IEEE POWER ELECTRONICS SOCIETY

Products Newsletter

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IEEE Advancing Technology for Humanity

PELS News

Welcome to PELS President-Elect

PELS would like to congratulate Yunwei Ryan Li, University of Alberta (Canada), on his new role as President-Elect for 2026. Prof. Li. will begin his new role effective immediately. He also will continue his role as PELS Vice President of Products. 2026 is the last year of his second term as VP of Products.

Pubs Education

2025 Indices Now Available

Did you know that PELS publications have yearly indices? In each publication index you can find all technical items—papers, correspondence, reviews, etc.—that appeared in the periodical during 2025, and items from previous years that were commented upon or corrected in 2025. Departments and other items may also be covered if they have been judged to have archival value. The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index. You can locate the 2025 indices under the last issue of 2025.

Monitoring Authorship Changes in the IEEE Publishing Portal

The latest improvements to the IEEE Publishing Portal include better monitoring of changes to the author list between different versions of an article. In addition to tracking author list changes on revised submissions, the IEEE Publishing Portal now also monitors changes on resubmissions, which occur when an author submits an updated version of their article after receiving a Reject and Resubmit decision. Unlike revisions, resubmissions are assigned a new Manuscript ID.

For both revised and resubmitted articles with author list changes, all authors—including any who were removed in the updated version—receive an email notification when the new version is submitted. The Portal also sends an automated email to the publication's administrator to support tracking and management of these changes. In ScholarOne, the Editor-in-Chief, administrator, and Associate Editor (or equivalent role) can view the author's explanation for the authorship change, determine whether the change is appropriate, and move the submission forward accordingly.

As a reminder, the IEEE Publication Services and Products Board Operations Manual (PSPB) includes the following policy about authorship changes. Once the list and order of authors has been established, the list and order of authors should not be altered without permission of all living authors of that article. Change in the author list is considered rare and exceptional, and the decision to allow

such changes rests with the Editor*. Section 8.2.1.A.3; “Editor*” is defined in 8.2 as the person responsible for the publication, which for most IEEE publications is the Editor-in-Chief.

PELS Publications Notes
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: Ultra-wide Bandgap Power Devices, Circuits, and Applications
Deadline for Submission of Manuscripts: March 31, 2026.
Guest Editors: Johan HR Enslin, Olga Spahn, and Tsorng-Juu Peter 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

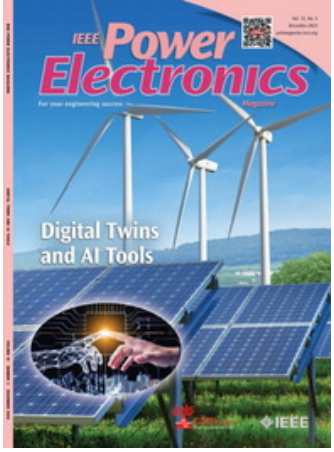
Special Section: High-Power Electronics for Modern Energy Grids
Deadline for Submission of Manuscripts: March 31, 2026.
Guest Editors: Giovanni De Carne, Jinpeng Wu, Drazen Dujic

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: March 31, 2026.
Guest Editors: Zhi Jin (Justin) Zhang, Reynaldo Nuqui

IEEE Power Electronics Magazine

From the EIC: Looking Forward to 2026!
Happy New Year to you all, and may you all have a fantastic 2026! Now is a time to look forward to events like **APEC** (San Antonio, Texas), March 22-26; **PCIM** (Nuremberg, Germany), June 9-11; and **ECCE Asia** (Nagasaki, Japan), May 31-June 4. We strongly encourage you to check them all out! If you are interested in participating in the magazine this year, please consult our **editorial calendar**.



Get Access to Previous Issues
For more editorial from previous issues of the magazine, please visit our **website**. You will discover a variety of Open Access columns, Society News, and podcasts. Be sure to read our December 2025 issue on **Digital Twins and AI Tools**.

IEEE Transactions on Power Electronics (TPEL)

Call for TPEL Co-EICs
The editors have announced a call for Co-EICs to handle TPEL regular papers. The deadline for applications is January 31, 2026. You can access the call **here**.

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.
3. The abstract of the paper.

January 2026 Highlighted Papers
TPEL editors have selected these papers to highlight from the **January 2026** issue.

