Special Issue

Design, Preparation, and Microstructural Characterization of High Entropy Materials

Message from the Guest Editor

High-entropy materials (high-entropy alloy, high-entropy oxide, high-entropy...) have attracted tremendous attention and have shown promise regarding exciting applications which have previously been unfathomable to achieve. Owing to their short-range disorder and long-range order nature, these materials maintain a high configuration entropy, which can still sustain phase stability, allowing various adjustment in the mechanical, electrical, optical, magnetic, and catalytic performances of the materials. Previous research on high-entropy materials has focused on bulk samples. However, as the miniaturization of devices has evolved, there is a need to understand this multiple alloy system at the micro and nano levels. This Special Issue aims to bring together research papers, short communications, and review articles focused on the novel synthesis, device designs, fabrication, advanced characterization, and artificial intelligence design of various high-entropy materials in order to provide a comprehensive overview of the state of the art within this field

Guest Editor

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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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