

Journal of
**Mechatronics, Electrical Power, and
Vehicular Technology**

INTERNATIONAL PEER REVIEWERS ACKNOWLEDGEMENT

The Editor of MEV would like to thank the wisdom and advice of many individuals who dedicated their considerable time and expertise in safeguarding the quality and high standard of academic integrity of the journal.

We are greatly indebted to the expertise, dedication, and expeditious response of the following individuals for reviewing at least one and, in some cases, many manuscripts for the journal from early 2010 until today.

Prof. Ir. Jamasri, Ph.D.

Department of Mechanical and Industrial Engineering, Gadjah Mada University
Jl. Grafika No. 2, Yogyakarta, 55281, INDONESIA

Prof. Dr. Ir. Suhono H Supangkat, M.Eng., CGEIT.

School of Electrical Engineering and Informatics, Institut Teknologi Bandung
Jl. Ganesha No. 10, Bandung 40135, INDONESIA

Prof. Dr. Ir. Zainal Abidin

Mechanical and Aerospace Engineering, Institut Teknologi Bandung
Jl. Ganesha No. 10, Bandung 40135, INDONESIA

Prof. István Patkó

Óbuda University, Budapest, 6. Doberdó str., Budapest H-1034 HUNGARY

Prof. Dr. Ir. R. Danardono Agus Sumarsono, DEA., PE.

Department of Mechanical Engineering, University of Indonesia
Kampus UI Depok 16424 Depok, Jawa Barat, INDONESIA

Prof. Sasongko Pramono Hadi

Department of Electrical Engineering, Gadjah Mada University
Jl. Grafika No. 2, Yogyakarta 55281, INDONESIA

Prof. Juan Carlos Alvarez

Dept. Electrical Engineering, University of Oviedo
Calle San Francisco, 1, 33003 Oviedo, Asturias, SPAIN

Prof. Dr. Murat Lüy

Department of Electrical and Electronic Engineering, Kirikkale Üniversitesi
Kirikkale Üniversitesi, Ankara Yolu 7. Km, 71450 Yahşihan/Kirikkale, TURKEY

Dr. Ir. Iman K Rekswardojo

Mechanical and Aerospace Engineering, Institut Teknologi Bandung
Jl. Ganesha No. 10, Bandung 40135, INDONESIA

Dr. Yuliadi Erdani

Politeknik Manufaktur Bandung
Jl. Kanayakan No. 21 Dago, Bandung – 40135, INDONESIA

Dr. Larissa Lorenz

Bauhaus Luftfahrt e.V., Lyonel-Feininger-Str. 28, 80807 Munchen, GERMANY

Dr. Si Steve Li

Electromechanical System Development, General Electric Global Research Centre
610 London Square Drive, Clifton Park, NY12065, UNITED STATES

Ahmad Agus Setiawan, S.T., M.Sc., Ph.D.

Department of Engineering Physics, Faculty of Engineering, Gadjah Mada University
Jl. Grafika No.2, Yogyakarta 55281, INDONESIA

Ocktaeck Lim, Ph.D.

School of Mechanical Engineering University of Ulsan
Daehakro 93, Nam-gu 44610 Ulsan, KOREA, REPUBLIC OF

Dr. Ir. Edi Leksono, M.Eng.

Engineering Physics, Institut Teknologi Bandung
Jl. Ganesha No. 10, Bandung 40135, INDONESIA

Dr. Irhan Febijanto

The Agency for the Assessment and Application of Technology
Kawasan Puspiptek Serpong Tangerang Selatan, INDONESIA

Ir. Endra Joellianto, Ph.D.

Engineering Physics, Institut Teknologi Bandung
Jl. Ganesha No. 10, Bandung 40135, INDONESIA

Dr. Ir. Rizqon Fajar, M.Sc.

The Agency for the Assessment and Application of Technology
Gdg. 230 Kawasan Puspiptek Serpong Tangerang Selatan, INDONESIA

Dr. Narankhuu Jamsran

Thomas Air LLC, Mongolia
"Tushig" center 204, Seoul Street-
23, 4th Khoroo, Sukhbaatar
district, Ulaanbaatar, MONGOLIA

Dr. Tushar Ahmed

School of Aerospace, Mechanical
and Mechatronic Engineering, The
University of Sydney
Camperdown NSW 2006,
AUSTRALIA

Dr. Endra Pitowarno, M.Eng.

