

Special Issue

High Power Electric Traction Systems

Message from the Guest Editors

Miniaturization, lightening of weight, and high reliability of traction systems are required for energy saving, running distance improvement, and lifetime extension. New switching devices (Silicon Carbide), the permanent magnet synchronous motor (PMSM), and new power converter/inverter topologies with high-efficiency control schemes have contributed to achieve the needs. This Special Issue focuses on the analysis, design, and implementation of high-power electric traction systems for miniaturization, lightening of weight, and high reliability. Topics of interest for this Special Issue include, but are not limited to:

- Control of traction inverter
- Motor drive schemes for traction system
- New topology for high-power traction system
- Reliability of traction systems
- High voltage silicon carbide (SiC)
- Battery or hydrogen-powered traction systems
- Tolerant control of traction system under faults

Welcome to contribute!

Guest Editors

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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).

