Special Issue

Development of Electrode Materials for Sodium Ion Batteries

Message from the Guest Editors

The generation of electrical energy from renewable sources has surged in recent years due to an increase in the demand for efficient, environmentally friendly energy production. It is therefore imperative to develop effective energy-storage systems in order to enhance our ability to store and utilize the energy generated from renewable sources on a large scale. In addition, although the electric vehicle market is growing rapidly, the cost of lithium-ion batteries (LIBs) is a major hurdle impeding the widespread use of electric cars. In this particular context, low-cost sodium-ion batteries (SIBs) have garnered significant attention due to their cost, as they are widely available and affordable compared to traditional LIBs. However, the development of high-performance electrode materials is key to the widespread utilization of SIBs. In recent years, many researchers have endeavored to address this topic, leading to the manufacture of higher performance SIBs. To provide an essential guide to the development of electrode materials for SIBs, this Special Issue of *Materials* is dedicated to the investigation of electrode materials for SIBs.

Guest Editors

Dr. Guo-Ming Weng

Shanghai Key Laboratory of Hydrogen Science & Center of Hydrogen Science, School of Materials Science and Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Yuanming Gao

Inner Mongolia Key Laboratory of New Materials and Surface Engineering, School of Materials Science and Engineering, Inner Mongolia University of Technology, Hohhot 010051, China

Deadline for manuscript submissions

20 December 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/223177

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

mdpi.com/journal/materials

Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

MDPI