## Special Issue

# Novel High-Entropy Alloys Synthesized by Mechanical Alloying: Microstructure and Mechanical Properties

## Message from the Guest Editor

Materials fabricated using mechanical alloving (MA) are making a significant contribution to industrial applications. Mechanical alloying was selected as the most appropriate processing method to produce oxide dispersion strengthened (ODS) alloys, which exhibit good creep resistance, thermal stability, wear resistance, oxidation resistance, etc. In recent years, high-entropy alloys (HEAs) have become a new class of metallic alloys which favor the formation of a solid solution instead of intermetallic compounds. Thus, ODS-HEAs are promising structural materials for hightemperature and radiation resistance applications due to high configurational entropy and the pinning effect of dispersed oxide particles, which restrict dislocation motion and restrain the growth of grains. This Special Issue aims to present the recent developments in highentropy alloys synthesized by mechanical alloying. Also, it focuses on the effects of oxide dispersoids on the properties of HEAs for elevated temperature applications.

## **Guest Editor**

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## Deadline for manuscript submissions

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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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