

## Special Issue

# Manufacturing, Welding, Testing and Applications of the Advanced Materials

### Message from the Guest Editors

Material properties determine their applicability. Additionally, we can design materials for special applications as a function of the required mechanical, chemical, electrical, and other properties and working conditions. The advanced materials are metals, polymers, composites, and ceramics for special applications. The testing of the materials is an essential way to know their properties. For advanced materials, we can use standardized tests, but it can require designing a new testing process.

Experimental characterization of advanced materials when subjected to special conditions.

Synthesis and characterization of improved materials to withstand special working conditions.

New methods of synthesizing advanced materials for working in special environments.

Computational simulation of advanced materials when subjected to special conditions

Thus, we are pleased to invite you to submit your work for this Special Issue, to assemble a collection of in-depth discussions and reflections on this fascinating and important topic for the development of science and technology.

---

### Guest Editors

Prof. Dr. Alexis Rusinek

Dr. László Tóth

Dr. Tünde Anna Kovács

Dr. Zoltán Nyikes

Dr. Enkő Bitay

---

### Deadline for manuscript submissions

closed (22 July 2024)



## Crystals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.4  
CiteScore 5.0



[mdpi.com/si/153198](https://mdpi.com/si/153198)

*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)