

Special Issue

Advances in High-Performance Non-ferrous Materials

Message from the Guest Editors

Nowadays, there is great pressure on energy conservation and emission reduction. In order to achieve these goals, weight reduction in manufacturing fields such as the vehicle, marine, and aerospace industries, and microelectromechanical systems, is the major trend. Although some structures and parts that require special properties and service conditions must use ferrous materials such as steels due to their superior thermal and wear resistance, there is a desperate need to replace these alloys with non-ferrous materials such as Al alloys, Mg alloys, Ti-based alloys, and Cu alloys in order to reduce operational and maintenance costs. Recently, many material processing techniques have been developed to enhance the performance of non-ferrous materials. This Special Issue covers these topics and focuses on the process–structure–performance relationships of high-performance non-ferrous materials.

Guest Editors

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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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