

## Special Issue

# Orientation Relationships of Phase Transformation and Precipitation in Metallic Materials

### Message from the Guest Editors

Dear colleagues,

Phase transformation and precipitation are important metallurgical processes in many metals and alloys. The properties of the material are significantly affected by the composition, crystal structure, morphology, size and distribution of the phases and precipitates formed in the final microstructure. During these processes, well-defined crystallographic orientation relationships may exist between the parent phase/matrix and the transformed phases/precipitates, which play an important role in determining the final microstructure, texture and properties of the material.

This Special Issue collects papers on the crystallographic orientation relationships and variant selection during the phase transformation and precipitation of metals and alloys. Papers focusing on the discovery of new orientation relationships, experimental characterization and theoretical analysis of existing orientation relationships and variant selection, and the development of new theories and modeling techniques are particularly welcome. Reviews and fundamental crystallography about orientation relationships and their representation are also welcome.

### Guest Editors

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### Deadline for manuscript submissions

closed (25 August 2024)



## 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

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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).