How to get published with the IEEE?

Salam Nazhan

27-12-2016

Outline

- About the IEEE
- IEEE covered areas and impact
- Why publish with IEEE
- What IEEE editors and reviewers are looking for
- Why IEEE editors and reviewers reject papers
- Structure of the paper
- Ethics
- Type of Journals
- How to respond to reviewers and editor comments

The aim

- The aim is to help you get your work published- and to do so as successfully as possible

About the IEEE

- World's largest technical membership association with over 415,000 members in 160 countries
- Five core areas of activity
  - Publishing
  - Conferences
  - Standards
  - Membership
  - E-learning

IEEE's Mission

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity

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IEEE publications

IEEE Journals & Magazines—Top-cited in the fields of electrical engineering and computing—174 in all.

Eight New in 2015

IEEE Conference Proceedings—Cutting-edge papers presented at IEEE conferences globally.

Now 1,400+ Annual titles!

IEEE Standards—Quality product and technology standards used by worldwide industries and companies to ensure safety, drive technology, and develop markets.

Smart Grid, NESC®, 802

IEEE Educational Courses—Over 300 IEEE educational online learning courses, plus IEEE English for Engineering.

More Courses, New Series

eBooks Collections— Two eBook collections now available, IEEE-Wiley eBooks Library, MIT Press eBooks Library and NEW in 2015! **Morgan & Claypool eBooks**

IEEE-Wiley, MIT Press and Morgan & Claypool

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New IEEE journals in 2014

- IEEE/CAA Journal of Automatica Sinica
- IEEE Cloud Computing
- IEEE Transactions on Computational Social Systems
- IEEE Transactions on Control of Network Systems
- IEEE Electrification Magazine
- IEEE Internet of Things Journal
- IEEE Transactions on Network Science and Engineering
- IEEE Power Electronics Magazine

For a complete title listing, to go: http://ieeexplore.ieee.org/xpl/opacjrn.jsp

All included in an IEL subscription
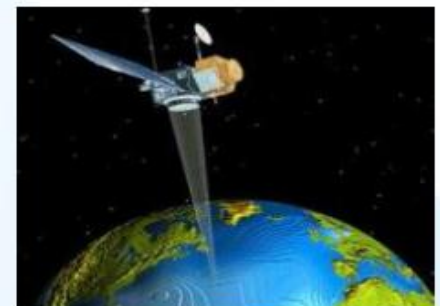
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New IEEE journals for 2015

- IEEE Transactions on Big Data
- IEEE Transactions on Cognitive Communications and Networking
- IEEE Transactions on Computational Imaging
- IEEE Transactions on Molecular, Biological, and Multi-Scale Communications
- IEEE Transactions on Multi-Scale Computing Systems
- IEEE Transactions on Signal and Information Processing over Networks
- IEEE Systems, Man, and Cybernetics Magazine
- IEEE Transactions on Transportation Electrification

For a complete title listing, to go: http://ieeexplore.ieee.org/xpl/opacjrn.jsp

All included in an IEL subscription
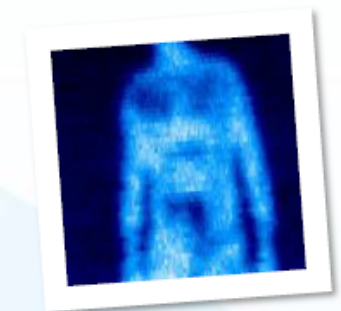
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IEEE covers all areas of technology

