

Special Issue

Plastic Deformation and Mechanical Behavior of Metallic Materials

Message from the Guest Editor

In the metal industry, mechanical properties play a important role in selecting the right metal/alloy for the right technological and industrial fields, e.g., manufacturing, machining, aerospace, and construction sectors, where metals are used under challenging temperatures, and other external factors.

Understanding mechanical properties is a challenge in materials research that is of importance to ensure plastic deformation mechanisms. For this Special Issue, we welcome papers on the above subjects using either experimental or theoretical approaches. This Special Issue aims to include a collection of reviews and research articles on the plastic deformation and mechanical behaviour of metallic materials. This includes research related to the strength, ductility, and fracture of metals across a wide range of temperatures, from cryogenic to high temperatures, as well as studies on metal sheets.

Guest Editor

Dr. Jana Bidulská

Faculty of Materials, Metallurgy and Recycling, Technical University of Kosice, Kosice, Slovakia

Deadline for manuscript submissions

closed (20 December 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/153640

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

[mdpi.com/journal/
materials](https://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](https://mdpi.com/journal/materials)



About the Journal

Message from the Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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)