

Special Issue

New Horizons on Nanocrystalline Materials for Solar Energy Conversion and Storage

Message from the Guest Editors

The Special Issue on *New Horizons on Nanocrystalline Materials for Solar Energy Conversion and Storage* aims to provide a strong platform gathering the recent advances and challenges on colloidal and thin films nanocrystalline materials, with potential application in solar energy harvesting and storing systems. We invite researchers to contribute to the present issue with their original works on the field, in the form of full paper, communication, and review. The topics on this issue cover, but are not restricted to:

- Emerging nanocrystalline systems with potential application in solar energy harnessing and storage.
- Novel routes of synthesis of colloidal nanocrystals.
- Controlled growth and deposition of nanocrystalline thin films.
- Advanced characterization techniques, and theoretical investigations on fundamental properties of nanocrystalline semiconductors, to assess their possibilities on solar conversion systems.
- Strategies for enhanced performance of nanocrystalline materials (surface functionalization, doping, heterostructures, etc.).

Guest Editors

Dr. Drialy Cardenas-Morcoso

Luxembourg Institute of Science and Technology, L-4422 Belvaux,
Luxembourg

Dr. Hung-Pin Hsu

Mingchi Institute of Technology, Taipei 243303, Taiwan

Dr. Franziska Simone Hegner

Technical University of Munich (TUM), James-Franck-Str. 185748
Garching, Germany

Deadline for manuscript submissions

closed (15 July 2022)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/78853

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)