Products Newsletter

March 2026 | Issue 68

PELS News

APEC Meeting Reminder

If you will be attending APEC, please note that the PELS Products Meeting with take place on Tuesday, March 24, from 9 am-12 pm. It be at the Grand Hyatt San Antonio River Walk, Lone Star C, which is on the Second Floor of the hotel. Address: 600 East Market Street San Antonio, Texas, 78205 USA. The meeting is open to all PELS members.

To access the PELS Meeting Series schedule for APEC 2026, click **here**.

Pubs Education: AI

AI Search

Did you know that PELS has a new website function, an AI-powered search? This search, utilizing vector-based or semantic search, represents a major advancement over traditional keyword-based methods. Unlike keyword search, vector search comprehends the meaning behind words, delivering more relevant results by analyzing the context and relationships between terms. This PELS pilot project currently includes two years of full-text articles from *IEEE Transactions on Power Electronics* (TPEL). For guidelines on using the search, please visit online **here**. Don't forget to provide feedback on the site regarding your experience with the AI-powered search.

AI Policy for PELS Publications

With the rapid development of AI technology, we would like to share the following **guidelines** for authors and reviewers.

For paper authors: “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.” (IEEE Publication Services and Products Board Operations Manual, Section 8.2.1.B.10)

For paper reviewers: “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 Publication Services and Products Board Operations Manual, Section 8.2.1.C.6)"

Author Portal & ScholarOne

PELS has implemented AI and self-citation policies in the Author Portal as well as ScholarOne. This ensures our compliance with the **IEEE PSPB**.

Call for Papers: PELS Publications

JESTPE

Special Issue: Applications of Wide-bandgap Technology for Innovative Future Grid Applications
Deadline for Submission of Manuscripts: Extended to April 1, 2026
Guest Editors: L. M. Tolbert, S. Ji, and C. Ho

Special Issue: Ultra-wide Bandgap Power Devices, Circuits, and Applications
Deadline for Submission of Manuscripts: April 15, 2026
Guest Editors: J. Enslin, O. Spahn, and T. Liang

Special Issue proposals within scope of the journal are welcome, guidelines available online at PELS **website** and IAS **website**. For further information, **email** JESTPE DEiC Sudip Mazumder.

JWPT (the new *IEEE Journal on Wireless Power Technologies*)
Special Issue: Wireless Power in Space
Deadline for Submission of Manuscripts: July 1, 2026
Bonus: Accepted papers will be invited to a Special Session at IEEE WiSEE 2026 (Leuven, Belgium.)
Guest Editors: Neil Buchanan, Alessandra Costanzo, Nuno Borges Carvalho, Greg Durgin

TPEL
Special Section: Advanced Model Predictive Control for Resilient Converter-Dominated Electrical Grids
Deadline for Submission of Manuscripts: March 31, 2026
Guest Editors: Jose Rodriguez, Zhenbin Zhang

Special Section: Power Semiconductor Devices: From Modeling & Characterization to Gate Driving and AI-Enabled Technologies
Deadline for Submission of Manuscripts: March 31, 2026
Guest Editors: Alan Mantooth, Leo Lorenz

Special Section: High-Power Electronics for Modern Energy Grids
Deadline for Submission of Manuscripts: March 31, 2026
Guest Editors: Giovanni De Carne, Jinpeng Wu, Drazen Dujic

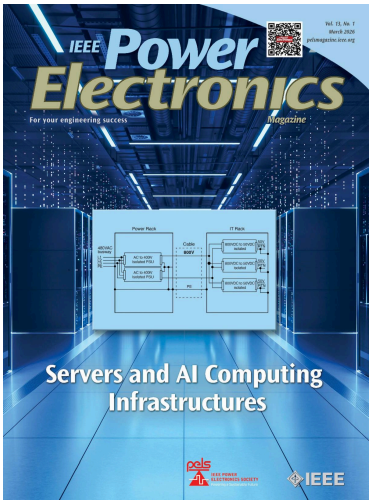
Special Section: Grid-Forming Technologies under Converter and Resource Constraints
Deadline for Submission of Manuscripts: March 31, 2026
Guest Editors: Dominic Gross, Yunjie Gu

