Special Issue

Thermal and Energy Management of Battery-Operated Systems

Message from the Guest Editor

This Special Issue aims at addressing the challenges posed by integrated management of battery temperature and energy efficiency considering the energy efficiency of the load devices, including modeling and estimation of battery-powered systems, design of energy and thermal management systems for batteries, system-level energy and thermal management techniques. It will focus on:

- Battery modeling: thermal, State of Charge and State of Health models
- System energy estimation: architectural analysis, sensor placement and estimation algorithms
- Battery system design: cell balancing, grouping/packing techniques and power electronic aspects
- Energy management methods for battery-powered systems: Circuits, Algorithms for System-level power management
- Cell heat generation and battery system heat transfer analyses
- Battery cooling systems and battery thermal management systems
- System-level integration and control of batteries into the systems
- Hybrid energy system design
- Battery storage of renewable energy

Guest Editor

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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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