Special Issue

Innovative Technologies in Power Converters

Message from the Guest Editors

The main aim of this Special Issue is to seek high-quality submissions that highlight these innovative technologies in power converters and address recent breakthroughs in power electronics application-oriented design. The topics of interest include but are not limited to:

- Adaptive and predictive controllers
- Preventing aging and failure controllers
- Neural network-based and Artificial Intelligence controllers
- Internet of Things applied to power management
- Modular arrangements (IPOS, ISOP, IPOP, multilevel power converters, composite power converters)
- Partial power processing converters
- Multiple input–multiple output (MIMO) power converters
- Resonant-based power converters and PWMresonant converters
- High switching frequency applications of GaN and SiC
- High power density switching converters using GaN or SiC
- Unique applications of SiC or GaN devices
- New ferromagnetic materials for magnetic elements
- Emerging dielectric materials and metamaterials for capacitors
- Superconductivity and cryogen applications

Guest Editors

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Deadline for manuscript submissions

closed (28 February 2022)



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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.

Editor-in-Chief

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

