Special Issue

Advances in Battery Energy Storage Systems

Message from the Guest Editors

This Special Issues focuses on technologies of battery energy storage, such as rechargeable batteries and flow batteries for stationary and vehicular applications. The topics of interest related to BES systems include, but are not limited to:

- BES modeling, state estimation and parameters identification
- BES management systems (BMS, EMS)
- BES diagnostics
- BES online testing (e.g., electrochemical impedance spectroscopy, incremental capacity)
- BES interface power electronics,
- BES charging
- Experimental investigation offline on BES devices with particular reference to Redox Flow Batteries (RFBs) and Li-ion batteries.
- Multi-physic multi-dimensional models of singles components and stack of RFBs and Li-ion batteries.
- Design of BES systems for microgrids
- Technical and economic assessments of BES systems
- Electric vehicles with electrical prolusion powered by batteries
- Waterborne vehicles with electrical prolusion powered by batteries.

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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.

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