

Special Issue

Control, Modelling, and Management of Batteries

Message from the Guest Editors

Lithium-ion batteries are generally regarded as key components of a sustainable society. However, they can only make a positive environmental impact if they have a long enough service life. Battery manufacturing is an energy-demanding process, and they can still be charged using electricity generated from fossil fuels. To achieve a safe yet effective utilization of these batteries, it is necessary to develop advanced techniques to control and manage these batteries. This Special Issue will highlight recent studies that are related to the control, modeling, and management of batteries. Topics of interest include but are not limited to the following:

- Battery modeling, including models that describe the battery's electrochemical behavior, dynamic behavior, etc.
- Estimation of the internal status of the battery and battery packs, including the state of charge, state of health, state of power, state of energy, remaining useful life, internal temperature, etc.
- Second-life use of retired batteries, including battery screening, battery reuse, battery recycling, etc.
- Techniques that can prolong the lifespan of batteries.....

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