Special Issue

High-Performance Light Alloys 2022

Message from the Guest Editors

Light alloys, which have the advantages of a high specific strength and specific stiffness, have wide application in aerospace, transportation, automobile, electronics and the national defense military industry. Various high-performance light alloys have been developed in recent years. One main focus is to improve the mechanical properties of light alloys to reduce the weight of components and improve the service life. The preparation method, such as casting, plastic processing, welding and joining, heat treatment and powder metallurgy, plays an important role in the microstructure evolution and the improvement of mechanical properties. This Special Issue will compile recent developments and excellent results in the field of high-performance light alloys to accelerate their large-scale application. The articles presented in this Special Issue will cover but are not limited to the following topics: aluminum alloys, magnesium alloys, titanium alloys, metallic composites, casting, plastic processing, welding and joining, heat treatment, powder metallurgy, phase transformation, texture, strengthening and toughening, and fatigue properties.

Guest Editors

Dr. Zhiwen Shao

Dr. Xiaoli Zhao

Dr. Chi Zhang

Deadline for manuscript submissions

closed (30 November 2022)

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/115802

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/crystals

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/journal/crystals

About the Journal

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)