Special Issue

Deposition of Metals and Their Application in Catalytic Processes of Energy Interest (2nd Edition)

Message from the Guest Editor

This Special Issue aims to provide an overview of recent advances in the synthesis of catalytic materials via deposition methods, such as single atoms, spherical and hetero-shaped nanoparticles, nanosheets, etc., as well as energy realization via traditional thermochemical conversion, photocatalysis, electrocatalysis, and photoelectrochemical catalysis transformation. This Special Issue is expected to promote the application of metal nanocatalysts in the energy field through precise synthesis, suitable modification, advanced characterization, and theoretical calculation.

- Rare earth catalytic materials;
- The development of rare earth metal structural materials;
- Thermoelectric materials;
- Rare earth energy materials;
- New organic/polymer electrode materials;
- Lithium-ion battery materials;
- Non-ferrous metal resource circulation and metallurgical secondary comprehensive utilization;
- Rare metal metallurgy;
- The comprehensive utilization of non-traditional resources;
- The multiphysics simulation of industrial process and strengthening energy saving;
- Rare earth luminescent materials;
- Rare earth-doped novel laser (scintillation) crystals.

Guest Editor

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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.

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