

Special Issue

Phase Transition and Magnetic Effect of Magnetic Alloy

Message from the Guest Editor

This yielded hypotheses concerning a variety of magnetic effects of magnetic materials, possibly originating not only from their magnetic and/or crystal structures, but also external influences such as pressure, temperature, etc., usually accompanied by the phase transition of the alloys. Such phenomena include increasing the magnetization and coercivity, exchanging coupling, striction, optical effects, etc. Understanding the magnetic effects of magnetic materials is the key to expanding the usability of the materials, i.e., it is impossible to effectively utilize the magnetic material without its full understanding. Therefore, the Special Issue entitled “Phase Transition and Magnetic Effect of Magnetic Alloy” aims to deepen our understanding of the magnetic effects and their relations with the phase transition. In this Special Issue, we hope to gather articles related to the magnetic effects and phase transitions of magnetic materials, with magnetic and physical properties supporting magnetic effects also being of interest as well as also welcoming theoretical and experimental in-depth analyses of already well-known magnetic effects.

Guest Editor

Dr. Jihoon Park

Department of Magnetic Materials, Powder Materials Division, Korea Institute of Materials Science, Changwon, Gyeongsangnam-do 51508, Korea

Deadline for manuscript submissions

closed (31 July 2024)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/108086

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 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).