Special Issue

Computational Methods for Fatigue and Fracture

Message from the Guest Editors

The development of modern numerical methods has led to significant advances in the field of fatigue and fracture, which are pivotal issues in structural integrity. Because of the permanent tendency to shorten time-to-market periods and the development cost, the use of the finite element method, extended finite element method, peridynamics, or meshless methods, among others, has been a viable alternative to experimental methods. This Special Issue aims to focus on the new trends on computation methods to address fatigue and fracture problems. Examples of innovative and successful industrial applications, as well as nonconventional numerical approaches, are also encouraged. Research and review papers are welcome.

Guest Editors

Dr. Ricardo Branco

Prof. Dr. Filippo Berto

Prof. Dr. Shengchuan Wu

Deadline for manuscript submissions

closed (31 December 2021)



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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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