

Products Newsletter



July 2023 | Issue 36

Journal Impact Factors Announced for PELS Pubs

First Journal Impact Factor! **IEEE Open Journal of Power Electronics**



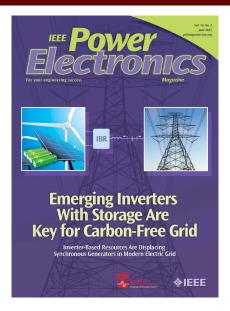
IEEE Open Journal of Power Electronics (OJPEL) is proud to announce its first Journal Impact Factor of 5.8 by Clarivate. OJPEL was launched in 2020. It is a 100% open access journal that publishes high-quality, peerreviewed papers. OJPEL covers the development and application of power electronic systems and technologies. The EIC of OJPEL is Dr. H. Alan Mantooth, University of

Journal Impact Factors also were announced for:

- •IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE): 5.5
- IEEE Power Electronics Magazine (MPEL): 2.3
- IEEE Transactions on Power Electronics (TPEL): 6.7
- •IEEE Transaction on Transportation Electrification

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IEEE Power Electronics Magazine



reliability of the electric grid.

Over the years, deployment of distributed energy resources (DER) has risen rapidly with the explosive growth in renewable energy sources (RES), especially using solar photovoltaic (PV) systems and wind power, as well as battery storage. While the early deployments of DER were enabled by synchronous generators (SGs), typically driven by diesel or natural gas engines, the recent growth in DER and RES is made possible by advances in grid connecting inverters, namely gridfollowing (GFL) inverters, and grid-forming (GFM) inverters. In the June 2023 issue of IEEE Power Electronics Magazine, the cover article "Advanced Inverter Interactions with Electric Grids" by Leo Casey, Johan H. Enslin, Géza Joós, Mark Siira, Bogdan Borowy, and Chase Sun, the authors suggest that new standards and guides may be required for inverter-based resources (IBR) operation, and help specify the respective roles of GFL and GFM operating modes. This will reduce inverter-based system events experienced by power utilities worldwide and increase the adoption rate of renewable energy, according to the article. Plus, the article explains the transition of the IBR from GFL mode to GFM mode to enhance the

Free for All

Visit the magazine **website** for various open access columns and society news stories.

IEEE Transactions on Power Electronics (TPEL)

TPEL has several announcements for the month of July.



Ongratulations to the 2022 TPEL Prize Paper Award Recipients!

- 2 Letter Awards
- 5 First Place Prize Paper Awards
- 9 Second Place Prize Paper Awards

For more information, visit the website.

2 Call for Proposals in TPEL Special Sections

IEEE Transactions on Power Electronics (TPEL) is seeking multiple proposals for special sections to be published in 2024. There are 2 required documents: **Call for Proposals** and the required **Guest Editorial Board Information** spreadsheet. The deadline for CFP is August 31, 2023.

Proposals for the special sections should be emailed to both the TPEL EIC: **ntuymchen@ieee.org** and the TPEL Admin: **marybeth.schwartz@ieee.org**. For more on the special sections, contact the TPEL Admin: **marybeth.schwartz@ieee.org**.

3 The August 2023 issue of TPEL is now available online. Be sure to check out these highlighted articles selected by TPEL editors.

"A Scalable Electronic-Embedded Transformer, a New Concept Toward Ultra-High-Frequency High-Power Transformer in DC-DC Converters" by Yuliang Cao, Khai Ngo, and Dong Dong. The paper provides an interesting hybrid passive-active circuit enhancement technique for modular converters.

"An Extended Generalized Average Modeling Framework for Power Converters" by Kartikeya Jayadurga Prasad Veeramraju, Jacob A. Mueller, and Jonathan W. Kimball. This paper discusses an extended generalized averaging technique capable of capturing multi-frequency dynamics.

IEEE Power Electronics Letters

TPEL Letters has a few news items to share for July.

In the June 2023 issue of TPEL we featured a Letters Special Section on *Patent-Related Short Articles*. We would like your feedback about the topic of "post-patent articles." We can then decide if such a topic should be a regular TPEL Letters topic in the future. Thank you for completing the survey.

2 We soon will be announcing another Letters special section, with a Call for Papers to be published in August or early September.

3 In the July 2023 issue, we are pleased to present a collection of 18 Letters that cover various emerging topics in power electronics technologies. These contributions include physics-based modeling, analysis and measurement of power semiconductor devices, novel converter circuits, control methods, modulation techniques, health monitoring of capacitors and motors, stability of grid-forming converters, and wireless power transfer. Two intriguing Letters from the issue are highlighted below.

"A Novel Data Generation and Quantitative Characterization Method of Motor Static Eccentricity With Adversarial Network," by Wei Sun, Haowen Wang, and Ronghai Qu. This work addresses the issue of acquiring data in the use of neural network for monitoring the degree of motor eccentricity. A data generation and quantitative characterization method is presented and verified with experimental tests.

"Analysis and Measurement of the Surge and Gate-Noise Voltages in a 1.7-kV IGBT Module With the Effect of Reverse-Recovery Current," by Kazunori Hasegawa and Kai Takagi. This work examines the impact of the reverse-recovery current produced by a PIN diode on the surge voltage and gate-noise voltage of IGBT devices within an inverter system. Theoretical analysis based on the circuit modeling and experimental measurements are presented.

IEEE Open Journal of Power Electronics (OJPEL)

Do you have a paper that you would like to publish in a short period of time? Take a look at OJPEL and see if you may find it beneficial to publish your article here! OJPEL offers a quick review turnaround time that provides quality reviews that can help you make sure you are publishing your best work. All articles that are published with OJPEL are 100% open-access, so anyone is able to read and cite them. Plus, OJPEL offers article processing charge discounts to PELS members! For more information, please click here.

IEEE Transactions on Transportation Electrification (TTE)

TTE has a few items of note for July.

Occupant Prize Paper Award Recipients!

1 First Place Prize Paper Award

3 Second Place Prize Paper Awards Visit the website for **details**.

The editorial team of *IEEE Transactions on Transportation Electrification (TTE)* is pleased to announce a new Call for Papers: Special Issue on Electrified Ship Technologies. The full paper submission deadline is January 31, 2024. The expected publication date is September 2024. All manuscripts must be submitted through Manuscript Central.

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

JESTPE is pleased to announce its 2022 Prize Paper Award Recipients!

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- 3 Second Place Prize Paper Awards

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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>).