

Special Issue

Phase Formation and Mechanical Properties of High Entropy Alloys

Message from the Guest Editors

Since the concept of high entropy alloys (HEAs) was introduced two decades ago by pioneering materials scientists, this metallic material has now become one of the most studied structural materials. Due to its unique approach to alloy development, the idea suggests the new paradigm of the alloy design. At least 3–5 multiple elements with equiatomic proportions form solid solutions, and this stands in contrast to the conventional practice of a small number of alloying elements to a single base element. This equiatomic multicomponent approach enlarges the number of possible element combinations and gives unique physical and mechanical properties. This Special Issue on “Phase Formation and Mechanical Properties of High Entropy Alloys” encourages submissions on a variety of different research fields, including phase formation and transformations, low- and elevated-temperature deformation mechanisms, physical and mechanical properties, and materials characterization. Experimental and theoretical approaches are also welcome.

Guest Editors

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Message from the Editorial Board

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.

Editors-in-Chief

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