metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.5

CITESCORE 5.3

New Trends in Fatigue of Metals

Guest Editors:

Dr. Luis Reis
IDMEC, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisbon, Portugal

Dr. Pedro Moreira
Institute of Science and Innovation in Mechanical and Industrial Engineering, Porto, Portugal

Deadline for manuscript submissions:
closed (29 February 2024)

Message from the Guest Editors

With the advent of new materials and new technologies and manufacturing processes, as is the case of additive manufacturing (AM), it is essential to improve our knowledge of material behavior, to estimate the failure of systems and structures during service. Among other issues, the phenomenon of fatigue is of the utmost importance due to its presence in most failure cases and the economic impact, respectively.

The Special Issue will cover a large spectrum of recent developments regarding fatigue phenomena from different points of view, i.e., new design methodologies considering artificial intelligence, machine learning and data science, new theoretical approaches or models, new techniques in numeric simulations, new experimental set-ups concerning different loading conditions, new specimen types to achieve uniaxial, biaxial, and triaxial states of stress, and different environmental conditions. Moreover, examples of innovative and successful applications in case studies or real applications, as well as non-conventional experimental or numerical approaches, are welcome.

metals

IMPACT FACTOR 2.5

CITESCORE 5.3

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
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)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI