



energies



an Open Access Journal by MDPI

Battery Modelling, Applications, and Technology

Guest Editor:

Dr. Simone Barcellona

Department of Electronics,
Information and Bioengineering,
Politecnico di Milano, 20133
Milan, Italy

Deadline for manuscript
submissions:

closed (31 October 2023)

Message from the Guest Editor

Batteries, among the various energy storage systems, are electrochemical storage devices that have always been attractive for both stationary and mobile applications. Different kinds of technology (lead–acid, nickel–cadmium, nickel–metal, etc.) have been developed over the years, and there are other novel technologies (metal–air, quasi–solid–state battery, all–solid–state battery, etc.) still under study. The most important features that these devices aim to have high power, energy density, and efficiency in addition to a long lifecycle. To achieve this, the modeling of batteries and the estimation of their parameters becomes a very important challenge.

In the light of above, the aim of this Special Issue is to collect both original research works as well as review articles on battery chemical, electric, thermal, and aging models, integrated battery models and their composition, battery parameter estimation methods, and novel applications and technologies of batteries.

Dr. Simone Barcellona

Keywords

energy storage systems; battery technologies; battery applications; battery modelling; parameter estimation techniques



mdpi.com/si/147872

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)