

Products Newsletter



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Pubs Education: The Latest on AI

Do you know how to properly use AI language tools, such as ChatGPT, in publications and paper reviews? The following is PELS policy on this.

For Paper Authors

The use of artificial intelligence (AI)-generated text (e.g., by ChatGPT) in an article shall be disclosed in the acknowledgements section of any paper submitted IEEE Conference or Periodical. The section of the paper that use AI-generated text shall have a citation to the AI system used to generate the text.

Excerpted from the *IEEE Publication Services and Products Board (PSPB) Operations* Manual, Section 8.2.1.B.10.

"The use of content generated by artificial intelligence (AI) in an article (including but not limited to text, figures, images, and code) shall be disclosed in the acknowledgments section of any article submitted to an IEEE publication. The AI system used shall be identified, and specific sections of the article that use AI-generated content shall be identified and accompanied by a brief explanation regarding the level at which the AI system was used to generate the content. The use of AI systems for editing and grammar enhancement is common practice and, as such, is generally outside the intent of the above policy. In this case, disclosure as noted above is recommended."

For Paper Reviewers

The use of artificial intelligence (AI)-generated text (e.g., by ChatGPT) in a paper review process should be done with extreme caution. Using such language tools to improve the writing for better communication with the authors may be permitted. However, uploading a confidential manuscript to such a tool to generate review comments is a clear and serious violation of IEEE review policies.

Excerpted from the *IEEE Publication Services and Products Board (PSPB) Operations* Manual, Section 8.2.1.C.6.

"Information or content contained in or about a manuscript under review shall not be processed through a public platform (directly or indirectly) for AI generation of text for a review. Doing so is considered a breach of confidentiality because AI systems generally learn from any input."



IEEE Power Electronics Magazine

Today, power electronics (PE) is playing a vital role in advancing electrical technology around the globe. As a result, it is a key technology for power conditioning and grid integration of distributed energy resources, and for delivering power over long distances mainly from offshore wind and utility-scale solar farms. With such widespread adoption and a broad applications spectrum, there is a need for PE solutions that ease system integration. In fact, there is a growing demand for interoperable and vendor-agnostic interfaces to ease integration and reduce the balance of system costs.

In the June 2024 issue of *IEEE Power Electronics Magazine*, the second feature article "**Building the Electric Power Grid One Unit at a Time**," the authors Radha Sree Krishna Moorthy and Madhu Chinthavali reveal a fundamental unit for grid integration called smart universal power electronics regulator or SUPER. It is a single power conversion unit with standardized interconnections.

Free for All

For more editorial from the June 2024 issue of *IEEE Power Electronics Magazine*, visit the redesigned magazine **website**. You will discover a variety of Open Access columns, along with Society News stories. Stay tuned for the September 2024 issue, which will be dedicated to the magazine's tenth anniversary.

IEEE Transactions on Power Electronics (TPEL)

The TPEL editorial team would like to share the following announcements.

• Call for New TPEL Special Section Proposals(Deadline: August 31, 2024)

TPEL is now accepting special section proposals for manuscripts to be published in 2025. To find out the requirements for a proposal, click **here**.

• The TPEL editors have selected a few papers to highlight from the **August 2024** issue. **"Balancing Multiphase FCML Converters With Coupled Inductors: Modeling, Analysis, Limitations**" by Daniel H. Zhou, Janko Čeliković, Dragan Maksimović, and Minjie Chen. This article investigates the modeling, analysis, and design methods for passively balancing flying capacitor multilevel (FCML) converters using coupled inductors.

"An Integrated Multiport Circuit Breaker With Current Flow Controlling Capab ility for Meshed Multiterminal HVDC Grids" by Ali Sajjadi, Gholamreza Kadkhodaei, Mohsen Hamzeh, Saman Dadjo Tavakoli, and Oriol Gomis-Bellmunt. This article presents an integrated device with current flow control and fault current interruption capability.

IEEE Power Electronics Letters

The August 2024 issue of TPEL features 16 Letters. Here is one of those Letters.

"Topology and Control for Second Harmonic Current Reduction in Two-Stage Single-Phase Inverter Without Electrolytic Capacitors" by Shiqi Kan, Xinbo Ruan, and Xin Li. In this article, the topology of FCC boost TL converter was reconstructed from the viewpoint of active clamping. Based on this, different circuits in previous publications were synthesized, and a comparison of derived circuits was present. Under the condition of the front-end FCC boost TL converter regulating the dc-bus voltage, the SHC compensation method based on the modified flying capacitor voltage reference was proposed. By transformation of the control diagram, the voltage control plus load-current feed-forward scheme was derived. Finally, a 3 kW two-stage single-phase inverter was built and tested, and the experimental results verified the validity of the proposed scheme.

IEEE Transactions on Transportation Electrification (TTE)

The editorial team of TTE invites you to read theJune 2024 issue. Authors are encouraged

to submit their manuscripts for publication in TTE. All manuscripts can be submitted through **ScholarOne**. For author guidelines, please visit TTE**online**.

IEEE Open Journal of Power Electronics (OJPEL)

The Web of Science is currently testing the Transparent Peer Review (TPR) program with various IEEE publications, including **OJPEL**. TPR helps to increase the transparency of the peer review process and allows readers to see the exchange between authors and reviewers throughout the review process by anonymously publishing reviews and authors' responses to the reviewers' comments as supporting information to the actual article. OJPEL will soon begin its pilot program in ScholarOne Manuscripts. All topics are eligible to participate in this pilot. More information will be posted on PELS **website** when the system is live.

IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE)

The next issue of JESTPE will be published soon! This edition will feature a special issue about talkative power conversion. Be on the lookout for when this issue goes live on **IEEE Xplore** to look at these interesting papers.



This message is being sent to you because of your membership with and/or your interest in <u>publications</u> of the IEEE Power Electronics Society. For any questions about the newsletter, please contact Mary Beth Schwartz (<u>marybeth.schwartz@ieee.org</u>).

IEEE Power Electronics Society | 445 Hoes Lane | Piscataway, NJ 08854 US

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