Special Issue

Optimization and Exploration of Novel Electrode Materials for Lithium-Ion/Solid State Batteries

Message from the Guest Editors

Lithium-ion batteries are commonly used for consumer electronics with one of the best energy-to-weight ratios. Beyond consumer electronics, lithium-ion batteries are growing in popularity for electric vehicles due to their high energy density, long cycle life, and high-rate performance. In recent years, new electrode materials with unique physical and chemical properties have been designed to meet the requirements of the automotive industry. However, the high cost of lithium-ion batteries is still a major challenge, and the optimization of existing active materials and exploration of novel electrodes are urgent matters. This Special Issue focuses on the optimization of existing electrodes and the exploration of novel electrodes for lithium-ion end solid state batteries. We welcome authors to submit relevant articles to this issue to share the lastest trends and promote the development of high specific capacity batteries. Keywords: cathode; anodes; oxides; olivine; polymer; lithium metal; lithium ion batteries; solid state batteries

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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