Special Issue

Synthesis, Properties, and Applications of 2D Materials

Message from the Guest Editor

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.

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)



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/197221

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

mdpi.com/journal/ crystals





an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



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, Pl, 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, CAPlus / SciFinder, and other databases.

Journal Rank:

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

