



Service Safety, Reliability, and Uncertainty Assessment of Lithium-Ion Battery

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Message from the Guest Editors

Dear Colleagues,

Recently, due to their wide temperature range, high energy density, low self-discharge rate, and long cycle life, lithium-ion batteries have been widely used in a variety of industries, such as transportation, electronics, portable mobile devices, and aerospace. However, the capacity degradation of lithium-ion batteries can lead to increased internal resistance, accelerated aging, and even a safety risk during long-term use and charge/discharge processing. Moreover, defects in the design stage, harsh service environment, and misuse can also cause serious degradation of the service performance of lithium-ion batteries. Therefore, the service performance assessment of lithium-ion batteries has become a hot topic in theoretical research and engineering applications.

In this Special Issue, we welcome papers or reviews, including simulation studies and experimental studies, on the service performance of battery materials, battery cells, and battery packs, with a focus on safety, reliability, and uncertainty assessment. Furthermore, we also welcome articles on optimized design for lithium-ion battery service safety.





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Message from the Editor-in-Chief

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