More than just electrical engineering & computer science

OPTICS RENEWABLE ENERGY PHOTONICS

SEMICONDUCTORS SMART GRID

IMAGING INFORMATION TECHNOLOGY

COMMUNICATIONS AEROSPACE CIRCUITS

BIOMEDICAL ENGINEERING ELECTRONICS

LTE WIRELESS BROADBAND NANOTECHNOLOGY

OIL & GAS CLOUD COMPUTING

RF CYBER SECURITY MEDICAL DEVICES

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IEEE Societies

IEEE Aerospace and Electronic Systems Society

IEEE Antennas and Propagation Society

IEEE Broadcast Technology Society

IEEE Circuits and Systems Society

IEEE Communications Society

IEEE Components, Packaging, and Manufacturing Technology Society

IEEE Computational Intelligence Society

IEEE Computer Society

IEEE Consumer Electronics Society

IEEE Control Systems Society

IEEE Dielectrics and Electrical Insulation Society

IEEE Education Society

IEEE Electron Devices Society

IEEE Electromagnetic Compatibility Society

IEEE Engineering in Medicine and Biology Society

IEEE Geoscience and Remote Sensing Society

IEEE Industrial Electronics Society

IEEE Industry Applications Society

IEEE Information Theory Society

IEEE Instrumentation and Measurement Society

IEEE Intelligent Transportation Systems Society

IEEE Magnetics Society

IEEE Microwave Theory and Techniques Society

IEEE Nuclear and Plasma Sciences Society

IEEE Oceanic Engineering Society

IEEE Photonics Society

IEEE Power Electronics Society

IEEE Power & Energy Society

IEEE Product Safety Engineering Society

IEEE Professional Communications Society

IEEE Reliability Society

IEEE Robotics and Automation Society

IEEE Signal Processing Society

IEEE Society on Social Implications of Technology

IEEE Solid-State Circuits Society

IEEE Systems, Man, and Cybernetics Society

IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society

IEEE Vehicular Technology Society

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IEEE quality makes an impact

IEEE publishes:

19 of the top 20 journals in Electrical and Electronic Engineering

18 of the top 20 journals in Telecommunications

7 of the top 10 journals in Automation & Control Systems

6 of the top 10 journals in Computer Science, Hardware & Architecture

4 of the top 5 journals in Cybernetics

3 of the top 5 journals in Artificial Intelligence

2 of the top 5 journals in Robotics

The Thomson Reuters Journal Citation Reports presents quantifiable statistical data that provides a systematic, objective way to evaluate the world's leading journals.

Based on the 2013 study released June 2014

More info: www.ieee.org/citations

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IEEE Leads US Patent Citations

Top 20 Publishers Referenced Most Frequently by Top 40 Patenting Organizations

IEEE

Association for Computing Machinery (ACM)
Reed/Elsevier/Pergamon/Academic Press/Saunders
American Institute of Physics (AIP/AVS)
Springer/Springer Wien/Springer-Verlag/Kluwer
3GPP General Partnership Project Standards Body
American Chemical Society (ACS)
Society for Information Display (SID)
John Wiley and Sons/Wiley-Verlag/Wiley-Liss
The International Society for Optics and Photonics (SPIE)
Joint IEEE and ACM
The Internet Society/IETF-Internet Engineering Task Force
U.S. Department of Energy
Institution of Engineering and Technology (IET/IEE)
American Physical Society (APS)
IEEE/The Japan Society of Applied Physics
Institute of Pure and Applied Physics (IPAP)
Nature Publishing Group
Institute of Electronics, Information and Communication Engineers (IEICE)
Electrochemical Society

0   50000   100000   150000   200000   250000   300000   350000

IEEE is cited over 3x more often than any other publisher

Source: 1790 Analytics LLC 2014. Based on number of references to papers/standards/conferences from 1997-2012

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IEEE Leads European Patent Citations

**Top 20 Publishers Referenced Most Frequently in EPO Patents
by Top 25 Patenting Organizations**

Publisher	Citations
IEEE	13557 (21.57%)
Reed/Elsevier/Pergamon/Academic Press/Saunders	10126 (16.11%)
ACS-Am Chem Soc	3397 (5.41%)
John Wiley & Sons/Wiley-Verlag/Wiley-Liss	2811 (4.47%)
IETF Internet Eng Task Force	1717 (2.73%)
IET/IEE	1530 (2.43%)
Springer/Springer Wien/Springer-Verlag	1500 (2.39%)
3GPP Gen Partner Proj Stds Body	1301 (2.07%)
AVS-AIP Am Inst Physics	1128 (1.80%)
Nature Publishing Group	1095 (1.74%)
Amer Soc Microbiology	1076 (1.71%)
SPIE-Int Soc Opt Engineering	1030 (1.64%)
Am Soc Biochemistry Molec Biology	1028 (1.64%)
Natl Acad Sciences	1008 (1.60%)
ACM-Assoc Comput Mach	878 (1.40%)
European Telecom Standards Institute (ETSI)	865 (1.38%)
Blackwell Futura	784 (1.25%)
Royal Soc Chem	650 (1.03%)
IEICE-Inst Elec Info Comm Eng	642 (1.02%)
AAAS-Am Assoc Advancement Sci	510 (0.81%)

IEEE is the top cited publisher in patent references from the European Patent Office

Source: 1790 Analytics LLC 2012, , Science References from 1997-2011

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Why Publish with IEEE?

