

Special Issue

Deformation Behavior of the Alloys under Simple and Combined Loading Conditions at Various Deformation Rate

Message from the Guest Editors

Clarifying the mechanical behavior of alloys is quite important to evaluate their performance. Actually, alloys undergo not only simple loading, but also quite complicated loading conditions via combinations of simple loading with proportional and non-proportional histories. Additionally, products with high performance at high-speed deformation are quite useful to avoid the fatal accidents of transportation equipment. In both cases, strain rate sensitivity in the inelastic deformation of alloys holds the key, and it is important to clarify dynamic or impact effects of the phenomena. In the Special Issue, research works related to deformation behavior of alloys are invited, as well as interdisciplinary works concerning these topics. Fundamental research works on testing methods and computational simulations are also included. This Special Issue will be composed of articles reporting on new and progressive research results, and reviews of particular classes of fundamental deformation behaviors of alloys and their applications.

Guest Editors

Dr. Takeshi Iwamoto

Academy of Science and Technology, Hiroshima University, 1-4-1 Kagamiyama, Hiroshima, Japan

Prof. Tao Suo

School of Aeronautics, Northwestern Polytechnical University, Xi'an, China

Deadline for manuscript submissions

closed (31 May 2018)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.9



mdpi.com/si/11619

Metals

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

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





Metals

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 4.9



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



About the Journal

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.

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).