



Smart Battery Systems: Advanced Modeling, State Estimation, Prognostics and Control

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Batteries are deployed across a wide range of applications, such as portable electronics, electric vehicles, and stationary power storage systems, due to their high energy and power densities and long lifetime. With emerging technology such as artificial intelligence and blockchain technology, smart battery systems that integrate state-of-the-art battery hardware with advanced battery management processes are moving rapidly from a research field to a requirement for technology's functionality. Advanced modeling, state estimation, prognostics, and control are the key parts of smart battery systems and contribute to extending battery lifetime and enhancing battery safety. This Special Issue is a dedicated outlet for up-to-date research on all aspects of advanced modeling, state estimation, prognostics, and control of smart battery systems. Manuscripts from cross-disciplinary fields, such as artificial intelligence, blockchain, electrochemistry, power electronics, and thermal and mechanical technologies are warmly welcome.





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Message from the Editor-in-Chief

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