

Special Issue

Microstructure and Mechanical Properties of Metallic Materials 2023

Message from the Guest Editors

With the development of science and technology, many emerging technologies are being used to synthesize new metal materials. Due to the differences in the properties of different metallic materials, the microstructural and mechanical properties must be evaluated to determine whether the materials can be applied in aerospace, mechanical, bridges, weaponry, warheads, fragments etc. Indeed, the microstructure of metallic materials has a crucial effect on their mechanical properties, such as phase-transformation strengthening, dislocation strengthening, grain-boundary strengthening, grain refinement and composition and the proportion of elements, which can be used to achieve high strength/hardness and determine the application of the metallic material. The aim of this Special Issue is to highlight the preparation, characterization, microstructure, mechanical properties, and applications of metallic materials, metallic composites and nanocomposites. We hope that the Issue will compile the current state of the art of metallic materials and highlight the range of applications of these metal composites and nanostructures.

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2023)



Crystals

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CiteScore 5.0



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About the Journal

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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