Special Issue

Laser-Driven Alloy Design: Enhancing Mechanical Performance in High-Entropy Systems

Message from the Guest Editors

We are excited to announce a call for research articles for a Special Issue focused on “Laser-Driven Alloy Design: Enhancing Mechanical Performance in High-Entropy Systems ”. Laser processing technologies have been widely applied in the processing and fabrication of metallic materials. For Industry 4.0 and future-oriented manufacturing strategies, these techniques provide reliable solutions for the rapid production of high-performance materials and structural components. High-entropy alloys (HEAs) have attracted tremendous attention in recent years due to their excellent comprehensive properties and reliability across diverse service environments. Integrating HEA design with laser processing technologies allows greater flexibility and freedom in tailoring compositions and microstructures. This Special Issue, titled “Laser-Driven Alloy Design: Enhancing Mechanical Performance in High-Entropy Systems,” aims to highlight new opportunities for laser-driven alloy development and promote the deployment of HEAs in next-generation structural and functional systems.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

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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