# Special Issue

# Magnetic Studies of Complex Alloys

# Message from the Guest Editor

The research on complex alloys is still increasing. The term complex alloys denotes a broad family of binary or multinary compounds consisting of, e.g., either metallic elements or mixtures of metals to which metalloids, rare earth elements, or chalcogenides are added. Their crystal structure is based on very large elementary unit cells. The use of the term complex and the discussion of complexity are rapidly increasing in last years. The main aim is to find new materials that are eco-friendly and substitute the gases used in conventional refrigerators in the vicinity of room temperature. Finding new progressive materials with these effects is important to meet the needs of space research. A further example is finding materials applicable in information technologies, where magnetoresistance is crucial. The goal of this Special Issue is to collect articles mainly concerning the frontiers of research on the magnetic properties of complex alloys. Both experimental and theoretical approaches are encouraged, and review articles are welcome. Research articles on the development of measurement and analysis methods to assess these materials are welcome.

#### **Guest Editor**

Prof. Dr. Marian Reiffers

Faculty of Humanities and Natural Sciences, University of Presov, ul. 17. Novembra 1, SK 081 01 Presov, Slovakia

## Deadline for manuscript submissions

closed (31 May 2021)



# **Metals**

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/46615

Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

mdpi.com/journal/ metals





# Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3





# **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.

### **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

#### **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / 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).