Special Issue

Microstructure and Mechanical Properties of Alloys

Message from the Guest Editor

The microstructure of metallic engineering alloys can be controlled via thermal, mechanical, or thermomechanical processes. Currently, more and more advanced engineering alloys are experiencing significant improvements in their mechanical properties, owing to the development of suitable microstructures. The microstructural evolution is often rationalized based on advanced materials' characterization and simulation tools. Additionally, the impact of different microstructural features on the mechanical behavior of the structural and functional parts must be addressed so as to correlate process–microstructure–properties relationships. This Special Issues aims to address the microstructural evolution and its impact on the mechanical properties of advanced engineering alloys. Papers dealing with processing techniques, modeling of the mechanical behavior, characterization of material microstructure, influence of environmental parameters, and temperature dependence, as well as advanced applications, are encouraged. Dr. Joao Pedro Oliveira

Guest Editor

Prof. Dr. João Pedro Oliveira
CENIMAT/I3N, Department of Materials Science, NOVA School of Science and Technology, Universidade NOVA de Lisboa, 2829-516 Caparica, Portugal

Deadline for manuscript submissions

closed (20 May 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/30164

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

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.

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

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