



an Open Access Journal by MDPI

# **High-Performance Alloys and Their Applications**

Guest Editors:

#### Prof. Dr. Zhiwei Liu

School of Materials Science and Engineering, Xi'an Jiaotong University, Xi'an, China

#### Dr. Peng Xiao

School of Material Science and Engineering, Xi'an Jiaotong University, Xi'an, China

Deadline for manuscript submissions: **20 July 2024** 

### 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 machinery, automotive, aerospace, biomedical. as 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.



**Special**sue





an Open Access Journal by MDPI

# **Editor-in-Chief**

### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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.

# **Author Benefits**

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

# **Contact Us**

*Applied Sciences* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/applsci applsci@mdpi.com X@Applsci