



Recycling of Lithium-Ion Batteries: Processes and Technologies

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Message from the Guest Editor

Dear Colleagues,

The recent expansion of the use of lithium-ion batteries (LIB) for various applications, including consumer electronics, electric vehicles, commercial buildings, and electrical grids, in an order of incremental scale, exponentially increases the demand for lithium resources. On the one hand, primary lithium resources are limited, and on the other hand, the extraction of lithium from the primary sources produces environmental impacts, which will result in the applications of LIBs being unsustainable. Therefore, for LIB applications to be sustainable, LIBs must be recycled. This Special Issue is devoted to the recycling of LIBs with regard to the processes and technologies.

Potential topics for this Special Issue include, but are not limited to:

Recycling LIB cathode materials;

Recycling LIB anode materials such as $\text{Li}_4\text{TiO}_{12}$, etc.;

Recycling LIB electrolytes;

Recycling byproducts formed after the electrolytes react with LIB anode/cathode materials;

Thermodynamic constraints for LIB processes and technologies.





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