

Special Issue

Recent Advances in Modeling and Control of Electric Energy Systems

Message from the Guest Editor

Over the past few years, electric energy systems are rapidly evolving, driven by the increasing demand for renewable energy integration, advancements in smart grid technologies, and the necessity for enhanced reliability and efficiency. This Special Issue on "Recent Advances in Modeling and Control of Electric Energy Systems" aims to showcase cutting-edge research findings and innovative solutions that address the challenges faced by today's electric grids. We seek to highlight significant advancements in modeling techniques, control strategies, and their applications in real-world scenarios. The topics include, but are not limited to, the following:

- Advanced modeling techniques for electric energy systems;
- The dynamic modeling of power systems;
- The modeling of renewable energy sources and their integration;
- Control strategies for renewable energy integration;
- Energy storage systems and their management;
- The modeling and control of battery energy storage systems;
- Advanced energy management systems for storage solutions;
- New topologies and control methods of inverters for electric vehicles;
- The thermal management of battery systems;

Guest Editor

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closed (15 February 2025)



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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

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).