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# **Lithium-Ion Batteries for Electric Vehicle**

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Deadline for manuscript submissions: closed (15 November 2024)

## Message from the Guest Editors

Dear Colleagues,

Featuring high energy and power density, a long lifespan, and a continuously decreasing cost, Li-ion batteries are regarded as the key energy storage components for electric vehicles. As is the case with most electrochemical systems, Li-ion batteries are highly nonlinear systems with complicated physical and chemical reactions. They are fragile to external factors, such as voltage, current, temperature, vibration, and humidity. The internal states of the batteries are mostly unmeasurable with the existing commercial sensors. Issues such as ultrafast charging, lifespan, second-life utilization, and reliability under extreme temperatures remain unsolved. Therefore, the intelligent control and management of these batteries are critical to the safe, fluent, and efficient use of these batteries.



mdpi.com/si/144600







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### Message from the Editor-in-Chief

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