of Information and Communication Engineering

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Journal of the Korea Institute of Information and Communication Engineering (J. Korea Inst. Inf. Commun. Eng., JKIIICE) is an official journal of the Korea Institute of Information and Communication Engineering (KIICE). It is peer reviewed, and open access journal that is published monthly. The date of publication is published on the last day of each month. JKIIICE is dedicated to promote the advancements in theory, engineering, and application in the field of information and communication convergence engineering including the following areas:

- Information Science
  - Database, Cloud Computing and Big Data
  - Computer Vision and Biomedical Imaging
  - Artificial intelligence and Intelligent Systems
  - Digital Contents, Game and Multimedia
- Communication Engineering
  - Semiconductor for Communication
  - Computer Network
  - Circuits and systems
  - Wireless and Data Communication
  - Privacy and Security
- Information and Communication Convergence

## I. SUBMISSIONS OF MANUSCRIPT

Manuscripts are submitted online to Korea Institute of Information and Communication Engineering (KIICE) via homepage (<http://www.jkiice.org/>). Submission instructions are available at the website. All articles submitted to the Journal must comply with these instructions. Failure to do so will result in return of the manuscript and possible delay in publication. Further inquiries are welcome at JKIIICE Editorial Office, [journal@kiice.org](mailto:journal@kiice.org) (phone: +82-51-463-3683; fax: +82-51-464-3683).

## II. RESEARCH AND PUBLICATION ETHICS

For the policies on research and publication ethics that are not stated in these instructions, the (<http://www.jkiice.org/>) can be applied.

### 1. Research Results

The original results of research should be recorded and maintained in a form that allows analysis and review, both by collaborators before publication and by other scientists for a reasonable period after publication. Exceptions may be appropriate in certain circumstances to preserve privacy, to assure patent protection, or for similar reasons. Fabrication

of data is an egregious departure from the expected norms of scientific conduct, as is the selective reporting of data with the intent to mislead or deceive, as well as the theft of data or research results from others.

### **2. Conflict-of-Interest Statement**

If there are any conflicts of interest, authors should disclose them in the manuscript. A conflict of interest may exist when an author has financial or personal relationships or affiliations that could influence the author's decisions, work, or manuscript. Authors are expected to provide detailed information about all relevant financial interests and relationships or financial conflicts (e.g., employment/affiliation, grants or funding, consultancies, stock ownership or options, royalties, or patents filed, received, or pending), particularly those present at the time the research was conducted and through publication, as well as other financial interests (such as patent applications in preparation) that represent potential future financial gain. All disclosures of any potential conflicts of interest, including specific financial interests and relationships and affiliations (other than those affiliations listed in the title page of the manuscript) relevant to the subject of their manuscript, will be disclosed by the corresponding author on behalf of each coauthor, if any, as part of the submission process. Likewise, authors without conflicts of interest will be requested to state as part of the submission process. Failure to include this information in the manuscript will prohibit commencement of the review process of the manuscript.

### **3. Authorship**

Authorship credit should be based on 1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet these 3 conditions.

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All submitted manuscripts should be original and should not be considered by other scientific journals for publication at the same time. Any part of the accepted manuscript should not be duplicated in any other scientific journal without the permission of the Editorial Board. If duplicate publication related to the papers of this journal is detected, the authors will be announced in the journal and their institutes will be informed, and there also will be penalties for the authors.

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Plagiarism takes many forms, from 'passing off' another's paper as the author's own paper, to copying or paraphrasing substantial parts of another's paper (without attribution), to claiming results from research conducted by others. Plagiarism in all its forms constitutes unethical

publishing behavior and is unacceptable.

