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Feature Papers in Structural Integrity of Metals

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Deadline for manuscript submissions:

closed (31 December 2023)

Message from the Guest Editors

Dear Colleagues,

Metals are widely used in various engineering sectors due to their superior properties. These materials are often subjected to complex static and cyclic loading histories, which can affect structural integrity. Therefore, designers must be able to account for the damage accumulation mechanisms and the associated durability to prevent unexpected failure. Thus, the development of safer and more durable components requires a deep understanding of the relationships between the microstructural features and the mechanical properties.

The goal of this Special Issue is to provide a comprehensive overview of the more recent advances in the structural integrity of metals. Potential topics include alloy design, processing techniques, microstructure features, chemical composition, advanced simulation methods, mechanical behavior, failure mechanisms, heat treatment strategies, forming and joining technologies, and environmental effects. Research and review papers addressing all aspects of the structural integrity of metals are welcome.











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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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