What helps build an author's credibility and career?

- Being published in a highly regarded, top quality publication

- Making your work easily findable

- Be cited by your peers

How do you increase your citations?

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Why Publish with IEEE?

What else increases an IEEE author's visibility?

IEEE's relationships with indexing and abstracting providers

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IEEE journal or IEEE conference?

- A **journal article** is a fully developed presentation of your work and its final findings
  - Original research results presented
  - Clear conclusions are made and supported by the data
- A **conference article** can be written while research is ongoing
  - Can present preliminary results or highlight recent work
  - Gain informal feedback to use in your research
- Conference articles are typically shorter than journal articles, with less detail and fewer references

Finding the right IEEE publication or IEEE conference

IEEE has **170 unique publications** covering a wide range of technical areas

- Review the journal listings
  - Who reads it
  - What they publish
  - What kinds of articles they want

IEEE publishes **1,300+** leading-edge **conference proceedings** every year

- Review the conference calendar
  - Find a good match for your research subject matter
  - Ensure you are available to present

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Publishing with IEEE Conferences

Each IEEE sponsored conference has its own requirements for publishing.

For complete information, see the Call for Papers for the conference in question.

To search for a specific conference, go to the main Conferences & Events page on www.ieee.org

Home » Conferences & Events » Conference Details

2012 IEEE Vehicle Power and Propulsion Conference (VPPC)

Sponsored by:

- **Power Electronics Society – PEL**
- **Vehicular Technology Society - VT**

Topic 1: HEV, BEV, FCEV and Plug-In EV System Design. Topic 2: Automotive Actuator and Electric Machinery Topic 3: Power Converter for Automotive Applications Topic 4: Motor Drives for Vehicle Applications Topic 5: Energy and Power Manag... Couplers Topic 7: Smart Grid and Electrical In... V2V) Topic 9: Telematics (included V2I) Topic...

Call for Papers for Conference Authors

Find details for paper and abstract submission.

› Search for call for papers on conference site

* Conference Details

Dates	09 Oct - 12 Oct 2012
Location	Seoul Olympic Parktel Seoul, Korea (South)
Web site	› www.vppc2012.org
Contact	Min Jung Kim Room 901, Science & Technology Building, 635-4, Yucksam-Dong, Kangnam-Ku Korea (South) Seoul 135-703 +82 70 8222 3371 +82 10 9156 3571 +82 2 3412 8723 (fax) secretariat@vppc2012.org
Conference #	20159
Attendance	450

Please see the conference Web site for full details.

Call for Papers for Conference Authors

Find details for paper and abstract submission.
› Search for call for papers on conference site

Conference Focus

- Application
- Science

Features
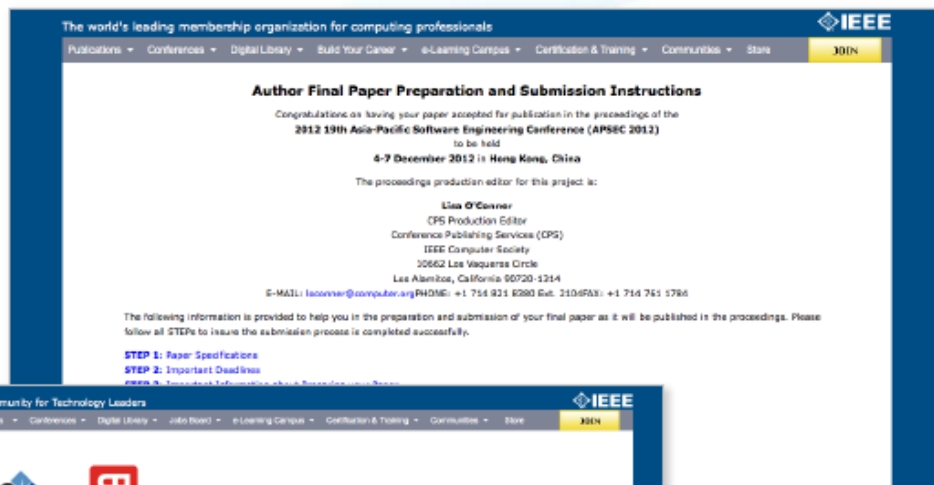
- Exhibits
- Tutorials

› Back to search results

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Author final paper preparation and submission instructions

If your paper is accepted to an IEEE sponsored conference, you will receive final submission instructions.

