



crystals

an Open Access Journal by MDPI



Mechanical and Microstructural Characterization of Superalloys

Guest Editors:

Prof. Dr. Chenglin Li

School of Power and Mechanical Engineering, Wuhan University, Wuhan 430072, China

Dr. Nan Li

AECC Beijing Institute of Aeronautical Materials, Beijing 100094, China

Message from the Guest Editors

Currently, there are demands for high-performance high-temperature alloys via alloy design, microstructural control, emerging fabrication techniques, etc. This Special Issue focuses on advances in alloy development, microstructural control and processing, the characterization of microstructure and high-temperature behavior, and the physical metallurgy of high-temperature alloys, including superalloys and high-temperature titanium-based alloys. Potential topics may include, but are not limited to, the following:

Deadline for manuscript submissions:

closed (11 January 2024)

- New alloy design theory, new strengthening methods or mechanisms for high-temperature alloys;
- Microstructural control and related high-temperature properties of high-temperature alloys;
- Microstructural evolution and damage mechanisms of high-temperature alloys;
- Microstructures and properties of additively manufactured high-temperature alloys;
- Crystal growth and coatings of high-temperature alloys.



mdpi.com/si/109832

Special Issue



crystals



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, PI, Italy

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.

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](#), [CAPus](#) / [SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](https://twitter.com/Crystals_MDPI)