



Deformation of Metals and Alloys: Theory, Simulations and Experiments

Guest Editors:

Prof. Dr. Roberto G. A. Veiga

Center of Engineering, Modeling and Applied Social Sciences, Federal University of ABC, 09210-580 Santo André, Brazil

Prof. Dr. Alejandro Zúñiga

Center of Engineering, Modeling and Applied Social Sciences, Federal University of ABC, 09210-580 Santo André, Brazil

Deadline for manuscript submissions:

31 October 2023

Message from the Guest Editors

Dear Colleagues,

Metallic materials have many distinctive properties, the ability to undergo varying degrees of permanent deformation being one of special interest for processing. The cornerstone of studies on the plasticity of metals and their alloys was laid decades ago by eminent scientists such as Nabarro, Orowan, Peierls, and Cottrell, among others. Particularly groundbreaking was their discovery of the fundamental role of dislocations in metal plasticity and the subsequent development of a theory of dislocations. Currently, research on deformation remains extremely important to improve the mechanical properties of existing structural and functional materials and for the design of novel alloys.

This Special Issue is open to theoretical, computational and experimental studies. To be considered for publication, papers should report fundamental and/or applied research or provide a relevant review on the deformation of metals and alloys.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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)**, **Inspec**, **CAPus / SciFinder**, and **other databases**.

Journal Rank: **JCR - Q2** (*Metallurgy & Metallurgical Engineering*) / **CiteScore - Q1** (*Metals and Alloys*)

Contact Us

Metals
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/metals
metals@mdpi.com
[@Metals_MDPI](https://twitter.com/Metals_MDPI)