



crystals



an Open Access Journal by MDPI

Synthesis, Properties, and Applications of 2D Materials

Guest Editor:

Dr. Xu Jing

Jiangsu Key Laboratory of
Advanced Metallic Materials,
School of Materials Science and
Engineering, Southeast
University, Nanjing 211189, China

Deadline for manuscript
submissions:

closed (10 September 2024)

Message from the Guest Editor

Dear Colleagues,

The applications of 2D materials span a wide range of fields, including electronics, photonics, energy storage, catalysis, sensing, and biomedicine. Graphene, with its exceptional electrical conductivity, has revolutionized the field of electronics and holds promise for flexible, transparent, and high-performance devices. TMDs exhibit unique optical properties, making them suitable for next-generation optoelectronics and photovoltaics. Additionally, 2D materials find application as catalysts for efficient energy conversion and storage, sensors for detecting gases and biomolecules, and platforms for biomedical imaging and drug delivery.

This Special Issue aims to bring together researchers from diverse disciplines to contribute their expertise and share the latest advancements in the synthesis, properties, and applications of 2D materials. It provides a platform for scientists to present their research findings, methodologies, and novel approaches in the field. Contributions may include original research articles, reviews, and perspectives that enhance our understanding of 2D materials and their potential impact on various applications.



mdpi.com/si/197221

Special Issue



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](#), [CAPlus / 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](#)