



Mechanical Behavior of Metallic Materials under Different Loading Conditions

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Message from the Guest Editors

Dear Colleagues,

Metallic materials are most frequently used in structural applications under various loading conditions. This Special Issue is dedicated to Prof. Hans-Jürgen Christ, University Siegen, Germany, who, throughout his career, has made seminal contributions to the fatigue and fracture of metals and alloys at various loading rates, temperatures, and within harsh environments. Therefore, we seek contributions that present new results and findings on the deformation behavior of single- and multi-phase (particle-strengthened) metallic materials, including metal matrix composites, particularly research addressing underlying microstructural mechanisms and consequences of material design and application. In addition, papers that address monotonic and cyclic deformation behavior (including the VHCF regime) at low and elevated temperatures in various environments, and studies on fracture mechanisms, are welcome.





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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.

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