Special Issue

Advances in Modeling Methods for Battery Life Prediction and Performance Evaluation (Volume II)

Message from the Guest Editor

This Special Issue highlights the research efforts towards advanced lifetime prediction methodologies and/or algorithms development works in terms of contributions (research/perspective/review articles). This is the second volume of the series following up the excellent collection of the works in the first issue. Novel methodologies and characterization techniques to predict battery aging could also be included for battery diagnosis and prognosis from cell to pack level. The authors are encouraged to submit original articles addressing potential but not limited to the following topics.

- Battery aging and lifetime prediction models
- Battery state of X (SoC, SoH, SoE, SoP, SoS) estimation
- Early life and Remaining useful life (RUL) prediction
- Rest time based or accelerated aging studies
- Advanced algorithms for on-board predictions
- Diagnosis and prognosis of battery systems
- Physics-based degradation modeling
- Model development using field-data (e-mobility & stationary)
- Machine learning or data-driven battery predictions
- Review of state-of-the-art battery modeling methodologies

Guest Editor

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Deadline for manuscript submissions

closed (23 January 2025)

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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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