





Special Issue Reprint

# **Thermal Management in Lithium-Ion Batteries**

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Considering the rapid growth witnessed in the electric vehicle and rechargeable battery markets, this Special Issue presents an opportune platform to explore diverse thermal management technologies. It specifically focuses on their application in battery and electronics systems for transportation applications, including passenger cars, trucks, buses, locomotives, boats, aircraft, and beyond, encompassing both established industry practices and emerging solutions for future advancements. This Special Issue includes valuable insights and expertise from academic institutions, industry organizations, and national laboratories.

The published papers cover the following topics: Single-phase and multi-phase cooling; Innovative cooling materials and structures; Advanced sensors, thermal control, and fault detection; Strategies to mitigate thermal runaway and propagation; Cutting-edge models to gain insights into thermal-related degradation mechanisms; New mechanistic models to understand degradation caused by thermal issues; Challenges of battery thermal management under extreme conditions such as extremely fast charge and low temperatures.





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