



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

Guest Editor:

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Deadline for manuscript
submissions:

20 December 2024

Message from the Guest Editor

Materials fabricated using mechanical alloying (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 high-temperature 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 high-entropy alloys synthesized by mechanical alloying. Also, it focuses on the effects of oxide dispersoids on the properties of HEAs for elevated temperature applications.





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