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High-Performance Alloys and Their Applications

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Message from the Guest Editors

High-performance alloys with high strength, high elastic modulus, high toughness, and excellent physical properties, as well as excellent machinability, continue to hold a significant position in the field of materials. These high-performance alloys are widely utilized as key structural and functional parts in various industries, such as machinery, automotive, aerospace, biomedical, electronic information, and other high-tech fields. The high performance of alloy materials has always been the goal of product application. The past few decades have witnessed remarkable progress in high-performance alloys and their applications in basic theory, new technology principle, novel material design, preparation and forming, and properties. Therefore, it is of great importance to understand the relationship between the preparation, microstructure, and properties of alloys, and it also facilitates the production of products with higher quality so as to meet the requirements of the industry.

This Special Issue aims to publish recent successes and developments regarding the design, preparation, processing, microstructure, properties, and application of high-performance alloys.



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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.

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