Electronics Engineering,
Polytechnic Institute of Surabaya
(EEPIS)
Kampus EEPIS/PENS, Jl. Raya ITS
Sukolilo, Surabaya 60111,
INDONESIA

Hendro Nurhadi, Dipl.Ing., Ph.D.

Department of Mechanical
Engineering - Institut Teknologi
Sepuluh Nopember
Campus ITS Keputih, Surabaya
60111, INDONESIA

Dr. Trina Fizzanty

Center for Science and Technology
Development Studies – LIPI
Widya Graha LIPI, 8th Fl, Jl.
Jendral Gatot Subroto kav. 10
Jakarta, INDONESIA

**Anna Maria Sri Asih, ST., M.M.,
M.Sc., Ph.D.**

Mechanical & Industrial
Engineering Department, Gajah
Mada University
Jl. Grafika No. 2 Yogyakarta 55281,
INDONESIA

**Dr.Eng. Anindito Purnowidodo,
M.Eng.**

Mechanical Engineering Dept.,
Brawijaya University,
Jl. Mayjen Haryono 167 Malang,
INDONESIA

Dr. Adha Imam Cahyadi

Department of Electrical
Engineering, Gajah Mada
University
Jl. Grafika No. 2, Yogyakarta 55281,
INDONESIA

Dr. Wahyudi Sutopo, S.T., M.Si.

Industrial Engineering,
Universitas Sebelas Maret
Surakarta
Jl. Ir. Sutami 36A, Surakarta,
57126, INDONESIA

Ir. Arko Djajadi, Ph.D.

Swiss German University
EduTown BSD City – Tangerang
15339, INDONESIA

Esa Prakasa, Ph.D.

Research Centre for Informatics –
LIPI
Komp LIPI Jl. Sangkuriang, Bld 20,
3rd Fl, Bandung 40135,
INDONESIA

Dr. Edi Kurniawan, S.T., M.Eng.

Research Centre for Physics – LIPI
Gedung 440, Kawasan PUSPIPTEK
Serpong, Banten 15314,
INDONESIA

Pudji Irasari, M.Sc.rer.nat.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Sunit Hendrana

Research Center for Physics - LIPI
Gedung 440, Kawasan PUSPIPTEK
Serpong, Banten 15314,
INDONESIA

**Dr. Ary Setijadi Prihatmanto,
S.T., M.T.**

School of Electrical Engineering
and Informatics, Institut
Teknologi Bandung
Jl. Ganesha No. 10, Bandung
40135, INDONESIA

Dr. Anusua Ghosh

School of Electrical and
Information Engineering,
University of South Australia
101 Currie St, Adelaide SA 5001,
AUSTRALIA

Dr. Ir. Feri Yusivar, M.Eng.

Department of Electrical
Engineering, University of
Indonesia
Kampus UI Depok 16424
Depok, Jawa Barat, INDONESIA

Dr. Agus Purwadi, M.T.

School of Electrical Engineering
and Informatics, Institut
Teknologi Bandung
Jl. Ganesha No. 10, Bandung
40135, INDONESIA

Dr. Dimas Anton Asfani, S.T., M.T.

Department of Electrical
Engineering - Institut Teknologi
Sepuluh Nopember
Campus ITS Keputih, Surabaya
60111, INDONESIA

Aji Prasetya Wibawa, Ph.D.

Department of Electrical
Engineering, State University of
Malang
Jl. Semarang No. 5, Malang, Jawa
Timur, INDONESIA

Dr. Eka Firmansyah

Department of Electrical
Engineering and Information
Technology, Gajah Mada
University
Jl. Grafika No. 2, Yogyakarta 55281,
INDONESIA

Dr. Fendy Santoso

Autonomous System Laboratory,
School of Engineering and
Information Technology, The
University of New South Wales
UNSW Campus, Building 17, R 131,
Canberra ACT 2610, AUSTRALIA.

Yusie Rizal, PhD Cand.

Dept. Engineering Science,
National Cheng Kung University
No. 1 號, Dasyue Rd, East District,
Tainan City, 701, TAIWAN.

Laksono Kurnianggoro

Laksono Kurnianggoro, Ph.D
Department of Electrical
Engineering, University of Ulsan
93 Daehak-ro, Mugeo-dong, Nam-
gu, Ulsan, SOUTH KOREA

Dr. Joga Dharma Setiawan

Faculty of Engineering,
Diponegoro University
Jl. Prof H. Soedarto, SH.Tembalang,
Semarang 50275, INDONESIA

Dr. Febllil Huda, S.T., M.T.

