# **Special Issue**

# Structural Integrity and Failure Assessments in Metals and Alloys

## Message from the Guest Editors

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.

### **Guest Editors**

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### Deadline for manuscript submissions

closed (29 February 2024)



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## **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

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#### **Author Benefits**

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indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

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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).

