Special Issue

Computational Methods for Fatigue and Fracture

Message from the Guest Editors

The development of modern numerical methods has led to significant advances in the field of fatigue and fracture, which are pivotal issues in structural integrity. Because of the permanent tendency to shorten time-to-market periods and the development cost, the use of the finite element method, extended finite element method, peridynamics, or meshless methods, among others, has been a viable alternative to experimental methods. This Special Issue aims to focus on the new trends on computation methods to address fatigue and fracture problems. Examples of innovative and successful industrial applications, as well as nonconventional numerical approaches, are also encouraged. Research and review papers are welcome.

Guest Editors

Dr. Ricardo Branco

Prof. Dr. Filippo Berto

Prof. Dr. Shengchuan Wu

Deadline for manuscript submissions

closed (31 December 2021)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/35833

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 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 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).