Department of Mechanical
Engineering, Universitas Riau
Kampus Bina Widya, Simpang
Baru, Tampan, Kota Pekanbaru,
Riau 28293, INDONESIA

Kadek Heri Sanjaya, Ph.D.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Ir. Hilwadi Hindersah

School of Electrical Engineering
and Informatics, Institut
Teknologi Bandung
Jl. Ganesha No. 10, Bandung
40135, INDONESIA

Suprpto, Ph.D

Departement of Electronics
Engineering,
Yogyakarta State University
Jl. Colombo No.1, Karang Malang,
Caturtunggal, DI Yogyakarta
55281, INDONESIA

Midriem Mirdanies, M.T.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Amin, M.T.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Sapdo Utomo, M.T.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Agus Risdlyanto, M.T.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Widodo Budi Santoso

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Bld 60,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Edwar Yazid

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Slamet Riyadi, S. Ds., M.Ds., Ph.D.

Product Design Department
Faculty of Art and Design, Institut
Teknologi Bandung
Jl. Ganesha No. 10, Bandung
40135, INDONESIA

Dr. Agfianto Eko Putra, M.Sc.

Department of Computer and
Electronic Science, Gadjah Mada
University
Jl. Grafika No. 2, Yogyakarta 55281,
INDONESIA

Dr. Caecilia Sri Wahyuning

Department of Industrial
Engineering, Institut Teknologi
Nasional
Jl. PHH. Mustafa No. 23, Bandung,
Jawa Barat, INDONESIA

Rifa Rahmayanti, M.Sc.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Eng. Handityo Aulia Putra

Department of Computer
Engineering, Keimyung University
1095 Dalgubeol-daero, Dalseo-Gu,
Daegu 42601,
KOREA, REPUBLIC OF

**Dr. Arwindra Rizqiawan, S.T.,
M.T.**

School of Electrical Engineering
and Informatics, Institut
Teknologi Bandung
Jl. Ganesha No. 10, Bandung
40135, INDONESIA

Dr.-Ing. Moch Ichwan

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Dr. Ir. Yoyon Ahmudiarto, M.Sc.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Vita Susanti, S.Kom.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

Hendri Maja Saputra, M.T.

Research Centre for Electrical
Power and Mechatronics – LIPI
Komp LIPI Jl. Sangkuriang, Blg 20,
2nd Fl, Bandung 40135,
INDONESIA

PUBLICATION ETHICS AND MALPRACTICE STATEMENT

Journal of Mechatronics, Electrical Power, and Vehicular Technology (hence MEV) is a journal aims to be a leading international peer-reviewed platform and an authoritative source of information. We publish original research papers, review articles and case studies focused on mechatronics, electrical power, and vehicular technology as well as related topics that has neither been published elsewhere in any language, nor is it under review for publication anywhere. This following statement clarifies ethical behavior of all parties involved in the act of publishing an article in this journal, including the author, the editor, the reviewer, and the publisher (Research Centre for Electrical Power and Mechatronics – Indonesian Institute of Sciences). This statement is based on COPE's Best Practice Guidelines for Journal Editors.

DUTIES OF AUTHORS

1. **Reporting Standards:** Authors should present an accurate account of the original research performed as well as an objective discussion of its significance. Researchers should present their results honestly and without fabrication, falsification or inappropriate data manipulation. A manuscript should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable. Manuscripts should follow the submission guidelines of the journal.
2. **Originality and Plagiarism:** Authors must ensure that they have written entirely original work. The manuscript should not be submitted concurrently to more than one publication unless the editors have agreed to co-publication. Relevant previous work and publications, both by other researchers and the authors' own, should be properly acknowledged and referenced. The primary literature should be cited where possible. Original wording taken directly from publications by other researchers should appear in quotation marks with the appropriate citations.
3. **Multiple, Redundant, or Concurrent Publications:** Author should not in general submit the same manuscript to more than one journal concurrently. It is also expected that the author will not publish redundant manuscripts or manuscripts describing same research in more than one journal. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable. Multiple publications arising from a single research project should be clearly identified as such and the primary publication should be referenced.
4. **Acknowledgement of Sources:** Authors should acknowledge all sources of data used in the research and cite publications that have been influential in determining the nature of the reported work. Proper acknowledgment of the work of others must always be given.
5. **Authorship of the Paper:** The authorship of research publications should accurately reflect individuals' contributions to the work and its reporting. Authorship should be limited to those who have made a significant contribution to conception, design, execution or interpretation of the reported study. Others who have made significant contribution must be listed as co-authors. In cases where major contributors are listed as authors while those who made less substantial, or purely technical, contributions to the research or to the publication are listed in an acknowledgement section. Authors also ensure that all the authors have seen and agreed to the submitted version of the manuscript and their inclusion of names as co-authors.
6. **Disclosure and Conflicts of Interest:** All authors should clearly disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.
7. **Fundamental Errors in Published Works:** If the author discovers a significant error or inaccuracy in the submitted manuscript, then the author should promptly notify the journal editor or publisher and cooperate with the editor to retract or correct the paper.
8. **Hazards and Human or Animal Subjects:** The author should clearly identify in the manuscript if the work involves chemicals, procedures or equipment that have any unusual hazards inherent in their use.

