Special Issue

Thermal Safety Design and Management of Batteries

Message from the Guest Editors

The vigorous development of electric vehicles and energy storage power stations is an effective solution to promote the effective use of renewable energy. However, the safety issues of lithium-ion batteries have not been satisfactorily resolved. Safety design is expected to fundamentally improve the safety of batteries and promote the discovery and development of new materials, new mechanisms, and new structures. On the other hand, safety management can ensure more rational use of existing batteries and improve the safety of battery systems. To this end, this Special Issue focuses on the frontiers of the fundamental science and key technologies for the thermal safety design and management of batteries, including mechanisms, modelling, characteristics, control, etc. Topics of interest for publication include but are not limited to:

- Safety design of battery materials
- Battery safety additives
- Thermal properties of battery materials
- Thermal runaway: mechanisms, characteristics, warning, and control
- Cell safety design
- Pack and system safety design: structures, parts, and control
- Thermal management system
- Firefighting: extinguishing agents and strategies

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About the Journal

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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