

## Special Issue

# Deformation Dynamics of Heterogeneous Metallic Materials

### Message from the Guest Editors

This Special Issue aims to publish research works that help to understand the relationships among the microstructure, deformation mechanism and mechanical response of metallic materials with heterogeneous microstructures. We anticipate that this Special Issue will build a bridge between materials science and mechanics communities. We welcome the submission of research papers dealing with topics including but not limited to the following: advanced fabrication (e.g., additive manufacturing), mechanical testing (e.g., dynamic compression/tension/shear, planar impact, ballistic penetration), microstructural characterization (e.g., scanning/transmission electron microscopy, X-ray/neutron imaging/tomography/diffraction), and multiscale modeling (e.g., ab initio method, molecular dynamics, Monte Carlo method, phase-field modeling, finite element method). Cutting-edge experiments with various in situ characterizations are of particular interest.

### Guest Editors

Prof. Dr. Junyu Huang

Prof. Dr. Yangguang Xu

Prof. Dr. Feng Zhao

Prof. Dr. Jin-Feng Li

### Deadline for manuscript submissions

closed (31 December 2022)



## Metals

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## 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.

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### Editors-in-Chief

Prof. Dr. Hugo F. Lopez

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 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 2025).