



Call for Papers

IEEE Journal of Emerging and Selected Topics in Power Electronics

Special Issue on Ultra-wide Bandgap Power Devices, Circuits and Applications

Our electrical power grid faces a variety of challenges, including aging infrastructure, an increased frequency of severe weather events, and emerging cyber and physical threats -ultimately resulting in power disruptions that cost for example the U.S.A. over \$150 billion each year. Along with the need to update our aging energy infrastructure, the demand for electricity is rapidly increasing because of electrification of transportation, industrial processes, and growth of AI data centers. This special issue is attracting new concepts in ultra-wide bandgap power electronics technology innovations that will enable a more secure and reliable grid, by advancing innovation in new high voltage converter topologies, circuits and high voltage system applications.

Topics of interest include, but are not limited to the following topics:

- Ultra-widegap Power Semiconductor Devices
- HV Power Electronic Building Blocks and Modules
- Ultrafast switching techniques
- HV Protection Devices
- HV Converter Topologies and Circuits
- EMI mitigation techniques
- Low-loss, HF dielectrics and HV insulation
- Packaging approaches for realization of high-power, high-speed devices and modules
- Innovations in UWBG and Ultrafast Switching and Gate drive technologies.

All submissions should be made through *Manuscript Central* at <http://mc.manuscriptcentral.com/jestpe-ieee>. The cover page should be clearly marked with "Special Issue on Ultra-wide Bandgap Power Devices, Circuits and Applications" and the appropriate manuscript type should be selected when uploading the submission. Manuscripts submitted for this special issue will be handled by the guest editorial board outlined below. For more information on special issues and electronic submissions, please go to <http://www.ieee-pels.org/publications/jestpe>.

Deadline for Submission of Manuscript: 15 April 2026

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Proposed Timeline

- **15 January, 2026:** Call for papers to IEEE JESTPE Ed. Office
- **15 April, 2026:** Manuscript submission deadline
- **31 July, 2026:** Final acceptance notification
- **31 August, 2026:** Manuscript forwarded to IEEE for publication
- **November, 2026:** Special Issue appears in IEEE JESTPE