

## Special Issue

# Design of High-Entropy Alloys

### Message from the Guest Editors

High entropy alloys (HEAs) and complex, concentrated alloys (CCAs) have resulted from new approaches to alloy design, which emerged 16 years ago. HEAs/CCAs suggest the usage of multiple (at least 3–5) principle elements taken in close to equiatomic proportions with the possible presence of minor components. Due to such a complex chemical composition, the alloys can have unique structures and properties. Moreover, in addition to alloys, high entropy ceramics and coatings have recently emerged and already demonstrated remarkable properties.

Special Issue on the Design of High Entropy Alloys welcomes submissions on topics within the above-mentioned scope. Works on fundamental aspects like phase formation and transformations, strengthening and deformation mechanisms, as well as diffusion are welcome. Investigations of functional properties of HEAs and non-metallic high-entropy materials are also eagerly anticipated. We hope paper published in the Special Issue will advance our understanding of composition–structure–properties relationships in HEAs and contribute to the design of new materials with unprecedented properties for future applications.

---

### Guest Editors

Prof. Dr. Sergey V. Zharebtsov

Department of Materials Science and Nanotechnology, Belgorod State University, 85 Pobeda str, 308015 Belgorod, Russia

Dr. Nikita Stepanov

Lab. of Bulk Nanostructured Materials, Belgorod State University, 85 Pobeda str, 308015 Belgorod, Russia

---

### Deadline for manuscript submissions

closed (30 April 2022)



## Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/si/41993](https://mdpi.com/si/41993)

*Metals*

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

[metals@mdpi.com](mailto:metals@mdpi.com)

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