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Advancements in Multi-Principal Element Alloys: Synthesis, Microstructures and Properties

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Deadline for manuscript submissions:
closed (10 October 2023)

Message from the Guest Editors

Dear Colleagues,

A new concept of alloy design has been discovered early decades and named Multi-Principal Element Alloys (MPEAs). MPEAs are an emerging class of engineering materials with excellent mechanical, thermal, chemical and electrical properties due to constituent alloying elements and type of synthesis methods. MPEAs might be a chance in many applications; nevertheless, a robust synthesis strategy is lacking. It is worth noting that a wide range of syntheses has been developed for these systems recently, starting from bulk to powder-based approach, at the same time very few post-processing studies have been carried out. Furthermore, the microstructure and microstructure evolution is still under investigation due to their complexity.

In this context, it is a pleasure to invite researchers to submit manuscripts on the subject of MPEAs for this Special Issue, which is intended to cover broad aspects of synthesis, microstructure and mechanical characterizations, as well as manufacturing and potential applications of MPEAs.

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Message from the Editor-in-Chief

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