

Special Issue

Power Electronic Circuits and Systems for Emerging Applications

Message from the Guest Editor

In our fast-changing world of technology, power electronic circuits and systems have become a key enabler for a wide spectrum of applications. Examples of a few emerging applications that rely on the development of innovative power electronic circuits and controls include integrating renewable energy sources, powering electric vehicles, driving space crafts, ensuring stable grid power quality and stability, advancing industrial automation, establishing HVDC grids and solid-state transformers. This Special Issue addresses all aspects of the design, development, control, reliability, and related issues of power electronics circuits and systems in the context of emerging applications. Original research articles, case studies and reviews are welcomed, with a focus on, but not limited to, the following research areas:

- Innovative topologies and control strategies for power converters
- Integration of power electronics in renewable energy systems
- Electric drives and propulsion systems for electric vehicles
- Advanced power management techniques in smart grids
- High-voltage direct current (HVDC) grid technologies

Guest Editor

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Deadline for manuscript submissions

15 September 2025



Electronics

an Open Access Journal
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Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/183494

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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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