

Special Issue

Leveraging AI for Failure Diagnosis: Insights into Clean Energy Storage & Power Systems

Message from the Guest Editors

Transportation and energy storage electrification are considered the most promising ways to achieve the energy revolution and carbon neutralization worldwide. Developing clean energy devices has been investigated as the most critical energy storage technology to support all modes of electrified transportation and energy storage. The ever-increasing demands of all-weather applications, long lifespan, high energy density, fast charging, low cost, and high safety in electrified transportation are calling for better devices. Appropriate energy storage device design is increasingly regarded as a necessary strategy to enhance next-generation power/energy supply, considering its potential advantages of low cost, environmental friendliness, high energy/power density, intrinsic safety, long service life, and fast-charging capability. This Special Issue aims to reveal the failure mechanisms of energy storage devices, enhancing their overall performance from power, lifespan, and safety perspectives, unlocking artificial intelligence-based diagnosis methods, and providing guidance for the design of next-generation clean energy storage devices.

Guest Editors

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Deadline for manuscript submissions

20 November 2026



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 7.0



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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.

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