



Growth and Characterization of Chalcogenide Semiconductors

Guest Editor:

Prof. Dr. Ching-Hwa Ho

Graduate Institute of Applied
Science and Technology,
National Taiwan University of
Science and Technology, Taipei
106, Taiwan

Deadline for manuscript
submissions:

closed (15 October 2019)

Message from the Guest Editor

Many of the chalcogenide compounds are very promising for applications in fields related to semiconductor electronics, optoelectronics, bioelectronics, energy and the environment, etc. In particular, most chalcogenides are usually crystallized in a layered hexagonal related structure, a so-called two-dimensional (2D) material. The 2D materials are specially used for large-area, ultra-thin, flexible and curved devices. The topic is currently undergoing enthusiastic study. Owing to the novelty and interesting properties of chalcogenides, we invite researchers to submit papers to this Special Issue entitled “Growth and Characterization of Chalcogenide Semiconductor” in the journal *Crystals*.

Keywords

- Synthesis of chalcogenide compounds
- Crystal growth
- Structure study
- 2D chalcogenide studies
- Semiconductors
- Metallic/optical/thermoelectric/photocatalysis properties
- Electronics and optoelectronics devices
- Photoluminescence
- Spectroscopy
- Carrier transport
- Photodetector
- Defect studies
- Band and theoretical calculations
- Other characterization tools related to chalcogenides





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

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](https://twitter.com/Crystals_MDPI)