Special Issue

Microstructure Properties and Characterization of Metallic Material

Message from the Guest Editors

The microstructure of metallic materials is fundamental in determining their mechanical, physical, and chemical properties, which are critical to the performance and durability of these materials in demanding applications. Recent advancements in alloy design, processing methods, and surface engineering have paved the way for significant improvements in metallic materials' microstructural properties. Understanding how heat treatment, phase transformations, and defect evolution influence the microstructure of metallic alloys has become increasingly important in optimizing their performance for industries like aerospace, automotive, energy, and biomedical engineering.

This Special Issue aims to advance the understanding of how to control and manipulate the microstructure of metallic materials to enhance their mechanical properties and reliability in various industrial applications.

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