

Products Newsletter



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IEEE Power Electronics Magazine



In parallel with battery electric vehicles (EVs), wireless inductive charging of EVs is also gaining momentum. Research and development in this area is moving ahead at full-speed. In the September 2023 issue of *IEEE Power Electronics Magazine*, the article "Wireless Inductive Charging of Battery Electric Vehicles is Coming," the authors Darko Vračar, Sebastian Wüstner, and Alkiviadis Boulos present the latest achievements in inductive charging system (ICS) at BRUSA Elektronik AG, Munich, Germany. Besides raising awareness of electrification using wireless ICS, the article also focuses on BRUSA's contributions to ICS, both in the academic world, as well industry. The authors claim that BRUSA was one of the first commercial company to demonstrate a working ICS for BMW.

Free for All

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

IEEE Transactions on Power Electronics (TPEL)

- **1** Three New Special Sections for Publication in October 2024 (Submission Deadline: March 31, 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

2 Post-Conference Paper Submissions

At ECCE, TPEL announced the establishment of post-conference paper submission guidelines. These **guidelines** are designed to aid authors in effectively enhancing the conference papers and navigating their transition to journal submissions and ensuring a successful outcome.

6 Institutional Emails

As of September 1, 2023, all TPEL submissions must have a primary email address that is institutional. This measure is to protect our authors. Examples of institutional emails include those from an academic institution, a government agency, a company, or IEEE. Papers that do not meet this requirement will not be entered into the review process. We thank you for your assistance with this submission update.

4 Highlighted Papers from January 2024 TPEL

- "Switching Noise Propagation and Suppression in Multisampled Power Electronics Control Systems" by Ruzica Cvetanovic, Ivan Z. Petric, Paolo Mattavelli, and Simone Buso. This paper discusses elegant theory and practice for understanding the noises in multisampled digital control systems.
- "Three-Phase Four-Wire Nine-Leg AC-DC-AC Converter Based on High-Frequency Link" by Jean Torelli Cardoso, Alan Santana Felinto, Cursino Brandão Jacobina, and Maurício Beltrão de Rossiter Corrêa. The paper examines high-quality analysis and implementation of a three-phase high-frequency link power quality conditioner.

IEEE Power Electronics Letters

- **1** The editorial team of TPEL Letters announces a Call for Letters: Special Section on Power Electronics Technologies for Transforming Electrical Grids. Manuscripts can be submitted through **ScholarOne**. January 31, 2024 is the Manuscript Submissions Deadline. To access the Call PDF, click **here**.
- ② In the **December 2023** issue, 16 Letters are published, covering the advancements in wireless power, novel converter topologies, advanced control methods, use of deep learning in thermal modeling, and advanced design of magnetic components. Two intriguing Letters from the issue are highlighted below.
- "A PCB-Integrated Inductor With an Additively Electrodeposited Laminated NiFe Core for MHz DC–DC Power Conversion," by Yixiao Ding, Xuan Wang, and Mark G. Allen. This work presents a practical design of a printed circuit board (PCB) integrated inductor for MHz dc-dc power converters. The inductor employs an additively electrodeposited polypyrrole-laminated nickel-iron core, which, with a racetrack-shaped winding, yields an efficiency above 85% for a 4 MHz buck converter with output current in the range of 0.15-0.4 A.

"Optimization of Torque Ripple for Low-Carrier-Ratio Dual Three-Phase PMSM With Pulse Pattern Control," by Minrui Gu, Zheng Wang, and Bo Wang. This work presents an optimal PWM strategy to mitigate the torque ripple of dual three-phase permanent-magnet synchronous motor drives with low carrier ratios. The method is used with the model predictive pulse pattern control scheme and experimentally verified.

IEEE Open Journal of Power Electronics (OJPEL)

OJPEL is almost done for 2023. With the start of a new year, there is an important update from IEEE regarding open-access article processing charges. Beginning on January 1, 2024, IEEE is adjusting the open-access article processing charges to USD 1,995 per article. IEEE members will be eligible for a 5% discount. If you are a PELS member and submit to the *IEEE Open Journal of Power Electronics*, you will be eligible for a 20% discount. Please note that the IEEE and PELS discounts cannot be combined.

IEEE Transactions on Transportation Electrification (TTE)

There is still time to submit a manuscript to the TTE Special Issue on Electrified Ship Technologies. The submission deadline is January 31, 2024. The expected publication date is September 2024. All manuscripts can be submitted through Manuscript Central.

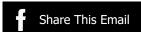
IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE)

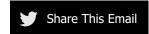
As of this year, JESTPE has been publishing for 10 years. This would not be possible

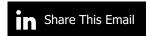
without the efforts of those who have volunteered to be on JESTPE's editorial board. There are still some on the current editorial board who have been with JESTPE since its inception. We thank the following volunteers for supporting JESTPE for the past 10 years and are looking forward to their contributions in the future.

- Fernando Briz
- Henry Shu-Hung Chung
- Lennart Harnefors
- Yen-Shin Lai
- Tsorng-Juu Liang
- Gerry Moschopoulos
- Olorunfemi Ojo
- Mario Pacas
- Xinbo Ruan
- Toshihisa Shimizu
- Luca Zarri









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>).

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