Special Issue

Battery Management and Advanced Energy Storage/Conversion Technologies in Renewable Power Systems: From Batteries to Fuel Cells and Hybrid Solutions

Message from the Guest Editors

With the rapid development of the social economy, energy security and environmental protection have become urgent issues facing mankind. The usage of renewable energy to generate electricity can alleviate the above problems to a certain extent. In the development and application of renewable power generation systems, new energy storage and energy conversion technologies are vital. The application of battery energy storage can promote the continuous and stable generation of power by renewable energy sources, while reducing wind and solar abandonment rates. The rapid development of battery technology is crucial to the realization of the efficient use of renewable energy, low-carbon and low-emission operation. The Special Issue is focused on the combination of battery management and system integration technologies, suitable for large-scale application and sustainable complex energy systems. The scope of this Special Issue includes, but is not limited to, the following topics:

- Battery energy storage in renewable energy;
- Large-scale battery integration technology;
- Aging of energy storage batteries;
- Battery safety management;
- Battery thermal management.

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