



Advanced Modeling, Control and Emerging Application of Energy Storage Systems

Guest Editors:

Dr. Jichao Hong

Prof. Dr. Xiaoming Xu

Prof. Dr. Xiaolin Tang

Dr. Jiale Xie

Deadline for manuscript
submissions:

closed (10 January 2023)

Message from the Guest Editors

Energy storage systems (ESSs) are essential for achieving intelligent transportation electrification and are considered fundamental assets integrated into modern power systems. Emerging applications of ESSs with various entities can accelerate the paradigm shift towards sustainable transport and power systems. Therefore, this Special Issue aims to provide timely solutions for emerging scientific and technical challenges in energy storage for intelligent transportation systems and smart grids.

Topics of interest include but are not limited to:

- Advanced models for batteries, supercapacitors, and fuel cells etc.;
- Energy storage systems integration and performance optimization;
- Multi-physics field modeling, simulation, and experiments of ESSs;
- Online parameter identification and joint state estimation of ESSs;
- Lifetime prediction/analysis and fault diagnosis of HESSs;
- Innovative data analysis and energy management strategies of ESSs;
- Advanced battery safety and thermal runaway warning technology;
- AI-enabled decision making and operation and maintenance.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank: JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)