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All manuscripts will be evaluated by three peer reviewers who are selected by the editors. The acceptance criteria for all papers are based on the quality and originality of the research and its clinical and scientific significance. An initial decision will normally be made within 4 weeks after the agreement of review by the reviewers, and the reviewers' comments will then be sent to the corresponding authors. Revised manuscripts must be submitted online by the corresponding author. The corresponding author must indicate the alterations that have been made in response to the reviewers' comments item by item in a response note. Failure to resubmit the revised manuscript within 4 weeks of the editorial decision is regarded as a withdrawal. The editorial office should be notified if additional time is needed or if an author chooses not to submit a revision. The editorial committee makes decisions concerning minor revision, resubmit, and acceptance or rejection. Before proceeds a review process, all manuscripts will be briefly reviewed by a Managing Editor to check the validity of the manuscripts (pre-review process) and the editor may request the authors some editing of the manuscripts including redrawing of figures or changing the paper's format or the order of the manuscript etc.

### **Manuscript evaluations are assigned one of four outcomes:**

#### **• Accept**

An Accept with no revision means that the submission is perfect and there are no suggestions for improvement. The paper is ready for publication.

#### **• Minor Revision**

A Minor revision should be only be used for papers that have a clear contribution, and there are only small changes that need to be made to make the paper ready for publication. A minor revision usually means that only textual changes are needed. For minor revision, only the Editor will need to validate that the revised paper has adequately met the suggested changes.

#### **• Resubmit**

The classification Resubmit is used when a paper shows that it might have a potential contribution and the topic is of interest to JKIIICE, but not enough information is provided in the submission to determine this. The resubmission will go through a faster review process to determine if it should be accepted or rejected.

#### **• Reject**

This rating is used when the submission is off topic for JKIIICE, it is an incremental contribution over prior art, or a more complete submission is needed to better evaluate

the ideas presented. The authors can revise, run new experiments, and decide to potentially submit to JKIIICE at a later date. If submitted again to JKIIICE, it will be treated as a new submission.

Authors can track the progress of a manuscript on the journal's website. Articles that are accepted for publication are moved from the "Manuscripts Accepted" to the "Manuscripts in Publication" section of the journal's website.

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Manuscripts submitted to JKIIICE must be original work submitted exclusively to JKIIICE and never published before, excluding in short abstract form. A manuscript previously published in another language is not regarded as an original contribution.

##### **2. Copyright**

With each manuscript you must submit an JKIIICE copyright form which transfers the copyright to the unpublished article to JKIIICE and which warrants that the article is the original work of the author and does not infringe the copyright of any other parties. Before publication, the Editorial and Publication Office must receive a signed hard copy of the copyright form, which can be obtained on the JKIIICE web site.

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#### **4. Contents**

Statements and opinions given in the articles published in JKIIICE are the expressions of the contributors. Responsibility for the contents of published papers rests upon the authors, not KIICE or JKIIICE.

#### **5. Authorship**

Every contributor should be listed as an author and no one but contributors should be listed as authors. The submitting author is regarded as the corresponding author. All correspondence will be sent to the submitting author by e-mail.

#### **VI. MANUSCRIPT PREPARATION**

##### **1. Format of Initial or Intermediate Contributions**

The main document with the manuscript text and tables should be prepared with in an Han-Geul Word or PDF format in Korean. The manuscript should be written in 9.2-point font with double line spacing on A4 sized (21.0 × 29.7 cm) paper with 3.85 cm margins on the top, and bottom, right, and left margins 3.0cm. The Standard order of section in the manuscript file is: title page, abstract, introduction, system model and methods, results, discussion, acknowledgments, references, figure legends, and table legends. Validations to this format may be allowed. Number all manuscript pages starting with the title page as page 1.

##### **2. Title Page**

The Title page should include a full title, running title (no more than 40 characters in length) of the article and authors' information. The Title should be as concise as possible but informative enough to facilitate information retrieval, but not use the acronym words. Authors' information should contain the names, affiliations, should be provided. For a multicenter study, indicate each individual's affiliation using a superscript Arabic number (1,2,3...).

