



crystals



an Open Access Journal by MDPI

Growth and Properties of Photovoltaic Materials

Guest Editors:

Dr. Mahmoud H. Hammouri

Department of Physics, Natural
and Applied Sciences, University
of Wisconsin-Green Bay, Green
Bay, WI 54311, USA

Dr. Marco Bazzan

Dipartimento di Fisica e
Astronomia, Università di
Padova, Via Marzolo 8, 35131
Padova, Italy

Deadline for manuscript
submissions:

20 December 2025

Message from the Guest Editors

Dear Colleagues,

The "Growth and Properties of Photovoltaic Materials" Special Issue serves as a pivotal platform for the exploration of solar energy technology. Crafting high-performance photovoltaic materials is a delicate process of achieving crystalline perfection while preserving energy efficiency. Articles within this Special Issue illuminate crystal growth techniques, from vapor deposition to solution-based methods, crucial for robust solar cell development.

This exploration extends to core material properties. Material characterization, covering structural, optical, and electrical aspects, unveils molecular intricacies, paving the way for improved photovoltaic efficiency. Investigating semiconductor properties provides insights into charge separation and transport mechanisms, essential to solar cell operation.

The Special Issue also highlights thin-film solar cells and sustainable technologies for energy conversion. We invite experts, scholars, and practitioners to contribute their findings and insights, bridging the gap between theory and practical applications in the dynamic world of photovoltaic materials.



mdpi.com/si/197393

Special Issue



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

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

Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
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)