Special Issue

Design, Processing and Properties of High Entropy Ceramics

Message from the Guest Editor

The present Special Issue aims to collect insightful papers on the latest development of high entropy ceramics, which are attracting increasing research interests within the materials science community, for a broad range of applications. High entropy materials have been conceived about twenty years ago when a novel approach based on the combination of multiple elements in the equimolar ratio was proposed to design new metallic alloys. High entropy alloys have shown outstanding mechanical properties, and excellent high temperature and chemical stability. Subsequently, the concept of high entropy design has been successfully applied to ceramics, and a considerable amount of high entropy oxides, nitrides and carbides have been developed, with better properties compared to their traditional counterparts. High entropy ceramics offer significant advantages for various application sectors, including aerospace, energy conversion and storage, catalysis, tribology, and corrosion engineering, among others. For more information, please refer to the Special Issue website:
https://www.mdpi.com/journal/materials/special_issues/N1PWW44VC8

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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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