Special Issue

Ionic Liquid Electrolytes for Energy Storage Devices

Message from the Guest Editor

Ionic liquids are salts in the liquid state that have unique properties such as low volatility, excellent electrochemical stability, and low toxicity. Recently, ionic liquid electrolytes demonstrated excellent suitability for their application in rechargeable batteries and supercapacitors. Uncommon phenomena such as lithium negative transference, superionicity, interfacial electrofreezing, etc. take place with these electrolytes, making it crucial to understand the rules for better electrolyte design even beyond ionic liquids themselves. We are pleased to invite you to contribute your research to the Special Issue "Ionic Liquid Electrolytes for Energy Storage Devices" of MDPI Materials (IF:3.1 (2023)). This Special Issue aims to communicate recent discoveries related to the applications of ionic liquids in energy storage. In this Special Issue, original research articles, perspectives, and reviews are welcome. Research areas include (but are not limited to) : synthesis of ionic liquids, physical-chemical properties of ionic liquids, batteries and supercapacitors with ionic liquid electrolytes, etc.

We look forward to receiving your contribution.

Guest Editor

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About the Journal

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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