materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.4

Indexed in: PubMed

CITESCORE 5.2

Multiscale Characterization and Computational Modeling/Simulation of Metallic Materials

Guest Editors:

Dr. Jiaqing Li

Dr. Liang Zhang

Dr. Yu Liu

Dr. Rui Wang

Dr. Che Zhang

Deadline for manuscript submissions:
30 June 2024

Message from the Guest Editors

Metallic materials have been used in space, transportation, energy production, industry, and other fields. The application potential of engineering materials depends on their properties for the considered use. To deepen the understanding of the relationships between the structure, properties, or functions of materials, multiscale experimental techniques have been developed, including advanced macro-mechanical testing such as tensile, compressive, fatigue, impact, and creep loadings, as well as microstructural characterization. In addition, nano and atomistic approaches, including density functional theory modeling, first-principles modeling, molecular dynamics simulation and finite element simulation, have also been developed to probe the fundamental deformation mechanisms of materials.

This Special Issue aims to cover recent advances and developments in the multiscale characterization and computational modeling/simulation of metallic materials. This issue will collect quality papers providing a sound base in the field for present and future scientists dealing with the enhancement of metallic materials properties for specific high-end applications.

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