Special Issue

Multifunctional High Entropy Alloys: Forming, Microstructure and Deformation Behavior

Message from the Guest Editors

High Entropy Alloys (HEAs) have gained significant attention due to their exceptional mechanical properties, thermal stability, and corrosion resistance, making them promising candidates for structural and functional applications. This Special Issue aims to explore the latest advancements in HEAs, focusing on their processing, microstructural evolution, and deformation mechanisms under various loading conditions. Topics of interest include novel fabrication techniques such as additive manufacturing and severe plastic deformation, phase transformations, strengthening mechanisms, and the impact of composition and microstructure on mechanical behavior. Additionally, studies on HEAs' response to extreme environments, including high strain rate loading, fatigue, and wear resistance, are highly encouraged. By bringing together researchers from diverse disciplines, this issue seeks to advance HEAs' fundamental understanding and practical applications.
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Guest Editors

Dr. Ali Arab

Prof. Dr. Alexis Rusinek

Prof. Dr. Yue Zhang

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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