Special Issue

Power Electronics Contribution to Renewable Energy Conversion: Progress and Challenges

Message from the Guest Editors

This Special Issue aims to provide a particular opportunity for researchers, engineers, and academics to demonstrate and exchange the progress shown in the latest study results and findings within the proposed subject, and present promising future developments and challenges as well. All original research articles and reviews related to energy conversion technology issues are welcome. The Special Issue topics include, but are not limited to:

- Renewable energy generation systems;
- Power converter topologies;
- Power conversion control:
- Converters and systems;
- Renewable energy and energy storage;
- Electricity and hydrogen-based energy systems;
- Battery energy storage and management systems;
- Battery charging systems;
- Smart grid;
- Distributed energy generation systems;
- Power and energy management and dispatch;
- Converter modeling, simulation, design and modulation control;
- Wireless power transfer;
- Maximum power point tracking for renewable energy harvest;
- Solid-state lighting and drives;
- Wide bandgap power electronics;
- Electrical machines drive and control;
- Systems' special applications.

Guest Editors

Dr. Shun-Chung Wang

Dr. Tripathi Ravi Nath

Dr. Jianguan Liao

Deadline for manuscript submissions

closed (31 October 2022)



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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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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).

