



Microstructure and Mechanical Properties of Metallic Materials 2023

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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.





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Message from the Editor-in-Chief

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