

Special Issue

Inclusion/Precipitate Engineering in Steels

Message from the Guest Editors

Inclusion/precipitate particle behaviors in liquid steel and in solid steel strongly control both the cleanliness and the material properties of steel materials, such as their toughness. These fundamental techniques have traditionally been denoted “Clean Steel” and “Oxide Metallurgy”, respectively, and they have been utilized in practice. Today, these two research directions have been partially overlapped and combined. Thus, we suggest that they collectively be denoted “Inclusion/Precipitate Engineering”. The current issue focuses on presenting the latest research on the inclusion/precipitate engineering of steels, including the metallurgical processing of steels, the resulting microstructure, and the final material properties. Both experimental research carried out in laboratories and steel plants as well as modeling research will be considered. In addition, because inclusions/precipitates are complexes composed of oxides, sulfides, nitrides, and carbides, their composition control and consequent size control are also of interest.

Guest Editors

Prof. Dr. Pär Jönsson

Department of Materials Science and Engineering (MSE), KTH Royal Institute of Technology, Stockholm, Sweden

Prof. Dr. Keiji Nakajima

Department of Materials Science and Engineering (MSE), KTH Royal Institute of Technology, Stockholm, Sweden

Deadline for manuscript submissions

closed (15 January 2021)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/25079

Metals
Editorial Office
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 2.5
CiteScore 5.3



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



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

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, Ei
Compendex, CAPus / 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 18.7 days after
submission; acceptance to publication is undertaken in 2.7
days (median values for papers published in this journal in
the second half of 2025).