



Fracture Mechanics and Failure Analysis of Metallic Materials

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Message from the Guest Editors

Dear Colleagues,

It is our pleasure to invite you to contribute to this Special Issue of *Metals*, titled “Fracture Mechanics and Failure Analysis of Metallic Materials”. As the title suggests, this Special Issue primarily deals with the application of fracture mechanics in investigating various failure mechanisms of metals. Additionally, other approaches to failure analysis, including experimental and numerical, are covered by this Special Issue.

This Special Issue will cover a wide range of topics, including failure mechanisms such as fatigue, corrosion, and wear; the fracture behaviour of metallic materials used in numerous industrial applications (mechanical, civil, chemical, aerospace, biomedical engineering, etc.); and, of course, the use of fracture mechanics parameters and tools in both theoretical and practical terms.

Submitted contributions should focus on material characterisation and methods of analysing the causes and risks of failure, for the purpose of improving the existing design solutions, as well as developing new ones, for various components and/or equipment.

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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.

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