A 'corresponding author' for reprints should be indicated, and full contact information (including address, e-mail) should be provided. Any financial disclosure or support (grant number, institution, location, and acknowledgement) and presentation history (name of the meeting and date) at a meeting should be included if relevant.

##### **3. Abstract & Index Terms (Keywords)**

The Abstract should be self-contained (contain no footnotes). It should concisely state what was done, how it was done, principal results, and their significance. It should be from 130 to 160 words for all forms of publication. The abstract should be written as one paragraph and should not contain displayed mathematical equations, tabular material, or numbered references. At the end of abstract, Index Terms should be given in 4 or 5 keywords and separated by commas such as Maritime,

Information, Communication, Science, etc.

#### 4. Text

The text is recommended to be arranged in this order, if possible:

- **Introduction**

The purpose and the background should be written simply and lucidly.

- **System Model and Methods**

The methodology should be written precisely so that others may use some or all of the methods in another study or judge the scientific merit of your work.

- **Result**

A detailed description of the study results should be objectively presented, in an orderly and logical sequence using both text and illustrative materials (Tables and Figures).

- **Discussion and Conclusions**

Author's interpretation of the results, author's opinion and process of inducing conclusion should be written simply.

##### 1) Text Section Heading

There are four levels of section headings with established specifications: primary; secondary; tertiary; and quaternary heads. Enumeration of section heads is required. The section headings are as follows:

##### I. PRIMARY HEADING

Primary headings are enumerated by Roman numerals and centered above the text.

##### 1.1 Secondary Heading

Secondary headings are enumerated by Arabic numerals followed by periods.

**1.1.1 Tertiary Heading:** Tertiary headings are identical to secondary headings

**1) Quaternary heading:** Quaternary headings are enumerated by Arabic numerals followed by parentheses.

##### 2) References in Text

References should be obviously related to documents. References should be numbered consecutively in the order in which they are first mentioned in the text. Each reference should be cited as [1, 4, 7], or [6-9]; Kim [3] and Jang and Lee [5]; Park et al. [6].

##### 3) Text Equations

The Equations should be punctuated and aligned to bring out their structure and numbered on the right. Mathematical operation signs indicating continuity of the expression should be placed at the left of the second and succeeding lines. Use  $\times$  rather than a centered dot, except for scalar products of vectors. The solidus (/) should be used instead of built-up fractions in running text, and in display wherever clarity would not be jeopardized. Use "exp" for

complicated exponents. Furthermore, the Notation must be legible, clear, compact, and consistent with standard usage. All unusual symbols whose identity may not be obvious must be identified the first time they appear, and at all subsequent times when confusion might arise. Superscripts are normally set directly over subscripts; authors should note where readability or the meaning requires a special order.

In the text, numbers should be Arabic numerals, except when beginning a sentence. Numbers greater than 999 should have commas, e.g., 13,970. The 24-hour system is used to indicate time, e.g., 18:00 hr. If you are using Word for Math, use either the Microsoft Equation Editor or the MathType add-on (<http://www.mathtype.com>) for equations in your paper. "Float over text" should not be selected.

##### 4) Units and Abbreviations

Units of measure should be presented according to the International System (SI) of Units. English units may be used as secondary units (in parentheses). An exception is when English units are used as identifiers in trade, such as "3½ in disk drive." All units must be preceded by one space except percentage (%) and temperature (°C).

The SI unit for magnetic field strength  $H$  is A/m. However, if you wish to use units of T, either refers 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 m<sup>2</sup>."

Abbreviations must be used as an aid to the reader, rather than as a convenience of the author, and therefore their use should be limited. Generally, avoid abbreviations that are used less than 3 times in the text, including tables and figure legends. Acronyms and abbreviations should be defined the first time they are used in text. Other common abbreviations are as follows (the same abbreviations are used for plural forms): hr (hour), sec (second), min (minute), day (not abbreviated), wk (week), mo (month), yr (year), L (liter), mL (milliliter),  $\mu$ L (microliter), g (gram), kg (kilogram), mg (milligram),  $\mu$ g (microgram), ng (nanogram), pg (picogram), g (gravity; not g), nm (nanometer),  $\mu$ m (micrometer), mV (millivoltage), mA (milliampere), mW (milliwatt), C (coulomb),  $\mu$ F (microfarad), mH (millihenry), n (sample size), SD (standard deviation of the mean), and SE (standard error of the mean).

