Special Issue

AI-Driven Energy Optimization, Diagnosis, and Control for Next-Generation Electric Vehicles

Message from the Guest Editors

We invite contributions that explore novel AI-driven strategies for energy optimization, intelligent diagnosis and prognosis, and advanced vehicle control. We seek research that will define the state of the art and illuminate the path for the next generation of intelligent, efficient, and reliable electric vehicles. Potential topics include, but are not limited to, the following:

- Machine learning and deep learning for energy management strategies in HEVs and EVs.
- Intelligent optimization and control of hybrid energy storage systems.
- Predictive and adaptive energy management based on traffic flow, route, and driving behavior.
- Reinforcement learning for real-time powertrain energy optimization.
- AI-based state of charge, state of health, and remaining useful life estimation.
- Machine learning models for battery degradation diagnosis and prognosis.
- Data-driven battery modeling and parameter identification.
- Intelligent fault diagnosis and anomaly detection in battery management systems.
- Smart control strategies for EV and HEV dynamics.
- AI applications in motion planning, stability, and trajectory control.
- ...

Guest Editors

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Deadline for manuscript submissions

15 April 2026

Electronics

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Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/254716

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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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