For general information for authors, go to the conference sponsor's information page.

Audience

Scientific research publishing

- Who writes scientific papers?
  - Whoever solves a new and important problem in their field
  - Engineers, scientists, educators and researchers from:
    - ➤ Corporations
    - ➤ Academia
    - ➤ Government
  - Students typically write and present conference papers before submitting journal articles

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Audience

What IEEE editors and reviewers are looking for

- Content that is **appropriate, in scope and level, for the journal**
- Clearly written **original material that addresses a new and important problem**
- Valid methods and rationale
- Conclusions that make sense
- Illustrations, tables and graphs that support the text
- References that are current and relevant to the subject

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Audience

Why IEEE editors and reviewers reject papers

- The content is **not a good fit for the publication**
- There are serious scientific flaws:
    - Inconclusive results or incorrect interpretation
    - Fraudulent research
- It is poorly written
- It does **not address a big enough problem** or advance the scientific field
- The work **was previously published**
- The **quality is not good enough for the journal**
- **Reviewers have misunderstood the article**

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Structure

Paper Structure
Elements of a manuscript

- Title
- Abstract
- Keywords
- Introduction
- Methodology
- Results/Discussions/Findings
- Conclusion
- References

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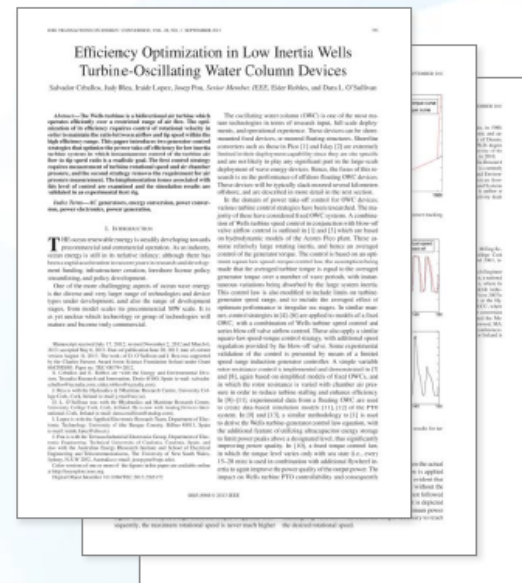
Structure

Paper Structure
Title

An effective title should...

- Answer the reader's question:
  "Is this article relevant to me?"
- Grab the reader's attention
- Describe the content of a paper using the fewest possible words
  - Is crisp, concise
  - Uses keywords
  - Avoids jargon

Good Title

vs.

Bad Title

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Structure

Paper Structure
Good vs. Bad Title

A Human Expert-based Approach to Electrical Peak Demand Management

VS

A better approach of managing environmental and energy sustainability via a study of different methods of electric load forecasting

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Structure

Paper Structure
Good vs. Better Title

An Investigation into the Effects of Residential Air-Conditioning Maintenance in Reducing the Demand for Electrical Energy

VS

"Role of Air-Conditioning Maintenance on Electric Power Demand"

4/8/2015

IEEE

Structure

Paper Structure
Abstract

A "stand alone" condensed version of the article

•No more than 250 words; written in the past tense

•Uses keywords and index terms

What you did

Why you did it

How the results were useful, important & move the field forward

Why they're useful & important & move the field forward

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Structure

Paper Structure
Good vs. Bad Abstract

The objective of this paper was to propose a human expert-based approach to electrical peak demand management. The proposed approach helped to allocate demand curtailments (MW) among distribution substations (DS) or feeders in an electric utility service area based on requirements of the central load dispatch center. Demand curtailment allocation was quantified taking into account demand response (DR) potential and load curtailment priority of each DS, which can be determined using DS loading level, capacity of each DS, customer types (residential/commercial) and load categories (deployable, interruptible or critical). Analytic Hierarchy Process (AHP) was used to model a complex decision-making process according to both expert inputs and objective parameters. Simulation case studies were conducted to demonstrate how the proposed approach can be implemented to perform DR using real-world data from an electric utility. Simulation results demonstrated that the proposed approach is capable of achieving realistic demand curtailment allocations among different DSs to meet the peak load reduction requirements at the utility level.

