Special Issue

Al-Assisted Control and Monitoring of Power Electronics in Transportation Systems

Message from the Guest Editors

This Special Issue highlights how AI and ML are advancing the control, diagnostics, and operational intelligence of power electronics in modern transportation systems. We invite submissions of original research and comprehensive reviews in this interdisciplinary area. Topics of interest include:

- Al-assisted real-time control
- Fault detection and predictive maintenance
- Physics-informed ML modeling
- Intelligent energy management
- Digital twins and distributed monitoring
- Embedded AI and cyber-security

We welcome contributions from researchers and industry professionals aimed at promoting intelligent, robust, and efficient power electronic systems for transportation.

Guest Editors

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Deadline for manuscript submissions

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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 16.8 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).

