

Special Issue

Feature Papers in Metal Failure Analysis

Message from the Guest Editors

We are pleased to announce the launch of this Special Issue devoted to metal failure analysis. Failure analysis is especially important for structural materials as their fracture may have terrible consequences. Progress in the development of safe and sound constructions requires comprehensive investigation of fracture mechanisms, effects of internal stresses, and microstrains on crack nucleation and propagation. Thus, studying the microstructural mechanisms underlying the fracture mechanics is of great practical importance. The aim of this Special Issue, “Feature Papers in Metal Failure Analysis”, is to highlight the current achievements in theoretical and experimental investigations of fracture behavior and its effect on mechanical performance of various metallic materials, focusing on the hottest success in analyzing the crack nucleation and propagation in metals and alloys under cyclic or monotonous loading as well as during exploitation. Papers dealing with experimental investigation, simulation, and analysis of failure of structural steels and alloys are also welcome.

Guest Editors

Dr. Andrey Belyakov

Laboratory of Mechanical Properties of Nanostructured Materials and Superalloys, Belgorod National Research University, Pobeda 85, Belgorod 308015, Russia

Dr. Anna Bodyakova

Laboratory of Mechanical Properties of Nanostructured Materials and Superalloys, Belgorod National Research University, Pobeda 85, Belgorod 308015, Russia

Deadline for manuscript submissions

closed (30 November 2023)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/143642

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).