



## Solid State Physics, Magnetic and Transport Properties of Intermetallic Compounds

Guest Editor:

**Prof. Dr. Arjun K. Pathak**

The State University at New York  
(SUNY), Buffalo State, Buffalo, NY,  
USA

Deadline for manuscript  
submissions:

**closed (28 February 2021)**

### Message from the Guest Editor

Intermetallics have a wealth of interesting fundamental and novel functional properties. They often have desirable phase transition, magnetic, and superconducting behaviors, and their physical properties can be tailored by controlling either or both chemistry and structure. Therefore, intermetallics remain an intriguing subject for materials science and condensed matter physics communities. Some example includes shape memory alloys, permanent magnets, as well as caloric and hydrogen storage materials. This Special Issue aims to cover the latest research and development related to the magnetism, transport, and thermodynamic properties of intermetallic compounds. This includes theory and modeling, synthesis and characterization, microstructure and structure–property relationships, phase transitions, and their related physical properties and crystal structures of intermetallic compounds.





an Open Access Journal by MDPI

## 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

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

## Contact Us

---

Metals Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/Metals_MDPI)