materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

Indexed in: PubMed

CITESCORE 5.8

Research on the Microstructure and Properties of Metal Alloys

Guest Editors:

Dr. Aldona Garbacz-Klempka
Historical Layers Research Centre, Faculty of Foundry Engineering, AGH University of Krakow, 23 Reymonta Str., 30-059 Krakow, Poland

Dr. Jarosław Piekło
Faculty of Foundry Engineering, AGH University of Krakow, 23 Reymonta Str., 30-059 Krakow, Poland

Prof. Dr. Andriy Burbelko
Faculty of Foundry Engineering, AGH University of Science and Technology, Mickiewicza 30, 30-059 Krakow, Poland

Deadline for manuscript submissions:
closed (20 January 2024)

Message from the Guest Editors

Metals and alloys occupy an important place in human history. Today, they make up one of the basic groups of construction materials. Alloy technology uses smelting and casting methods. Further possible methods include forming, welding, sintering, electrolysis, solid state diffusion saturation and additive methods and heat treatment.

The properties of metal products depend on the chemical composition and microstructure, formed during a series of technological procedures. The microstructure and properties of alloys are evaluated today using various methods. The study of the rules for forming the structure of alloys and the mechanisms of decohesion opens a new pathway for optimizing the properties of known alloys as well as designing new ones with improved properties.

Topics of interest in this Special Issue include the analysis of the microstructure and properties of alloys, their processing, the application of modern research and modeling and simulation techniques. Review articles relating to these topics are welcome to submit to this Special Issue. We look forward to receiving your submissions and jointly developing this interesting area of research.

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, 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