##### 5) Table

Each Table should be numbered with Roman numerals in the order of their appearance in the text. Tables should have a concise and informative title with the table content between horizontal lines. Vertical lines are not used. The structure should be clear, with simple column headings giving all units. A table should not exceed one page when printed. Use lower case letters in superscripts <sup>a), b), c)</sup> ... for special remarks. Unaltered computer output and notation are generally unacceptable.

Symbol	Quantity	Conversion from Gaussian and CGS EMU to SI <sup>a</sup>
$\Phi$	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 <sup>2</sup>
$H$	magnetic field strength	1 Oe $\rightarrow$ $10^3/(4\pi)$ A/m
$m$	magnetic moment	1 erg/G = 1 emu @ $10^{-3}$ A·m <sup>2</sup> = $10^{-3}$ J/T
$M$	magnetization	1 erg/(G·cm <sup>3</sup> ) = 1 emu/cm <sup>3</sup> @ $10^3$ A/m
$4\pi M$	magnetization	1 G $\rightarrow$ $10^3/(4\pi)$ A/m
$\sigma$	specific magnetization	1 erg/(G·g) = 1 emu/g $\rightarrow$ 1 A·m <sup>2</sup> /kg

## 6) Figures

Figures are numbered consecutively in the sequence mentioned in the text and must have a caption written in one paragraph style. The caption should contain an explanation of all abbreviations and symbols used, and indicate the size value of lines or bars unless shown directly on the figure. The Figure number should be placed at the lower-left corner of each figure, and the numbering order must be from left to right, and from upper to lower. Citations of figures in the text or parentheses are abbreviated, e.g., Fig. 1, Figs. 1 and 2, Figs. 1-3, (Fig. 1), (Figs. 1 and 2), (Figs. 1-3). When the text refers to both figures and tables, they should be mentioned in parentheses, e.g., (Table 1; Fig. 2) and (Tables 1-3; Figs. 4-6)

## 7) Miscellaneous Advice

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.” [Did the potential use (1)?] Write instead, “The potential was calculated by 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.” Indicate sample dimensions as “0.1 cm  $\times$  0.2 cm,” not “0.1  $\times$  0.2 cm<sup>2</sup>.” Do not mix complete spellings and abbreviations of units: use “b/s” or “bits per second,” not “bits/s.” When expressing a range of values, write “7 to 9,” not “7-9” or “7~9,” except for references [1-3].

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

Stylists prefer that you write in the first person and use the active voice (“I observed that ...” or “We observed that ...” rather than “It was observed that...”). If your native language is not English, please get a native English-speaking colleague to proofread your paper.

## 5. Acknowledgments

Persons or institutes who contributed to the papers but not enough to be coauthors may be introduced. Financial support, including foundations, institutions, pharmaceutical and device manufacturers, private companies, intramural

departmental sources, or any other support should be described.

## 6. List of References

The list of references should only include works that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. The correct citation format for an article in JMI~~C~~E is followed as:

### 1) Journal Articles:

- [1] E. H. Choi, H. S. Hwang, and C. S. Kim, “Electron spectroscopy studies on magneto-optical media and plastic substrate interfaces,” *International Journal of Information and Communication Engineering*, vol. 9, no. 4, pp. 358-362, Aug. 2011.

### 2) Books & Book Chapters

- [2] J. G. Proakis, *Digital Communications*, 4th ed. New York, NY: McGraw-Hill, 1993.
- [3] J. L. Hennessy and D. A. Patterson, “Instruction-level parallelism and its exploitation,” in *Computer Architecture: A Quantitative Approach*, 4th ed. San Francisco, CA: Morgan Kaufmann Pub., ch. 2, pp. 66-153, 2007.

