

Products Newsletter



March 2024 | Issue 44

Call for New TPEL EIC and Co-EICs

IEEE Transactions on Power Electronics (TPEL) is now accepting applications and nominations for the opening of Editor-in-Chief (EIC for Regular papers), as well as Co-Editor-in-Chiefs (Co-EICs). This is an open call to all qualified IEEE PELS members. Feel free to contact and encourage colleagues to apply for the position. For more information, click **here**. **The application deadline is March 15**, **2024**. All application information can be **emailed** to the TPEL Administrator.

Pubs Education: AI Policy

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.

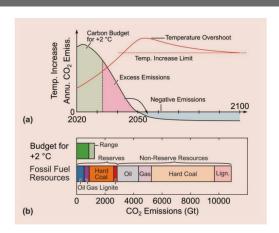
For Paper Authors

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.

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.

IEEE Power Electronics Magazine



The time horizon for achieving the net-zero-emission targets required for limiting global warming is relatively short—too short for relying on the hope for a disruptive technology emerging as a panacea: the lead times for technology development and scaling are long, as are the life-times of energy infrastructures once installed. Power converters with highest efficiencies of 99% and beyond have been demonstrated for various applications, i.e., there is little room for improvement. This can be seen as a consequence of the fact that until recently, converter optimizations mostly considered efficiency, power density, and

sometimes (life-cycle) costs. However, future power converters can and should be improved regarding their environmental footprint and their compatibility with a circular economy, i.e., Ecodesign or "Design for Circularity" concepts must be applied.

Therefore, in the March 2024 issue of *IEEE Power Electronics Magazine*, the article "Energy Efficiency is Not Enough!: Environmental Impacts as New Dimensions in Multi-Objective Optimization of Power Electronic Systems," the authors Jonas Huber, Luc Imperiali, David Menzi, Franz Musil, and Johann W. Kolar emphasize the need for circular economy in power electronics to mitigate e-waste and drastically cut carbon emissions. Simply improving efficiency, density, and life cycle cost is not the answer.

Free for All

For more editorial from the March 2024 issue of *IEEE Power Electronics Magazine*, visit the magazine **website**. You will discover various 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)

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

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

2 Three Special Sections (Submission Deadline: March 31, 2024)

The following special sections will be published in October 2024.

- Special Section on Advanced MV Power Electronics for Grid Interactive Applications
- Special Section on Advancing Power Electronics Reliability: Components, Systems, and Intelligent Operation
- •Special Section on Ultrawide/Wide Bandgap Device, Packaging, Control, EMI, and Applications for Power Electronics

To download the Call for Papers, please visit the TPELwebsite.

IEEE Power Electronics Letters

1 Letters Special Section (Submission Deadline: March 31, 2024)

The editorial team of TPEL Letters announces a Special Section on Power Electronics Technologies for Transforming Electrical Grids. Manuscripts can be submitted through **ScholarOne**. To access the Call PDF, clickhere.

2 Highlighted Letter from TPEL March 2024

The **March 2024 issue of TPEL** presents eight Letters covering a wide range of topics in power electronics, such as power semiconductor devices and modules, aluminum electrolytic capacitors, wireless power and data transfer system, electrical drives, and converter topologies. One intriguing letter from this issue is highlighted below.

•"A 3-D Integrated Power Module of GaN HEMTs Based on Silver Sintering Processes," by Zezheng Dong, Haidong Yan, Yinxiang Fan, Xinke Wu, and Junming Zhang. This work presents a 3-D packaging method for power modules of GaN HEMTs. A detailed discussion on the manufacturing processes, thermal simulations, and double pulse tests are provided.

IEEE Transactions on Transportation Electrification (TTE)

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)

OJPEL has OA papers on numerous topics. For instance, here are a few papers focusing on converters.

- "Stability Assessment of A Radial Grid With Power Converters" by Xingqi Liu, Zhixiang Zou, Jiajun Yang, Jian Tang, Zhiren Liu, Giampaolo Buticchi, Zheng Wang, and Ming Cheng.
- •"Isolated Flying Capacitor Multilevel Converters" by Santino F. Graziani, Thomas V. Cook, and Brandon M. Grainger.

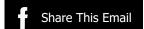
Be sure to take a look at **OJPEL** on Xplore for more OA papers.

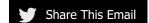
IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE)

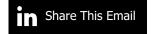
JESTPE currently has four special issues open for paper submissions. Below are the links for each call for papers. If you think your paper fits one of these topics, JESTPE would greatly appreciate your submission.

- •Design and Validation Methodologies for Power Electronics Components and Systems (Submission Deadline: March 15, 2024)
- Digital Twin Driven High-Reliability Power Electronic Systems (Deadline: April 30, 2024)
- Advanced Technologies of Motor Drives for Zero-Emission E-Mobility (Deadline: May 31, 2024)
- •Power Electronics Role in Future Renewables and Power-to-X Systems (Deadline: June 30, 2024)









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

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