Vs

This paper presents and assesses a framework for an engineering capstone design program. **We explain** how student preparation, project selection, and instructor mentorship are the three key elements that must be addressed before the capstone experience is ready for the students. **Next, we describe** a way to administer and execute the capstone design experience including design workshops and lead engineers. **We describe the importance** in assessing the capstone design experience and report recent assessment results of our framework. **We comment** specifically on what students thought were the most important aspects of their experience in engineering capstone design and provide quantitative insight into what parts of the framework are most important

Structure

Paper Structure
Keywords

Use in the Title and Abstract for enhanced Search Engine Optimization

Logical

Appropriate

Applicable

Specific

Searchable

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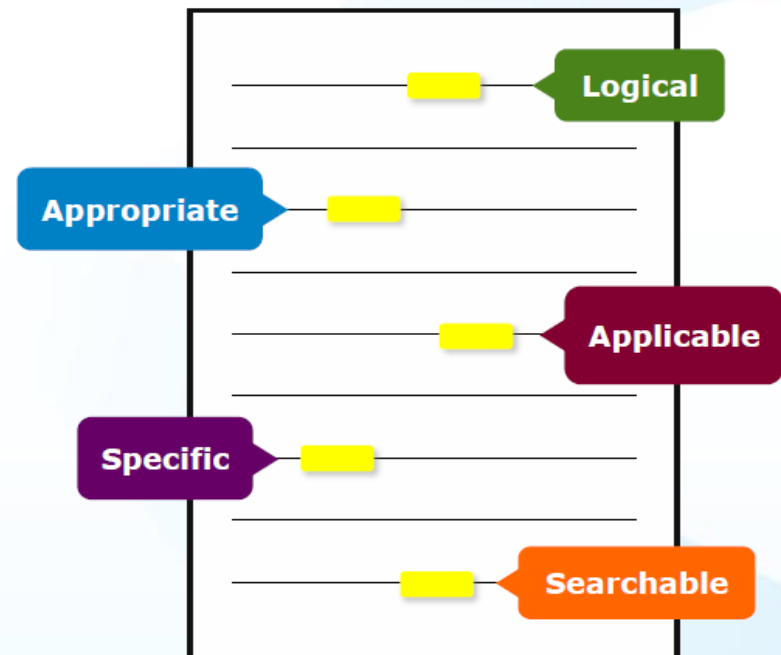
Structure

Paper Structure
Introduction

- A description of the problem you researched
- It should move step by step through:

Generally known information about the topic	Prior studies' historical context to your research	Your hypothesis and an overview of the results	How the article is organized

- The introduction should not be
  - Too broad or vague
  - More then 2 pages
  - Written in the present tense

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Structure

Paper Structure
Methodology

- Problem formulation and the processes used to solve the problem, prove or disprove the hypothesis
- Use illustrations to clarify ideas, support conclusions:

Tables
Present representative data or when exact values are important to show

Graphs
Show relationships between data points or trends in data

Figures
Quickly show ideas/conclusions that would require detailed explanations

Fig. A

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Structure

Paper Structure
Results/discussion

Demonstrate that you
solved the problem or
made significant advances

Results: Summarized Data

- Should be clear and concise
- Use figures or tables with narrative
  to illustrate findings

Discussion: Interprets the Results

- Why your research offers
  a new solution
- Acknowledge any limitations

Results

Discussion

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Structure

Paper Structure
Conclusion

- Explain what the research has achieved
    - As it relates to the problem stated in the Introduction
    - Revisit the key points in each section
    - Include a summary of the main findings, important conclusions and implications for the field
- Provide benefits and shortcomings of:
    - The solution presented
    - Your research and methodology
- Suggest future areas for research

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Structure

Paper Structure
References

- Support and validate the hypothesis your research proves, disproves or resolves

- There is no limit to the number of references
  - But use only those that directly support our work

- Ensure proper author attribution
  - Author name, *article title*, publication name, publisher, year published, volume, chapter and page number
  - IEEE journals generally follow a citation numbering system

Properly cited material

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Last task

- How do they fit together?

- Does each section perform its appointed task?

- Is the order logical?

