# **Special Issue**

# High-Entropy Alloy: Formation, Microstructure, and Properties

# Message from the Guest Editors

High-entropy alloys (HEAs) that were developed by mixing equimolar or near-equimolar multiple principal elements into alloys have attracted research attention in recent years. This has opened a new field of "metal harmony" and has been further applied in many fields such as transportation, structural materials, and biomedical science. The most remarkable feature of HEAs is their high mechanical performance, and their ability to achieve a balance between strength and toughness. In addition, HEAs exhibit excellent fatigue performance and also achieve excellent specific strength. This special issue correlates the properties improvement in terms of phase formations, microstructural variations, and stress-strain curves. In particular, the topic of interest includes but is not limited to

- Physical or mechanical properties of HEAs;
- Microstructure evolution of HEAs;
- Phase formations of HEAs;
- Processing methods of HEAs

## **Guest Editors**

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# Deadline for manuscript submissions

closed (1 May 2022)



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# Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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