



*crystals*



an Open Access Journal by MDPI

## Liquid Crystals on 2D Materials and Their Applications

Guest Editors:

**Dr. M. Arslan Shehzad**

Department of Chemical and Biomedical Engineering, Marcus Nanotechnology Center, Georgia Institute of Technology, Atlanta, GA, USA

**Dr. Haider Butt**

Associate Professor, Khalifa University, UAE

**Dr. Hassan Hafeez**

School of Physics & Astronomy, University of St. Andrews, St Andrews Fife KY16 9SS, UK

Deadline for manuscript submissions:  
**closed (30 October 2020)**

### Message from the Guest Editors

Low-dimensional materials, due to their exceptional properties, are a potential candidate for shifting the silicon-based industry to carbon to work with devices having extraordinary efficiencies. This Special Issue of Crystals aims to present the latest research on “Liquid Crystals on 2D materials”. Topics of interest include surface science of liquid-crystalline molecules on 2D materials, i.e., graphene, hBN and TMDs, alignment behavior of liquid crystals, experimental and theoretical results, characterization and analysis, and the roles of LC alignment in the determination of surface chemistry and properties, including electrostatic ones. Studies detailing the analysis of aspects related to the feasibility of large-scale production of liquid crystals with 2D surfaces, the achievement of complex architectures, and applications in biology, electronics, and optics are also welcome. This Special Issue is searching for advancements in 2D nanomaterials with liquid crystal synthesis and advancements in the area of low-dimensional nanomaterials being used in all forms of electronic and energy applications.



[mdpi.com/si/47721](https://mdpi.com/si/47721)

**Special** Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alessandra Toncelli

Department of Physics, University  
of Pisa, 56126 Pisa, 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, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/crystals](http://mdpi.com/journal/crystals)  
[crystals@mdpi.com](mailto:crystals@mdpi.com)  
[X@Crystals\\_MDPI](#)