- Do the ideas flow together? Is it easy to read?

- Does the same material appear more than ones?

- Can it be clearer?

- Is there enough detail?

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Ethics

Ethics
Types of misconduct

Conflict of Interest

- A financial or other relationship with the publication at odds with the unbiased presentation of data or analysis

Plagiarism

- Copying another person's work word for word or paraphrasing without proper citation

Author Attribution

- Must be given if you use another author's ideas in your article, even if you do not directly quote a source

Author involvement/ contributions

- Include any and all who have made a substantial intellectual contribution to the work
- Do not include minor contributors

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Ethics

Ethics
Ethical publishing

Plagiarism

- Avoid plagiarism
  - Cite and separate any verbatim copied material
  - Paraphrase reused text properly, and include citation
  - Credit any reused ideas
  - Familiarize yourself with IEEE Policies

Refer to our Tips Sheet
http://www.ieee.org/public
ations_standards/publicatio
ns/authors/plagiarism_and_
multiple_submissions.pdf

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Ethics

Ethics
Ethical publishing

Duplication, Redundancies & Multiple Submissions

- Author must submit original work that:
  - Has not appeared elsewhere for publication
  - Is not under review for another refereed publication
  - Cites previous work
  - Indicates how it differs from the previously published work
  - Authors MUST also **inform the editor** when submitting any previously published work

Refer to our Tips Sheet
http://www.ieee.org/publications_standards/publications/authors/plagiarism_and_multiple_submissions.pdf

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Where to Publish?

All Areas of Technology Covered

- Aerospace & Defense
- Automotive Engineering
- Biomedical Engineering
- Biometrics
- Circuits & Systems
- Cloud Computing
- Communications
- Computer Software
- Electronics
- Energy
- Engineering
- Imaging

- Information Technology
- Medical Devices
- Nanotechnology
- Optics
- Petroleum & Gas
- Power Electronics
- Power Systems
- Robotics & Automation
- Semiconductors
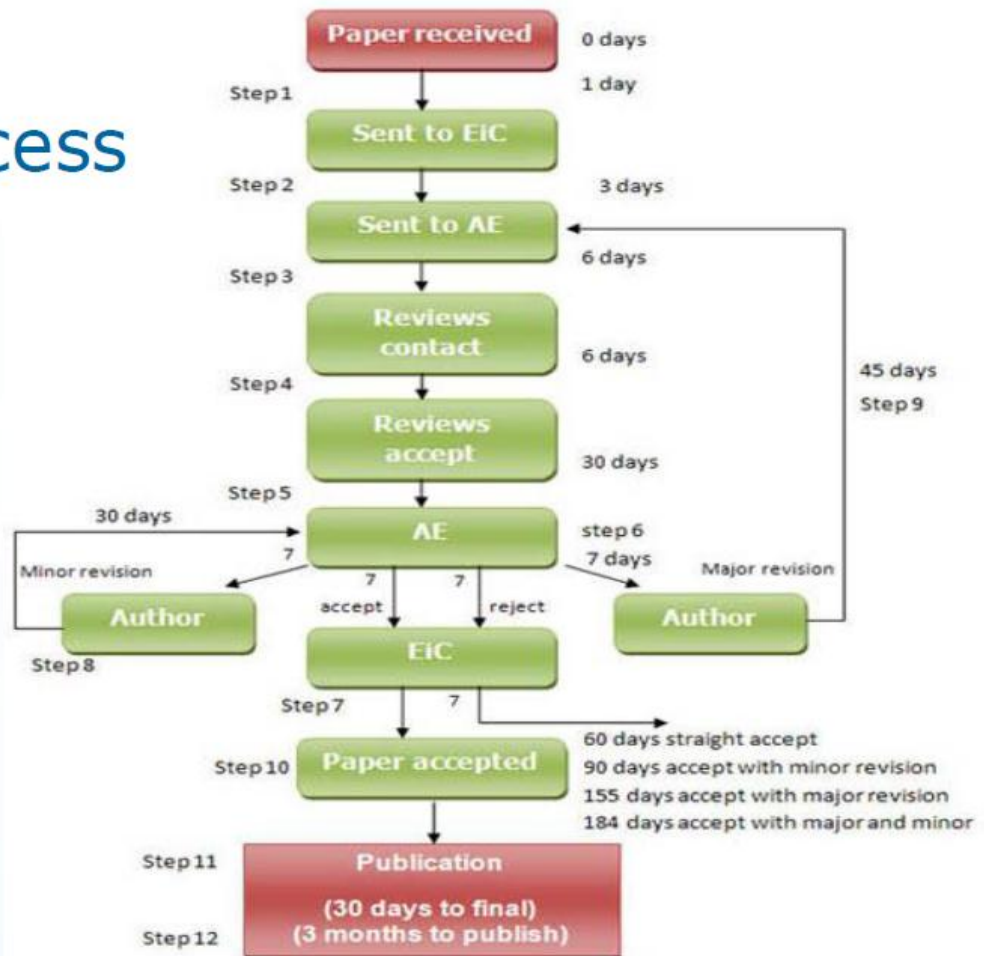- Smart Grid
- Wireless Broadband
and many more