DUTIES OF EDITOR

1. **Publication Decisions:** Based on the review report of the editorial board, the editor can accept, reject, or request modifications to the manuscript. The validation of the work in question and its importance to researchers and readers must always drive such decisions. The editors may be guided by the policies of the journal's editorial board and constrained by such legal requirements as shall then be in force regarding libel, copyright infringement and plagiarism. The editors may confer with other editors or reviewers in making this decision. Editors have to take responsibility for everything they publish and should have procedures

and policies in place to ensure the quality of the material they publish and maintain the integrity of the published record.

2. **Review of Manuscripts:** Editor must ensure that each manuscript is initially evaluated by the editor for originality. The editor should organize and use peer review fairly and wisely. Editors should explain their peer review processes in the information for authors and also indicate which parts of the journal are peer reviewed. Editor should use appropriate peer reviewers for papers that are considered for publication by selecting people with sufficient expertise and avoiding those with conflicts of interest.
3. **Fair Play:** The editor must ensure that each manuscript received by the Journal is reviewed for its intellectual content without regard to sex, gender, race, religion, citizenship, etc. of the authors. An important part of the responsibility to make fair and unbiased decisions is the upholding of the principle of editorial independence and integrity. Editors are in a powerful position by making decisions on publications, which makes it very important that this process is as fair and unbiased as possible.
4. **Confidentiality:** The editor must ensure that information regarding manuscripts submitted by the authors is kept confidential. Editors should critically assess any potential breaches of data protection and patient confidentiality. This includes requiring properly informed consent for the actual research presented, consent for publication where applicable.
5. **Disclosure and Conflicts of Interest:** The editor of the Journal will not use unpublished materials disclosed in a submitted manuscript for his own research without written consent of the author. Editors should not be involved in decisions about papers in which they have a conflict of interest

DUTIES OF REVIEWERS

1. **Confidentiality:** Information regarding manuscripts submitted by authors should be kept confidential and be treated as privileged information. They must not be shown to or discussed with others except as authorized by the editor.
2. **Acknowledgement of Sources:** Manuscript reviewers must ensure that authors have acknowledged all sources of data used in the research. Reviewers should identify relevant published work that has not been cited by the authors. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation. The reviewers should notify the journal immediately if they come across any irregularities, have concerns about ethical aspects of the work, are aware of substantial similarity between the manuscript and a concurrent submission to another journal or a published article, or suspect that misconduct may have occurred during either the research or the writing and submission of the manuscript; reviewers should, however, keep their concerns confidential and not personally investigate further unless the journal asks for further information or advice.
3. **Standards of Objectivity:** Review of submitted manuscripts must be done objectively and the reviewers should express their views clearly with supporting arguments. The reviewers should follow journals' instructions on the specific feedback that is required of them and, unless there are good reasons not to. The reviewers should be constructive in their reviews and provide feedback that will help the authors to improve their manuscript. The reviewer should make clear which suggested additional investigations are essential to support claims made in the manuscript under consideration and which will just strengthen or extend the work
4. **Disclosure and Conflict of Interest:** Privileged information or ideas obtained through peer review must be kept confidential and not used for personal advantage. Reviewers should not consider manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers. In the case of double-blind review, if they suspect the identity of the author(s) notify the journal if this knowledge raises any potential conflict of interest.
5. **Promptness:** The reviewers should respond in a reasonable time-frame. The reviewers only agree to review a manuscript if they are fairly confident they can return a review within the proposed or mutually agreed time-frame, informing the journal promptly if they require an extension. In the event that a reviewer feels it is not possible for him/her to complete review of manuscript within stipulated time then this information must be communicated to the editor, so that the manuscript could be sent to another reviewer.

