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Electrolyte Development for Fast-Charging High-Energy- Density Lithium Batteries CRADA 482 [Abstract Only]

January 2021

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Abstract

The high energy-density lithium (Li)-ion battery (LIB) and Li metal battery (LMB) technologies have been developed rapidly for the widespread electrification of automotive transportation sector. The projected fast-growing markets call for substantial improvement of battery performance and manufacturing cost reduction.

This project is to optimize and mature previously demonstrated novel electrolytes for both fast-charging LIBs with Gr anodes and high-energy-density LMBs to achieve long-term cycling stability at room temperature for applications in electric vehicles, unmanned aerial vehicles, and consumer electronics.

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