### 3) Conference Proceedings

- [4] A. Hashmi, H. Berry, O. Temam, and M. Lipasti, “Automatic abstraction and fault tolerance in cortical microarchitectures,” in *Proceedings of the 38th Annual International Symposium on Computer Architecture*, New York: NY, pp. 1-10, 2011.

### 4) Dissertations (Ph.D.) and Theses (M.S.)

- [5] B. Alavi, “Distance measurement error modeling for time-of-arrival based indoor geolocation,” Ph. D. dissertation, Worcester Polytechnic Institute, Worcester, MA, 2006.

### 5) Technical Report

- [6] Y. Z. Ben, D. K. John, and Anthony, “Tapestry: An infrastructure for fault-tolerant wide-area location and routing,” University of California, Berkeley: CA, Technical Report CSD-01-1141, 2001.

## 6) Online Source

- [7] Malardalen Real-Time Research Center. The worst-case execution time (WCET) analysis project [Internet]. Available: <http://www.mrtc.mdh.se/projects/wcet/>.
- [8] H. Nowakowska, M. Jasinski, P. S. Debicki and J. Mizeraczyk. (2011, October). Numerical analysis and optimization of power coupling efficiency in waveguide-based microwave plasma source. *IEEE Transactions on Plasma Science* [Online]. 39(10), pp. 1935-1942. Available: [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=6012536](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6012536).

## 7) Patents

- [9] J. L. Lee et al, GaAs Power Semiconductor Device Operating at a Low Voltage and Method for Fabricating the Same, US Patent 5,760,418, to ETRI, Patent and Trademark Office, Washington D.C., 1998.

## 8) Standards

- [10] IEEE Std. 1394, *IEEE Standard for a High Performance Serial Bus*, IEEE, Piscataway, N.J., 1995.

## VII. FINAL PREPARATION FOR PUBLICATION

### 1. Format of Final Contributions

Upon acceptance of an article, the author or authors are asked to submit the final manuscript. The final manuscript may be prepared using Han-Geul Word.

### 2. Author Supplied Electronic Graphics

Preferred file type is vector drawing such as EPS or WMF. If bitmap format is used, preferred one is TIF at a resolution of at least 300 dpi for color photos and at least 900 dpi for line art with minimum width of 100 mm (4 inches). Figures should contain only the image and not the caption.

### 3. Author Biographies

All authors may include biographies at the end of regular papers. The first paragraph may contain the author's educational background is listed. The degrees should be listed with type of degree in what field, which institution, city, state or country, and year degree was earned. Next, the author major field of study is listed.

### 4. Page Proofs

Page proofs and reprint order forms are sent to the corresponding author, together with a copyright transfer form if not submitted yet. It is advised that editing is limited to the correction of typographical errors, incorrect data, and grammatical errors, and for updating information on references which were in press. The results of page proofs should be sent immediately by e-mail, or if signed proofs, sent by FAX, preferably within 2 business days.

## VIII. PAGE CHARGES & REPRINTS

Each paper will be charged according to the number of pages. Twenty prints will be supplied without additional charge if requested. Additional reprints are available with actual cost. After a manuscript has been accepted for publication, the author will be required to pay a publication fee of US\$150 (150,000 Korean Won) up to six printed pages regardless of the number of printed pages. For papers in excess of six printed pages, an additional page charge of \$30 (30,000 Korean Won) per printed page will be requested for the printed pages beyond from seven to eight pages. For papers in excess of over nine printed pages, an additional page charge of \$40 (40,000 Korean Won) per printed page will be requested for the printed pages. When the acknowledgment in the paper is described, there is an additional charge \$100 (KRW100,000). Detailed instructions will accompany the payment request.

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US\$150 (150,000 Korean Won) + US\$30 (30,000 Korean Won)per extra page

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