Special Issue

Power Electronics and Renewable Energy System

Message from the Guest Editor

At present, we must construct a sustainable global energy system to stop climate change. In this sense, the electricity and transport sectors play an important role. The transition towards an renewable energies and the progressive implementation of electric vehicles are necessary. The topics to be addressed in the Special Issue include (but are not limited to):

- Power electronics in renewable energy sources.
- Power flow control and optimization.
- Electrical energy efficiency in industry, buildings, transmission and distribution, etc.
- Modeling, simulation and control of power electronic converters.
- Analysis of the uncertainty generated by renewable sources and electric vehicles.
- High/Medium-voltage DC systems.
- Grid planning with large-scale renewable energy resources.
- Renewable energy conversion systems: design, modelling, control and integration to modern power systems.
- Power and energy quality in electric systems with renewable energy resources.
- Power electronics and control in microgrids.

Guest Editor

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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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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).

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