

Special Issue

Research Progress in High-Performance Magnesium Alloy and Its Applications

Message from the Guest Editor

Magnesium is abundant in the Earth's crust and seawater. Mg alloy is the lightest metallic structural material, with the advantages of high specific strength, high specific stiffness, good electromagnetism shield, good damping capacity, good machinability, easy recycling, etc. Therefore, it has extremely broad application prospects and has drawn considerable interest in the fields of automobile, electronics, electrical appliances, transportation, aerospace, aviation, and the national defense military industry. This Special Issue will compile recent developments and excellent results in the field of Mg alloys to accelerate the large-scale application of Mg alloys. The articles presented in this Special Issue will cover but are not limited to the following topics: alloy development, microstructural evolution and mechanical properties, solidification and cast alloys, deformation and wrought alloys, welding and joining, corrosion and surface treatment, modeling and simulation, primary production and recycling, biomedical and functional applications, etc.

Guest Editor

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Deadline for manuscript submissions

closed (10 May 2023)



Materials

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CiteScore 5.8
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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.

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