Types

- **Traditional Journals** –
    Users/Libraries pay for access

- **Open Access Journals** –
    Author pays, free downloal

- **Hybrid Journals** –
    Most articles are traditional,
    some are open access (author
    preference)

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Review

Review

Review Process

e.g. IEEE Transactions on Information Technology in Biomedicine

Review

Review
Possible review decisions

- **ACCEPT:** Congratulations! The paper now is entered into a production process.

- **ACCEPT WITH MINOR CORRECTIONS:** One or more of the referees have made suggestions for improvement.

- **RESUBMIT:** The paper has major deficiencies that could be repaired by the author.

- **REJECT:** If you have a rejection from a top publication, you can try submitting the paper to a less-selective publication.

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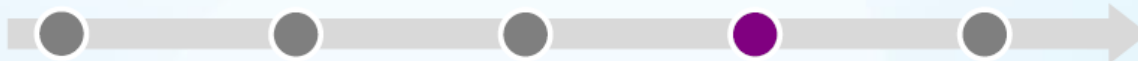
How to respond to reviewers and editor comments

To the Editor

Example/

Re: Title of the paper……………

Thank you very much for providing us with the reviewers' comments, which we did find them very helpful and constrictive. We have revised the paper along the lines suggested by the reviewers and all the changes are show as underlined. Below are our detailed responses to their specific comments.

Reviewers' Comments

Reviewer: 1

Key sites to remember

Manuscript "How to write":
http://www.ieee.org/publications_standards/publications/authors/author_guide_interactive.pdf

IEEE Author Tools
http://www.ieee.org/publications_standards/publications/authors/author_tools.html

IEEE Conference Search and Calls for Papers:
http://www.ieee.org/conferences_events/index.html

IEEE Xplore: http://ieeexplore.ieee.org

IEEE Xplore information, training and tools:
http://www.ieee.org/go/clientservices

IEEE Journal Citation reports:
http://www.ieee.org/publications_standards/publications/journmag/journalcitations.html

Key sites to remember

Publicly available authorship videos in IEEE.tv

- **How to write papers for MTT:**
  https://ieeetv.ieee.org/conference-highlights/how-to-write-papers-for-mtt

- **How to write and publish a technical paper**:

Part 1: https://ieeetv.ieee.org/ieeetv-specials/how-to-publish-a-technical-paper-with-ieee-part-1-overview-publishing-options-from-ieee

Part 2: https://ieeetv.ieee.org/ieeetv-specials/how-to-publish-a-technical-paper-with-ieee-part-2-audience-paper-structure

Part 3: https://ieeetv.ieee.org/ieeetv-specials/how-to-publish-a-technical-paper-with-ieee-part-3-ethics-where-to-publish-open-access-impact-factor

Part 4: https://ieeetv.ieee.org/ieeetv-specials/how-to-publish-a-technical-paper-with-ieee-part-4-using-ieee-xplore-and-other-author-tools
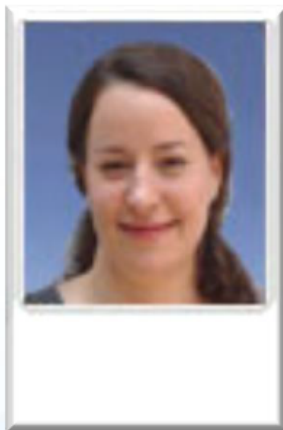
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THANK YOU!

Eszter Lukács

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Thanks for your attention!