



Crystallographic Planes Deformation in Metallic Materials

Guest Editor:

Dr. Silvia Barella

Department of Mechanics,
Politecnico di Milano, Milan, Italy

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Dear Colleagues,

Plastic deformation of metals is the basis for the realization of many components in different industry (automotive, aerospace, and biomedical) and an integral element of mechanical engineering. However, plastic deformation knowledge is also important for the understanding of certain failure mechanisms, e.g., creep.

Crystal plasticity theory was recognized as valuable in elucidating mechanisms of plastic deformation of crystalline metals at the beginning of the previous century, but this theory has been extended since and used to consider other factors, such as the size effect and dislocations.

The importance of the topics proposed for this Special Issue is evidenced by the steadily growing number of articles on crystallographic plane deformation in mainstream international journals over the past few years, and we hope that you will make further important contributions to this field through your high-quality research articles, communications, and reviews.

It is our pleasure to invite you to submit your manuscript to this Special Issue.

Dr. Silvia Barella
Guest Editor





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, CAPlus / SciFinder, and other databases.

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

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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