materials

IMPACT FACTOR 3.1

Indexed in: PubMed

CITESCORE 5.8

an Open Access Journal by MDPI

Advanced Structural-Functional-Integrated Light Alloys

Guest Editors:

Prof. Dr. Yuan Yuan
National Engineering Research Center for Magnesium Alloys, College of Materials Science and Engineering, Chongqing University, Chongqing 400000, China

Dr. Ligang Zhang
School of Material Science and Engineering, Central South University, Changsha 410083, China

Deadline for manuscript submissions:
closed (10 September 2023)

Message from the Guest Editors

With the rapid development of 5G communication technology and the new energy automobile industry, the broad applications of light and high-performance alloys, e.g., Al, Mg and Ti alloys, have attracted increasing attention. The existing traditional light alloys cannot meet the requirements of both structure and heat dissipation. Structural-functional-integrated light alloys provide both structural and functional properties. Mg and its alloys are attractive for application in the transportation field, Al and its alloys have been widely applied as conduction materials. Both, Mg and Ti alloys are also promising for biomedical applications.

This Special Issue is to provide a platform for the in-depth discussion of the mechanisms and strategies for the development of structural-functional-integrated light alloys. Any research, including but not limited to theoretical and calculation investigation; unique material design for the structural-functional-property-integration; advanced processing methods for the synergistic improvement of an alloys structural and functional properties, and in-depth characterization of an alloys functional properties are welcome.

materials

IMPACT FACTOR 3.1 | Indexed in: PubMed | CITESCORE 5.8

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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