CROSSMARK POLICY PAGE

All articles published in MEV receive a DOI and are permanently published. This applies regardless of the outcome of the peer review that follows after publication. All content, including articles that have not (yet) passed peer review, is permanently archived in Portico. All versions of all articles that have passed peer review will be archived in PubMed and elsewhere.

Authors can revise, change and update their articles by publishing new versions, which are added to the article's history; however, the individual versions, once published, cannot be altered or withdrawn and are permanently available on the MEV website. MEV participates in the [CrossMark](#) scheme, a multi-publisher initiative that has developed a standard way for readers to locate the current version of an article. By applying the CrossMark policies, MEV is committed to maintaining the content it publishes and to alerting readers to changes if and when they occur.

Clicking on the CrossMark logo (at the top of each MEV article) will give you the current status of an article and direct you to the latest published version; it may also give you additional information such as new referee reports. In order to maintain the integrity and completeness of the scholarly record, the following policies will be applied when published content needs to be corrected; these policies take into account current [best practice](#) in the scholarly publishing and library communities:

CORRECTION TO AN ARTICLE

In traditional journals, where articles are peer reviewed before publication, Corrections (or Errata) are published to alert readers to errors in the article that became apparent following the publication of the final article. By contrast, articles in MEV undergo peer review post publication and publication is not 'final' as new versions can be added at any stage. Possible mistakes that come to light during the peer review process may be highlighted in the published referee reports, which are part of the article. Authors can publish revised versions, and any errors that become apparent during peer review or later can be corrected through the publication of new versions. Corrections and changes relative to the previous version are always summarized in the 'Amendments' section at the start of a new version.

RETRACTION

Articles may be retracted for several reasons, including:

- honest errors reported by the authors (for example, errors due to the mixing up of samples or use of a scientific tool or equipment that is found subsequently to be faulty)
- research misconduct (data fabrication)
- duplicate or overlapping publication
- fraudulent use of data
- clear plagiarism
- unethical research

For any retracted article, the reason for retraction and who is instigating the retraction will be clearly stated in the Retraction notice. The retraction notice will be linked to the retracted article (which usually remains on the site) and the article will be clearly marked as retracted (including the PDF).

An article is usually only retracted at the authors' request or by the publisher in response to an institutional investigation. It is important to note in the context of MEV's publication model, that - as in traditional journals - a retracted article is not 'unpublished' or 'withdrawn' in order for it to be published elsewhere. The reasons for retraction are usually so serious that the whole study, or large parts of it, are not appropriate for inclusion in the scientific literature anywhere.

The content of a retracted article would only be removed where legal limitations have been placed upon the publisher, copyright holder or author(s), for example, if the article is clearly defamatory or infringes others' legal rights, or if the article is the subject of a court order. In such cases, the bibliographic information for the article will be retained on the site along with information regarding the circumstances that led to the removal of the content.

Under rare circumstances, for example, if false or inaccurate data have been published that, if acted upon, pose a serious health risk, the original incorrect version(s) may be removed and a corrected version published. The reason for this partial removal would be clearly stated on the latest version.

PREPARING THE MANUSCRIPT

FORMATTING REQUIREMENTS

Please use the author submission template available online at MEV Journal website. To use the template, kindly 'Save As' the MS Word file to your document, then copy and paste your document. To copy and paste the text into the template, please use 'Special Paste' and choose 'Unformatted Text'. Papers not prepared in accordance with author guidelines and manuscripts with number of mistakes will have to be pre-rejected by Editor.

Download the 'Author Submission Template' DOCX

http://www.mevjournal.com/mevfiles/MEV_author_submission_template_17.1.docx

If your article includes any Videos and/or other Supplementary material, this should be included in your supplementary file at initial submission for peer review purposes.

Word Processing Software

The manuscript should contain at least 2,000 words and should not exceed 25 pages including embedded figures and tables, contain no appendix, and the file should be in Microsoft Office (.doc/.docx) or Open Office (.odt) format. The paper should be prepared in A4 paper (210 mm x 297 mm) using 25 mm for left margin and 2 mm for the top, bottom, and right margin. No need to alter page number in this template as the page number will be reordered at preprinting process. The whole manuscript body should be in one column, using font type Times New Roman (TNR), font size 12, first line indent 5 mm, and 1.5 line spacing.

