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Health-Conscious Energy Management Strategy with Monitoring/Diagnosis/Prognosis Modules for Embedded Hybrid Energy Storage Systems

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Message from the Guest Editors

Dear colleagues,

The proposed Special Issue highlights the research topics of online monitoring, diagnosis, and prognosis of PEMFCs, LIBs, and SCs, and their integration into the sophisticated health-conscious EMS. Topics of interest for publication include, but are not limited to:

- Data-driven or model-based state-of-charge and state-of-health estimation for ESSs;
- Control-oriented multi-physical (electrical-thermal-aging) modeling for ESSs;
- Fusion of model-based and data-driven control techniques for ESSs;
- Robust and non-linear observer design for state and parameter estimation for ESSs;
- Proposition of health-conscious or fault tolerant control strategy for ESSs;
- Incipient ESSs fault diagnosis;
- Early stage remaining-useful-life prediction and uncertainty assessment for ESSs;
- Information fusion-based decision-making process for health-conscious EMS design;
- Advanced artificial intelligence techniques in the health-conscious EMS design;
- Comprehensive review of recent developments of ESSs' online monitoring/diagnosis/prognosis and their integration into the health-conscious EMS.



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Special Issue



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Message from the Editor-in-Chief

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