



High Capacity Electrode Materials for Advanced Lithium Ion Batteries

Guest Editor:

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submissions:

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Message from the Guest Editor

Dear Colleagues,

High energy density LIBs need both anode and cathode materials with high capacities for hosting Li-ions. In response to this demand, considerable research efforts have been directed toward improving the energy density of batteries by developing high-capacity electrode materials such as Li-rich (or Li-excess) cathodes, Ni-rich cathodes, and Si anodes, and other high-capacity anode and cathode materials. High-capacity anode research, in particular, has been active, and materials such as silicon (Si), tin (Sn), germanium (Ge) and tin oxides (SnO_x) have received significant attention. To address the most state-of-the-art in the research and development of high capacity electrodes (both anode and cathode) for lithium-ion batteries. The contents of the manuscripts will include, but are not limited to, the following topics:

- High capacity cathode materials for lithium-ion batteries
- High capacity anode materials for lithium-ion batteries
- Alloying anode (e.g., Si, Sn, Ge, etc.)
- New design and concept for high capacity electrodes
- Methods for performance analysis and material characterization
- Various cell design with different combination of anode and cathode.





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Editor-in-Chief

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Message from the Editor-in-Chief

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