Please make sure that you use as much as possible normal fonts in your documents. Special fonts, such as fonts used in the Far East (Japanese, Chinese, Korean, etc.) may cause problems during processing. To avoid unnecessary errors, you are strongly advised to use the 'spellchecker' function of MS Word.

Section Headings

Divide your article into clearly defined and numbered sections. The abstract is not included in section numbering. Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Heading should be made in four levels. Level five cannot be accepted.

- *Heading Level 1*: Heading 1 should be written in title case, left aligned, bold, 14 TNR, and Roman numbered followed by a dot.
- *Heading Level 2*: Heading 2 should be written title case, left aligned, bold, 12 TNR, Capital Arabic numbered followed by a dot.
- *Heading Level 3*: Heading 3 should be written title case, left aligned, italic, 12 TNR, numbered by Arabic number followed by closed bracket
- *Heading level 4*: Heading 4 is not recommended, however, it could still be accepted with the format of sentence case, left indent 5 mm, hanging indent 5 mm, italic, 12 TNR, numbered by small cap followed by a closed bracket.
- *Heading Level 5*: Heading Level 5 cannot be accepted in the manuscript.

ARTICLE STRUCTURE

The manuscript should begin with title, abstract, and keyword(s) followed by the main text. The main text should consist of at least IMRaD structure, except for the review article: Introduction, Method/Material, Result and Discussion, and Conclusion; followed by acknowledgement and References.

Introduction

State the objectives of the work and provide an adequate background, state of the art, and should be avoiding a detailed literature survey or a summary of the results. Explain how you addressed the problem and clearly state the aims of your study.

Material and methods

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described. A Theory section (if necessarily added) should extend, not repeat, the background to the article already dealt with in the Introduction and lays the foundation for further work. A Calculation section represents a practical development from a theoretical basis.

Results and discussion

Results should be clear and concise. Discussion should explore the significance of the results of the work, not repeat them. Avoid extensive citations and discussion of published literature. The following components should be covered in the discussion section: How do your results relate to the original question or objectives outlined in the Introduction section (what)? Do you provide interpretation scientifically for each of your results or findings

presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?

Conclusions

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section. The conclusion section should lead the reader to the important matter of the paper. Suggestion or recommendation related to further research can also be added but not to confuse the research with an uncompleted work.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Appendices

It is not recommended to use appendices in MEV Journal submission.

ESSENTIAL TITLE PAGE INFORMATION

Title

The title of the manuscript should be concise and informative, less than 15 words, title case, centered, bold. Titles are often used in information-retrieval systems. The title should be accurate, unambiguous, specific, and completely identify the main issue of the paper. Avoid abbreviations and formulae where possible.

Author names and affiliations

Author names should not contain academic title, official rank, or professional position. Please clearly indicate the given name(s) and last/family name(s) -full name if possible- of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Write clear affiliation of all Authors. Affiliation includes name of department/unit, (faculty), the name of university/institution, complete postal address, and country. All contributing author should be shown in contribution order.

Corresponding author

Clearly indicate the corresponding author clearly for handling all stages of pre-publication, refereeing, and post-publication. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.

Present/permanent address

If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

ABSTRACT AND KEYWORDS

Abstract

Abstract should be concise and factual, contains neither pictures nor tables, and should not exceed 250 words. The abstract should state briefly the purpose of the research, research methods, the principal results, and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

Graphical abstract

A graphical abstract is optional. Its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a supplementary file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Keywords

The keywords should be avoiding general and plural terms and multiple concepts. Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

INSTRUMENTS

Abbreviations, Acronyms, and Units

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

Math formulae

Mathematical equation should be clearly written, numbered orderly, and should be an editable text prepared using MS Equation Editor (not in image format) and should also be separated from the surrounding text. 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 ...". Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign.

Header-footer and hyperlink

Header and footer including page number must not be used. All hypertext links and section bookmarks will be removed from papers. If you need to refer to an Internet email address or URL in your paper, you must type out the address or URL fully in Regular font.

Footnotes

Footnotes should be avoided if possible. Necessary footnotes should be denoted in the text by consecutive superscript letters. The footnotes should be typed at the foot of the page in which they are mentioned, and separated from the main text by a short line extending at the foot of the column.

