

Special Issue

Micro-Structure and Mechanical Properties of Alloys

Message from the Guest Editor

Dear Colleague, The main aims of this Special Issue are to collect the original state-of-the art research works, technical research articles, and or comprehensive review articles in the field of structural metals/alloys includes metal matrix composites, nanostructured materials, high-entropy alloys, bulk-metallic glasses, and oxide dispersion strengthened alloys. The works demonstrating alloys with tensile, compression, shear, torsion, creep, and fatigue behavior from the elastic to plastic stage are focused through this Special Issue. This Special Issue encourages the researchers for describing the mechanical behavior by correlating several characterization techniques, namely, X-ray diffraction, scanning electron microscope, transmission electron microscope, and atomic probe tomography. The advanced materials manufactured from powder metallurgy, casting, laser processing, thin film technology, additive printing technology, etc., are the main scope of this Special Issue. Further, material modeling, finite element analysis, and any modelling techniques (using artificial intelligent) dealing with the mechanical behavior of alloys are also covered in this Special Issue.

Guest Editor

Dr. Subbarayan Sivasankaran

Department of Mechanical Engineering, Qassim University, Buraydah, Saudi Arabia

Deadline for manuscript submissions

closed (25 December 2023)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/136109

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

[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)





Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



[mdpi.com/journal/
crystals](https://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, CAPus / SciFinder, and other databases.

Journal Rank:

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