

## Special Issue

# Emerging Topics in Power Electronic Converters of Microgrids and Smart Grids

### Message from the Guest Editors

This Special Issue invites original contributions and review papers on emerging trends and innovations in power electronic converters for microgrids and smart grids. Topics of interest include, but are not limited to, the following:

- Design of power converters based on WBG devices with enhanced performance.
- Novel converter topologies and control strategies for microgrids and smart grids.
- WBG power semiconductors packaging-to-system integration.
- Advanced testing methodologies and reliability assessments of power electronic converters.
- Modeling and stability analysis of power electronics in microgrids and smart grids.
- Power quality improvement, harmonic mitigation, and voltage regulation.
- Inertia support, black start capabilities, and system protection strategies.
- Integration of renewable energy sources, energy storage systems, and electric vehicles.
- Case studies and real-world implementations of power electronics in microgrid and smart grid applications.

### Guest Editors

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### Deadline for manuscript submissions

15 November 2025



## Electronics

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## About the Journal

### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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### Editor-in-Chief

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