FIGURE AND TABLE

Figure should be in grayscale, and if it made in color, it should be readable (if it later printed in grayscale). A caption should be sequentially numbered with Arabic numerals and comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used. The lettering on the artwork should be clearly readable and in a proportional measure and should have a finished, printed size of 8 pt for normal text and no smaller than 6 pt for subscript and superscript characters. 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."

Figures should have a brief description in the main body of the manuscript. Insert figures and tables after they are cited in the text. For layouting purpose, please provide high resolution figure (≥ 300 dpi) in .tif/.jpg/.jpeg. Low-quality scans are not acceptable. Figures and tables should be embedded and not supplied separately. Moreover, kindly avoid mentioning the position of figure/table e.g. "figure below" or "table as follow" because the position will be rearranged in layouting process. DO NOT put boxes around your figures to enclose them.

We suggest that you use a text box to insert a graphic (which is ideally at least 300 dpi resolution TIFF or EPS file with all fonts embedded) because this method is somewhat more stable than directly inserting a picture. To have non-visible rules on your frame, use the MSWord "Format" pull-down menu, select Text Box > Colors and Lines to choose No Fill and No Line.

Electronic artwork

General points:

- Make sure you use uniform lettering and sizing of your original artwork.
- Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.

Formats

Regardless of the application used, when your electronic artwork is finalized, please 'save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- EPS (or PDF): Vector drawings. Embed the font or save the text as 'graphics'.

- TIFF (or JPG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
- TIFF (or JPG): Bitmapped line drawings: use a minimum of 1000 dpi.
- TIFF (or JPG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
- Supply files that are too low in resolution.
- Submit graphics that are disproportionately large for the content.

Figure captions

Ensure that each illustration has a caption. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used. figure caption of a single line must be centered whereas multi-line captions must be justified

Tables

Please submit tables as editable text and not as images. Number tables consecutively with Arabic numerals in accordance with their appearance in the text. Place footnotes below the table body and indicate them with superscript lowercase letters. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

CONSTRUCTION OF REFERENCES

References are recommended using IEEE referencing style. Please ensure that every reference cited in the text is also present in the reference list (and vice versa). References should be listed at the end of the paper and numbered in the order of their appearance in the text. The template will number citations consecutively within 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 ...”

Unpublished results and personal communications are not recommended in the reference list but may be mentioned in the text. If these references are included in the reference list, they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication. Wikipedia, personal blog, or non-scientific website is not allowed to be taken into account. Primary references should be at least 80% from at least fifteen references. References should be taken from the late ten years.

Avoid bulk references such as [1–9]. Avoid excessive self-citations (no more than 20%). If possible, article's DOI should be given for each reference list.

Reference formatting

There are two types of references, i.e., electronics sources and nonelectronics sources. Sample of correct formats for various types of references are as follows

- *Book*: Author, *Title*, edition, editor, City, State or Country: Publisher, year, Pages.
- *Part of book*: Author, “Title”, in *Book*, edition, editor, City, State or Country: Publisher, year, Pages.
- *Periodical*: Author, “Title”, *Journal*, *volume (issue)*, pages, month, year.
- *Proceeding*: Author, “Title”, in *Proceeding*, year, pages.
- *Unpublished paper*: Author, “Title”, presented at Conference/ event title, City, State or Country, year.
- *Patent/Standart*: Author, “Title”, patent number, month day, year.
- *Technical report*: Author, “Title”, Company, City, State or Country, Tech. Rep. Number, month, year.

Three pieces of information are required to complete each reference from electronics sources: 1) protocol or service; 2) location where the item is to be found; and 3) item to be retrieved. Sample of correct formats for electronics source references are as follows:

- *Book*: Author. (year, month day). *Title*. (edition) [Type of medium]. *volume (issue)*. Available: site/path/file.
- *Periodical*: Author. (year, month). *Title*. *Journal*. [Type of medium]. *volume (issue)*, pages. Available: site/path/file.
- *Papers presented at conferences*: Author. (year, month). *Title*. Presented at Conference title. [Type of Medium]. Available: site/path/file.
- *Reports and handbooks*: Author. (year, month). *Title*. Company. City, State or Country. [Type of Medium]. Available: site/path/file.

Reference management software

Every article submitted to MEV Journal shall use reference management software that supports Citation Style Language styles, such as Mendeley and Zotero, as well as EndNote®.