



## High-Entropy Alloys (HEAs)

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### Message from the Guest Editors

Dear Colleagues,

Originated from the idea of multi-principal-element solid solution, the field of “high-entropy alloys (HEAs)” has attracted intense and increasing interest from academia and industries worldwide. Outstanding (physical, mechanical, and functional) properties have been reported for a variety of HEAs. In order to balance the properties for targeted applications, the microstructure of HEAs can be a single phase or composite, and traditional physical metallurgy principles have been applied to develop unique HEAs, including high-entropy stainless steels, high-entropy superalloys, high-entropy refractory alloys, high-entropy light-weight alloys, high-entropy oxides, high-entropy metallic compounds, *etc.* As presented in a recent comprehensive review on HEAs, great challenges remain in fundamental understanding of HEAs formation and their properties, and potential high-performance HEAs are yet to be explored. The objective of this Special Issue is to timely disseminate the rapid progress in fundamental understanding and applications of HEAs.

Dr. Michael C. Gao  
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*Guest Editors*





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## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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