Special Issue

Recent Progress in Metal-Based Electrode Materials

Message from the Guest Editors

This Special Issue aims to provide a comprehensive overview of recent advances in the design, synthesis, and functional understanding of metal-based electrode materials. Particular emphasis will be placed on novel nanostructured architectures, phase-engineered systems, and hybrid metal–nonmetal composites that exhibit enhanced electrochemical activity and stability. These materials encompass not only pure metals, but also metallic alloys, oxides, hydroxides, and metal–organic frameworks.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

Metal and alloy electrodes for batteries and capacitors;
Metal oxide and hydroxide electrodes for pseudocapacitive storage;
Electrocatalytic applications of metal-based materials;
Electrodeposition and surface engineering of metal-based electrodes;
Structural and electrochemical characterization techniques;
In situ/operando studies of electrode processes.

We look forward to receiving your valuable contributions.

Guest Editors

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editors-in-Chief

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