"**Degradation Detection of a DC/DC Buck Converter Based on Feature Extraction**" by Yang Liu, Jigui Miao, Quan Yin, and Haoran Wang. This article presents a degradation detection method for dc/dc converters using feature extraction techniques. The output voltage ripple is used as the degradation indicator, and its values under healthy and degradation conditions are collected. Based on the time domain, frequency domain, and time-frequency domain feature information of the output voltage ripple, a feature selection method is designed to select key features, and the Bayesian optimization based support vector machine is established to detect degradation using the selected key features. Simulation and experimental results show the validity and practicability of the proposed method.

"**Impedance Analysis and Compensation Method for IPT System Applying Inverse Coupled Current Doubler Rectifier**" by Jian Cui, Yijie Wang, Tao Li, Jianwei Mai, and Dianguo Xu. This paper presents a novel impedance analysis and compensation method for IPT systems applying inverse coupled current doubler rectifiers (ICCDR). The work employs an innovative derivation approach based on rectifier diode current characteristics, establishing a parameter design criterion to ensure CCM. An accurate resistive inductive impedance model of ICCDR is established through modal analysis and first harmonic approximation. The presented LCC–LCC compensated IPT

prototype achieves zero phase angle and shows a 2% output current change rate within 8:1 load resistance range.

IEEE Power Electronics Letters

The **January 2026** issue of *IEEE Transactions on Power Electronics Letters* features 33 Letters showcasing cutting-edge advances across power electronics, including converter topologies, magnetics, sensing and protection, gate driving techniques, and data-driven control and modeling methods.

Two standout Letters from this issue address critical challenges associated with high-frequency switching dynamics and gate drive flexibility in SiC power modules, offering hardware-efficient solutions that enhance performance without increasing system complexity.

"**A Dual-Function Planar Magnetically Coupled Current Sensor for High-Frequency Oscillation Suppression and Switching Current Measurement**" by Xiaokang Zhang, Qiao Li, Yun Huang, Guiheng Liu, and Chao Yuan. This paper introduces an integrated sensing concept that simultaneously mitigates high-frequency switching oscillations and enables accurate switching current measurement. By embedding magnetically coupled planar coils within the printed circuit board, the proposed sensor combines a coil-based snubber to increase power loop impedance with a resonant compensation integrator that cancels snubber-induced resonance. This dual-function design achieves effective oscillation suppression while preserving high-fidelity current reconstruction, as validated through double-pulse experimental results.

"**A Novel Continuously Variable Gate Voltage Control Concept for Silicon Carbide Power Modules**" by Ahmad Al-Hmoud, Yushi Yang, and Yue Zhao. This paper presents an innovative gate driving approach that enables continuous gate voltage modulation using high-frequency signals up to 60 MHz. Unlike conventional solutions that rely on additional hardware or dc–dc converters, the proposed continuously variable gate driver (CVGD) exploits the intrinsic parasitics of SiC power modules to realize highly flexible driving profiles. The concept allows precise control across all switching intervals while maintaining a topology and component count comparable to traditional gate drivers.

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

To read the December 2025 issue of TTE, please visit **Xplore**.

IEEE Open Journal of Power Electronics (OJPEL)

The *IEEE Open Journal of Power Electronics* (OJPEL) is pleased to announce its new Editor-in-Chief, Wenkang Huang. The journal also welcomes a new Co-EIC to its board, Giovanni De Carne. For more on OJPEL, please visit us **online**.

Wenkang Huang
Infineon Technologies
(USA)

Giovanni De Carne
Karlsruhe Institute of Technology
(Germany)

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

Fernando Briz, JESTPE EIC, is pleased to announce that readers can look forward to the following special issues in JESTPE.

1. SI on Modular Power-Electronics and Reconfigurable Circuits in Energy Storage, Energy Conversion, and Power Management, published in Dec. 2025.
2. SI on High Power Density Power Converters Achieved by Device and Components Integration, to be published in Feb. 2026.

To access the latest issue of JESTPE, please visit **online**.

IEEE Electrification Magazine

The latest issue of *IEEE Electrification Magazine* is now **online**. In this issue, readers will find such features as **The Future of Electrified Transportation in the United States**, **The Link Between Waves and Watts**, and **Smarter Energy Management for Multistack Fuel Cells**.

If you are interested in submitting an article to the magazine, please **email** the editorial team. For detailed submission guidelines, please visit the magazine **website**.

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