

## Special Issue

# Investigation of Microstructural and Properties of Steels and Alloys

### Message from the Guest Editors

This Special Issue focuses on recent advances in the understanding of microstructural characteristics and property relationships in steels and alloys. The collection aims to bring together cutting-edge research exploring the correlation between processing techniques, resulting microstructures, and the subsequent mechanical, thermal, and chemical properties of various steel grades and metallic alloys. Topics of interest include novel characterization methods, computational modeling of microstructural evolution, advanced processing techniques for microstructural refinement, phase transformation mechanisms, and strategies for enhancing properties. The issue welcomes original research articles, comprehensive reviews, and case studies that contribute to the fundamental understanding and practical applications of microstructure-property relationships in industrial and structural materials. This collection will serve as a valuable resource for metallurgists, materials scientists, mechanical engineers, and industrial researchers working on the development and optimization of high-performance steels and alloys.

---

### Guest Editors

Dr. Saurabh Tiwari

School of Materials Science and Engineering, Yeungnam University,  
Gyeongsan 38541, Republic of Korea

Prof. Dr. Marek Sroka

Department of Engineering Materials and Biomaterials, Mechanical  
Engineering Faculty, Silesian University of Technology, ul. Konarskiego,  
18a, 44-100 Gliwice, Poland

---

### Deadline for manuscript submissions

10 July 2026



## Crystals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.4  
CiteScore 5.0



[mdpi.com/si/242970](https://mdpi.com/si/242970)

*Crystals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[crystals@mdpi.com](mailto: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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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