

Special Issue

Multi-Axial Fatigue and Fracture Behavior in Metals

Message from the Guest Editor

The continuous study of material fatigue and the development of new testing devices and methods for its characterization prove its importance, not only in scientific terms but also in its practical application. With the development of new materials and alloys, there is an increasing demand for materials which are reliable, can be obtained in a timely manner, and possess predictable properties. Through detailed characterization, more complex designs with reduced weight improvement and longer lifespans can be created and achieved with increased reliability, confidence, and safety.

Fatigue tests were initially predominantly focused on inducing uniaxial loads. However, since most components and machines are subjected to multiaxial cyclic loads, many researchers have dedicated their studies to multiaxial loading and these technological developments are associated with the materials' fatigue characteristics and properties.

We welcome all research and submissions in this field.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2022)



Metals

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Impact Factor 2.5
CiteScore 5.3



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About the Journal

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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