Special Issue

New Energy Storage Materials for Rechargeable Batteries

Message from the Guest Editor

Rechargeable batteries are the most important power sources for energy storage systems. With the advancements in 5G, electric vehicles, and clean energy such as wind and solar energy, rechargeable batteries with a high energy capacity, high safety level, long cycling life, low cost, green characteristics, and abundant resources are in demand. There has also been a growing research trend towards new energy materials for all types of ion battery, such as MXene, covalent–organic frameworks, metal–organic frameworks, liquid metals, biomaterials, solid state electrolytes, and so on. This Special Issue is proposed to provide and share recent research and developments on new energy storage materials for rechargeable batteries, including lithium ion batteries, sodium ion batteries, potassium ion batteries, calcium ion batteries, and zinc ion batteries, along with other rechargeable batteries, as well as on their synthesis, characterization, properties, and simulations. The contributions in this Special Issue will be of great interest to researchers working in the field of energy storage materials and batteries.

Guest Editor

Prof. Dr. Jinkui Feng

Key Laboratory for Liquid-Solid Structural Evolution & Processing of Materials (Ministry of Education), School of Materials Science and Engineering, Shandong University, Jinan 250061, China

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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Message from the Editorial Board

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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2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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