



Structural Integrity and Failure Assessments in Metals and Alloys

Guest Editors:

Prof. Dr. Roumen Petrov

Department of
Electromechanical, Systems and
Metal Engineering, Ghent
University, B-9052 Ghent,
Belgium

Dr. Abbas Bahrami

Materials Engineering
Department, Isfahan University of
Technology, Isfahan, Iran

Deadline for manuscript
submissions:
closed (29 February 2024)

Message from the Guest Editors

Dear Colleagues,

Since the beginning of the human civilization the failure analysis is a driving force for improving the strength of all materials used in the constructions and tools. Nowadays, the structural integrity and failure analysis have become an even more important research field combining modeling, materials characterization, microstructural analysis, stress analysis, and design factors that can all be involved in failure and integrity assessments.

This Special Issue on “Structural Integrity and Failure Analysis in Metals and Alloys” intends to collect the recent developments, technical reports and case studies in the field. Original manuscripts, technical papers and reviews on all aspects of failures and integrity assessment, including modeling of failures, microstructural analysis, environmental degradations, high temperature failures, corrosion-related damages, and lifetime prediction are welcome. The Special Issue is oriented not only to researchers from universities and industrial research centers but also to the organizations directly involved in the production and product development.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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 Editorial Board

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, 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](https://twitter.com/Metals_MDPI)