

Special Issue

Novel Insights into Fatigue and Fracture Behavior of Metallic Materials

Message from the Guest Editor

Recently developed new materials and technologies (e.g., additive manufacturing) being applied in structural components across many industries, like aerospace, automobile, goods, and medical devices, in order to obtain safe components and low materials savings. In many of these applications, safe design requires thorough knowledge of the fatigue and fracture response characteristics of a material. This Special Issue aims at providing a wide set of articles on various aspects of fatigue and fracture mechanics of metals. It is intended that this open access Issue will provide a place to get comprehensive information about the current state-of-the-art for fatigue and fracture behavior of new materials and manufacturing processes. Articles on experimental and modelling aspects of fatigue and fracture related to the following topics are particularly welcome: additively manufactured metals; novel joining techniques of mechanical parts (e.g., adhesive bonding, laser and friction stir welding); surface modification technological processes (e.g., shot peening).

Guest Editor

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About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Yong Zhang

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