Special Issue

Fatigue, Fracture and Damage of Steels

Message from the Guest Editors

The structural integrity of steels against the phenomena of fatigue, fracture and damage is a problem of major technological concern in engineering due the requirement for the acceptable damage tolerance of metallic structures in civil, mechanical, naval. aeronautical and aerospace engineering, and the possibility of structural integrity loss when any kind of fatigue, fracture or damage develops in the material. This Special Issue, "Fatigue, Fracture and Damage of Steels", is dedicated to the latest scientific achievements in the field. This issue welcomes contributions of any kind in the fields of fatigue, fracture, damage, corrosion, stress-corrosion, corrosion-fatigue or hydrogen embrittlement of steels. All approaches will be encouraged, including theoretical, numerical, and experimental ones. Different geometrical defects will be considered, such as cracks, notches, pits, scratches, crevices, etc. Any phase of the phenomena of fatigue, fracture or damage can be analyzed, i.e., from the early to the final stage, or any kind of loading (static, dynamic, cyclic, etc.), as well as any environment including aggressive or corrosive media.

Guest Editors

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Deadline for manuscript submissions

closed (20 March 2024)



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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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