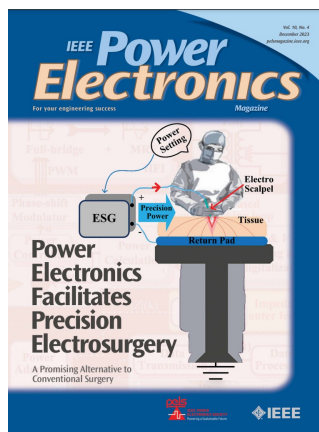


## IEEE Power Electronics Magazine



Use of electricity in surgery goes back more than a century. Since then, researchers and scientists have advanced the field to enable modern electrosurgery to pass alternating current at high frequency to precisely conduct clinical treatment of biotissues, such as cutting, coagulation, and fulguration. Consequently, with advances in power electronics, dedicated electrosurgery generators have evolved considerably from their older versions in terms of size, weight, functionality, galvanic isolation, protection for safety, attachment detection, and in multitude of other aspects.

In the December 2023 cover feature of *IEEE Power Electronics Magazine*, **Power-Electronics Enabled Precision-Power Electrosurgery**, authors Sudip K. Mazumder, Congbo Bao, and Ankit I. Mehta show that power electronics based electrosurgery is a promising alternative to conventional surgery for several surgical applications. Besides advancing the technique, the researchers are also focused on extending the current work for experimental validations.

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## IEEE Transactions on Power Electronics (TPEL)

### ❶ Call for New TPEL EIC and Co-EICs (Deadline: March 15, 2024)

*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](#).

### ❷ 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](#).

### ❸ 2023 TPEL Index Now Online

*2023 Index, IEEE Transactions on Power Electronics, Vol. 38*, is now available online. The Open Access index covers all technical items—papers, correspondence, reviews, etc.—that appeared in the periodical during 2023, and items from previous years that were

commented upon or corrected in 2023. To access the index, click [here](#).

#### ④ 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 TPEL [website](#).

#### ⑤ Highlighted Papers from February 2024 TPEL

The editors have selected the following papers from [TPEL February 2024](#).

- **“A Spurious-Free Piezoelectric Resonator Based 3.2 kW DC–DC Converter for EV On-Board Chargers”** by Eric Stolt, Weston Braun, Kristi Nguyen, Vakhtang Chulukhadze, Ruo Chen Lu, and Juan Rivas-Davila. This paper presents advanced piezoelectric resonator designs and thermal management, enabling high-power, efficient piezoelectric DC-DC converters.
- **“DC Output Ripple Suppression of High-Frequency DC–DC Resonant Converter”** by Xingkui Mao, Junhui Zhou, Binyi Zhang, Youtu Lin, Jiqing Dong, Yueshi Guan, and Yiming Zhang. The paper introduces an innovative dual capacitors filter for DC-DC power converters, effectively reducing output ripple by 50% without additional cost or volume.

## IEEE Power Electronics Letters

#### ① Letters Special Section (Submission Deadline: January 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, click [here](#).

② The [TPEL January 2024 issue](#) features 15 Letters that delve into novel topologies, control and modulation strategies for power converters, advancements in wireless power transfer and IoT applications, and motor drives. Two intriguing *Letters* from the issue are highlighted below.

- **“Compact Curved Coupler with Novel Flexible Nanocrystalline Flake Ribbon Core for Autonomous Underwater Vehicles”** by Chen Chen, Chaoqiang Jiang, Yibo Wang, Yuanshuang Fan, Bo Luo, and Yuan Cheng. This work presents a compact curved coupler utilizing a nanocrystalline flake ribbon magnetic core for inductive power transfer systems. Experimental tests on a DC-DC converter verify the superior features of the coupler.
- **“An Active Snubber Circuit for High-Capacity DC Chopper to Achieve Soft-Switching Operation for Offshore Wind VSC-HVDC System”** by Sihang Wu, Xiangyu Zhang, Bei Zhang, and Lei Qi. This work presents an active snubber circuit for soft-switching operation of high-power DC chopper in the high-voltage direct-current transmissions system. A downscaled 2 kV/600 A experimental test platform confirms the significant reduction (by 78%) of switching losses of IGBTs in the DC chopper.

## IEEE Open Journal of Power Electronics (OJPEL)

Effective January 1, 2024, IEEE has adjusted the Open-Access article processing charge (APC) to 1,995 USD plus applicable local taxes. This also affects papers that have been submitted in 2023. IEEE members receive a 5% discount and IEEE PELS members receive a 20% discount when publishing in OJPEL. These discounts cannot be combined and do not apply to undergraduate and graduate students. To learn about OJPEL, click [here](#).

## 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 **ScholarOne**.

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

JESTPE would like to thank all who expressed interest in joining its editorial board for 2024. The application period is now closed. The editorial team received over 20 Editor and 180 Associate Editor applications. Due to the high volume of applications, JESTPE is unable to provide personalized notifications to those who were not selected. We are excited to introduce the new editors starting in 2024.

- Huang-Jen Chiu (Natl. Taiwan Univ. of Sci. and Tech., Taiwan)
- Ngai Man Ho (Univ. of Manitoba, Canada)
- Hui Helen Li (Florida State Univ., USA)
- Firuz Zare (Queensland Univ. of Tech., Australia)
- Luca Zarri (Univ. of Bologna, Italy)

JESTPE is currently reviewing the Associate Editor applications and hopes to announce the new AEs soon. To learn more about JESTPE, click [here](#).



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