TPEL Letters
Special Section: Cyber-Security in Power Electronics Systems: Modeling, Detection, and Resilience
Deadline for Submission of Manuscripts: Extended to April 15, 2026
Guest Editors: Zhi Jin (Justin) Zhang, Reynaldo Nuqui

IEEE Power Electronics Magazine

From the Editor

Welcome to the March Newsletter! The trade show season is in full swing with **APEC 2026**, March 22-26, in San Antonio, Texas. There's also another major conference coming right around the corner, bringing together people from around the world in the power electronics industry: **PCIM**. It is held June 9-11 in Nuremberg, Germany. Every aspect of the industry will be represented, providing news and info about advancements and trends in technology and application solutions. The event showcases products, research, and development initiatives, making PCIM an important destination for all.



March 2026 Issue

The March 2026 issue is now available **online**. It focuses on Servers and AI Computing Infrastructures. The issue includes a healthy feature well, industry news, column assortment, pre-APEC coverage, and Society News.

****

Discover Previous Issues

For more editorial from previous issues of the magazine, please visit our **website**. You will find Open Access columns, podcasts, and much more.

New Board Member

John Noon, Otis Elevator Company, USA, has joined the *IEEE Power Electronics Magazine Advisory Board*. Welcome!

****

Call for Society News

We are currently gathering Society News for the June 2026 issue. Do you have chapter events to highlight, such as guest speakers, workshops, social events? Or chapter community service? Please **email** your content in by March 31, 2026.

IEEE Transactions on Power Electronics (TPEL)

Welcome TPEL Co-Editor-in-Chiefs

Please welcome the following new Co-EiCs to TPEL.

- Yi Tang, Nanyang Technological University, Singapore, **TPEL Co-EiC Letters**
- Ali Khajehoddin, University of Alberta, Canada, **TPEL Co-EiC, Regular Papers**

● Mahshid Amirabadi, Northeastern University, USA, **TPEL Co-EiC, Regular Papers**
● Luca Corradini, University of Colorado Boulder, USA, **TPEL Co-EiC, Regular Papers**

****

Impact Factor Survey

As part of our ongoing efforts to improve the quality and reach of TPEL, we invite you to participate in a survey aimed at gathering valuable insights on how to enhance its impact factor. The survey will take approximately 10-15 minutes to complete and will be open until April 9, 2026. We greatly appreciate your contributions to PELS and look forward to your valuable insights! You can access the survey **here**.

****

High Performer Status for 2025

TPEL has been ranked as a High Performer (top 25% of all IEEE Periodicals) for average weeks submitted to first decision AND average weeks submitted to online post in the full-year 2025. TPEL is the only one High Performer among all the IEEE Transactions in the field of power engineering. Thank you to the TPEL editorial team for your hard work and dedication.

****

Call for TPEL Associate Editors

TPEL is accepting applications and nominations for Associate Editors. Please visit the **website** for the application requirements.

****

TPEL Review Paper Submissions

For those who wish to submit a review paper to TPEL, please **email** the following information to the Admin. The Admin will then forward these files to the EiC for review.

1. A biography for each author.
2. The publication history for each author related to the topic.
3. The abstract of the paper.

****

March 2026 Highlighted Paper

TPEL editors have selected a paper to highlight from the **March 2026** issue.

"**Nonintrusive Capacitor Monitoring in Photovoltaic Inverters Based on MPPT-Induced Voltage Transients**" by M K P Muhammed Ramees and Md. Waseem Ahmad. This paper presents a nonintrusive method for monitoring capacitor health by utilizing the transient conditions created by variations in the maximum power point tracking reference voltage. These transient conditions generate low-frequency signals within the system. By capturing the low frequency content from the PV voltage and the estimated capacitor current (derived from the inverter output current), the method can estimate the capacitance without the need for additional sensors. Importantly, this approach uses the same signals employed for converter control, eliminating the requirement for additional sensors, and does not need injection of any signal, ensuring that the method does not disrupt the normal operation of the converter. The effectiveness of this method was confirmed through simulations conducted using MATLAB/SIMULINK, as well as practical testing on a laboratory prototype of a three-phase inverter.

If you would like to submit a paper to TPEL, please visit the **IEEE Author Portal**.

