



## Liquid-Crystalline Ion Conductors

Guest Editor:

**Dr. Masafumi Yoshio**

1. National Institute for Materials Science, Research Center for Functional Materials, Center for Functional Sensor & Actuator, 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan  
2. Graduate School of Chemical Sciences and Engineering, Hokkaido University, Sapporo 060-8628, Japan

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

### Message from the Guest Editor

This Special Issue is aimed at both basic and applied research on liquid-crystalline ion conductors. We encourage the submission of original papers on the new design and synthesis of liquid crystals and polymers capable of transporting ions and their use in various applications. Topics for the issue will include the following:

- The synthesis and structural characterization of ionic liquid-crystalline assemblies
- The alignment of assemblies and their fixation by polymerization
- Electrochemical properties
- Anisotropic properties
- Stimuli-responsive properties upon photoirradiation, and applied electric and magnetic fields
- Switching properties
- Optical properties
- Device applications





# crystals



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, St. Alban-Anlage 66  
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](#)