

## Special Issue

# Metal Corrosion Behavior and Protection in Service Environments

### Message from the Guest Editors

This Special Issue focuses on the corrosion behavior of metals and alloys in diverse service environments (e.g., marine, industrial, atmospheric, and high-temperature conditions) and explores advanced protection strategies. Corrosion remains a critical challenge, leading to material degradation, economic losses, and safety risks. We invite contributions addressing mechanisms, monitoring techniques, predictive modeling, and innovative protection methods (e.g., coatings, inhibitors, cathodic protection, and material design). Topics of Interest include the following themes: Corrosion mechanisms under harsh or dynamic conditions; Novel anti-corrosion materials and surface treatments; In situ monitoring and AI-driven corrosion prediction; Case studies on corrosion failure and mitigation in industries; Sustainable and eco-friendly protection technologies.

---

### Guest Editors

Dr. Zhiyuan Feng

School of Chemical Engineering and Technology, Sun Yat-sen University, Guangdong, China

Dr. Bing Lei

School of Chemical Engineering and Technology, Sun Yat-sen University, Guangdong, China

---

### Deadline for manuscript submissions

closed (31 March 2026)



## Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/si/236512](https://mdpi.com/si/236512)

*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, 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 18.7 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).