



## Co-Crystals and Polymorphic Transition in Energetic Materials

Guest Editors:

**Dr. Yapeng Ou**

State Key Laboratory of  
Explosion Science and  
Technology, Beijing Institute of  
Technology, Beijing 100081,  
China

**Dr. Tao Yan**

College of Aerospace and Civil  
Engineering, Harbin Engineering  
University, Harbin150001, China

**Dr. Siwei Song**

Institute of Chemical Materials,  
China Academy of Engineering  
Physics, Mianyang 621000, China

Deadline for manuscript  
submissions:

**15 July 2024**

### Message from the Guest Editors

An energetic material's crystal phases, structure and morphology determine its sensitivity, stability and mechanical properties as well as energetic performance. In recent years, with the development of theoretical calculation and experimental characterization techniques, the in-depth relationship between crystals and their properties has been extensively studied. Co-crystals are fabricated to modify the safety and detonation performances of energetic materials. Inhibition of the polymorphic transition during manufacture and storage has drawn significant attention due to its influence on the stability of energetic composites. Furthermore, the crystal spheroidization of energetic compounds is practically a prerequisite for ideal insensitivity and manufacturability. Crystal engineering occupies an increasingly important role in energetic material applications with emerging practical technology such as resonance acoustic mixing, seed crystal induction and so on.

The present Special Issue, entitled *Co-Crystals and Polymorphic Transition in Energetic Materials*, aims to examine recent breakthroughs in this burgeoning research field





# crystals



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alessandra Toncelli

Department of Physics, University  
of Pisa, 56126 Pisa, PI, Italy

## 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.

## 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](#), [CAPus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

---

*Crystals* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/crystals](http://mdpi.com/journal/crystals)  
[crystals@mdpi.com](mailto:crystals@mdpi.com)  
[X@Crystals\\_MDPI](#)