materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.4

Indexed in: PubMed

CITESCORE 5.2

Advances in High-Performance Non-ferrous Materials—2nd Volume

Guest Editors:

Prof. Dr. Hailiang Yu
Stake Key Laboratory of High Peformance Complex Manufacturing, Light Alloys Research Institute, Central South University, Changsha 410083, China

Dr. Zhilin Liu
Stake Key Laboratory of High Peformance Complex Manufacturing, Light Alloys Research Institute, Central South University, Changsha 410083, China

Dr. Guoai He
Light Alloy Institute, Central South University, Changsha 410083, China

Deadline for manuscript submissions:
20 July 2024

Message from the Guest Editors

Dear Colleagues,

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.

materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi