

Special Issue

Recent Advances in High-Performance Electrical Machine Drives: Design, Optimization, Manufacturing, and Control

Message from the Guest Editors

Today, electrical machines systems, as one of the core components for energy conversion and electricity consumption, have been widely employed in many sectors of industry, transportation, and domestic life. This Special Issue is dedicated to providing a platform for researchers to exchange the latest research and newest ideas in the area of design, optimization, manufacturing, and drives for high-performance electrical machines, further contributing to the ongoing progress in this dynamic field. In this Special Issue, original research articles and reviews are welcome. Research areas may include but not limited to the following:

- Permanent magnet machines;
- Reluctance machines;
- Electrically excited synchronous machines;
- Doubly fed induction machines;
- Data-driven design optimization;
- AI-assisted design;
- Advanced manufacturing techniques for machines;
- Integration design of machines and power electronics;
- Machine control and drives.

Guest Editors

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Deadline for manuscript submissions

closed (15 June 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 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).