

Special Issue

Deformation Mechanisms in High Entropy Alloys

Message from the Guest Editor

High-Entropy alloys (HEAs) have allowed us to “map” previously unexplored regions in multidimensional composition phase-space. This extraordinary access to the phase-space provides exciting opportunities to not only engineer novel microstructures but also manipulate deformation mechanisms that directly impact the strength–ductility trade-off. Examples of such mechanisms include twining-induced plasticity (TWIP), transformation-induced plasticity (TRIP), interfacial strengthening mechanisms, stacking faults, precipitate/dislocation interactions, dislocation/dislocation interactions, etc. Even the structure of dislocation cores in a multielement environment is being revisited, because the notion of Peierls stress for single elements needs to be adapted to multicomponent systems. The purpose of the Special Issue “Deformation mechanisms in High-Entropy Alloys” is to provide an international forum for such ground-breaking studies. We welcome scientific contributions involving experimental, theoretical, and computational studies on deformation mechanisms in HEAs.

Guest Editor

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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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