

## Special Issue

# Novel Crystalline Catalysts

### Message from the Guest Editor

Crystallines working as catalysts have been extensively studied in different catalytic systems. Crystalline catalysts are classified into several categories based on their crystal phase and crystal structure. By adjusting the crystal phase or structure, the catalytic properties of the crystalline catalysts can be controlled. In the past few decades, crystalline catalysts have been widely investigated in terms of the effect of the crystal phase, the crystal structure, the exposed crystal phase, crystal defects, etc., on catalytic properties. However, the requirements for a thorough comprehension of the structure–activity relationship and catalytic reaction mechanism have increased with the development of characterization techniques. Meanwhile, the construction of novel crystals for highly active catalysis is highly sought after.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Catalytic crystal synthesis;
- Crystal application in catalytic systems or pollutant degradation;
- The reaction mechanism of catalytic crystals.

---

### Guest Editor

Dr. Lili Wan

Inner Mongolia Key Laboratory of Chemistry and Physics of Rare Earth Materials, School of Chemistry and Chemical Engineering, Inner Mongolia University, Hohhot 010021, China

---

### Deadline for manuscript submissions

31 July 2025



## Crystals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.4  
CiteScore 5.0



[mdpi.com/si/210218](https://mdpi.com/si/210218)

*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)