

## Special Issue

# Recent Advances in Defect Structure Characterization of Single-Crystalline Materials

### Message from the Guest Editors

Unique properties characterize single crystals, distinguishing them from other materials. The need to produce single-crystalline composite materials with still new, extended, and better properties makes it necessary to study the defect structure for the development of existing crystal properties and the creation of new ones, as well as for modification of the production parameters.

The results presented in this Special Issue may create an interesting collection of papers on different aspects of production, processing, and properties of single-crystalline composition materials. This Special Issue of *Crystals*, entitled “Recent Advances in Defect Structure Characterization of Single-Crystalline Materials,” may report the novelties in the production and application of various single-crystalline materials, including superalloys, single-crystal semiconductors, etc., and new testing methods, summarizing the progress achieved in recent years. This forthcoming Special Issue will focus on the recent innovative and pioneering field of single-crystalline composite materials, their production and study, and the development of crystallization and research methods.

---

### Guest Editors

Dr. Jacek Krawczyk  
Prof. Dr. Jan Sieniawski  
Dr. Robert Paszkowski

---

### Deadline for manuscript submissions

closed (20 October 2024)



## Crystals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.4  
CiteScore 5.0



[mdpi.com/si/200986](https://mdpi.com/si/200986)

*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)