IEEE Power Electronics Letters

The **March 2026** issue of TPEL features 13 Letters advancing the state of the art in power electronics, spanning topics such as wide-bandgap device reliability, advanced converter topologies, wireless power transfer, AI-driven thermal monitoring, and sustainable packaging approaches. The

issue includes nine Regular Letters presenting innovations in conventional power electronics and four Special Issue Letters highlighting emerging topics such as AI-based modeling, wireless power, and sustainable design. Two highlighted Letters in this issue address sustainable power electronics and robust EV wireless charging.

"**Repairable, Recyclable, and Reliable Power Electronics Using Liquid Metal Interconnection**" by Wei Mu, Ameer Janabi, Zhongxiu Xiao, Chengjie Du, Luke Shillaber, and Teng Long. This Letter introduces liquid metal (LM) bonding in power electronic device packaging and converter assembly. Traditional soldered or sintered interconnections hinder repair and recycling, but the fluidic LM interconnection enables easy disassembly, reduces thermomechanical stress, and maintains high electrical performance. A buck converter prototype demonstrates efficiency up to 98.2%, showcasing a practical approach for repairable, recyclable, and reliable power electronics.

"**An Antimisalignment Electric Vehicle Wireless Charging System Based on Two Transmitting Coils With LCC-S Compensation**" by Yang Yi, Zhiwei Yao, Wenxuan Pan, Ronghuan Xie, Xiangpeng Cheng, and Yiming Zhang. This Letter addresses the challenge of lateral misalignment in EV wireless charging. Using two transmitting coils with LCC-S compensation and a voltage compensation strategy, the system achieves 200 V at 1 kW with a peak efficiency of 95.17% across the misalignment range, providing a robust solution for efficient and misalignment-tolerant EV wireless power transfer.

IEEE Transactions on Transportation Electrification (TTE)

Authors are encouraged to submit their manuscripts for publication in TTE. All manuscripts can be submitted through the **IEEE Author Portal**. To read the February 2026 issue of TTE, please visit **Xplore**.

IEEE Open Journal of Power Electronics (OJPEL)

The editors of *IEEE Open Journal of Power Electronics* (OJPEL) welcome submissions to the journal. Please submit your paper through the **IEEE Author Portal**. To read papers from Volume 7 of OJPEL, please visit **Xplore**.

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

The February 2026 issue of JESTPE is now available through **Xplore**. The issue features a **Special Issue on High Power Density Power Converters Achieved by Device and Components Integration**. If you would like to submit a paper to JESTPE, please visit the **IEEE Author Portal**.

IEEE Journal on Wireless Power Technologies (JWPT)

Early Access Milestone for New Journal

JWPT's EiC Jasmin Grosinger presents one of the first Early Access papers for the journal: "**Development of Dynamic Wireless Power Transfer System for Japan's First Demonstration Test on Public Road**" by Osamu Shimizu, Sakahisa Nagai, Toshiyuki Fujita, Daisuke Gunji, Hiroshi Fujimoto, Hayato Sumiya, Koichi Tanaka, Kazushi Moriishi, and Kentaro Nouchi. This journal paper represents the outcome of six years of research and development, demonstrating that electric vehicles can be safely and reliably charged while driving under real public-road conditions. The work confirms compliance with durability, safety, and electromagnetic field regulations—an essential step toward practical deployment of dynamic charging infrastructure. This successful demonstration highlights how wireless power transfer technologies are transitioning from controlled test

environments to real-world transportation systems, supporting more efficient and sustainable electric mobility. If you would like to submit a paper to JWPT, please visit the **IEEE Author Portal**.

IEEE Electrification Magazine

Join the TEC Council

As a member of the IEEE Power Electronics Society (PELS), there is no fee to join the IEEE Transportation Electrification Council (TEC).

The TEC is a Technical Council within the IEEE that serves as "one voice" for Transportation Electrification and coordinates broad and deep activities in the growing electrification revolution across transportation domains. These domains include advances in electric and hybrid cars, more-electric ships and aircraft, rail systems, personal transport, and the motive, storage, power grid, electronic intelligence, and control technologies that make them possible.

Individuals can join the TEC as a Participant and through the Council's sponsored activities, including conferences and peer-reviewed publications. Participants have the opportunity to publish and collaborate on research, network with colleagues, stay current on news and events, develop standards, and participate in educational activities. The Council also is building a Distinguished Lecturer Program in which Council members may participate.

For more information, please click **here**.

Share This Email | Share This Email | Share This Email

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