Special Issue

Additive Manufacturing of Functional Metal Materials: Process, Microstructure and Performance

Message from the Guest Editors

Shape memory alloys (SMAs) are materials that can restore their shape from a deformed shape to an earlier non-deformed shape due to the martensite–austenite transformation. The SMA family includes Fe-based SMAs, Cu-based SMAs, and NiTi-based SMAs. SMAs can be fabricated using various methods, including casting, powder metallurgy, rapid solidification, thermal spray, and, most recently, additive manufacturing. In some cases, a combination of different fabrication methods may be employed to achieve the desired properties and shapes. Each method has advantages and limitations, and manufacturers select the most suitable approach based on their specific needs.
This Special Issue aims to cover the latest progress in the manufacturing and performance of shape memory alloys, including manufacturing process optimization, defects and repair, microstructure and phase transformation, mechanical properties, functional properties, etc. Submissions of original research articles, reviews, and short communications related to the subject are very welcome.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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