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Structural Integrity and Failure Assessments in Metals and Alloys

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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.

Specialsue



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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 metallurgical field the 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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