Special Issue

Structural and Physical Properties of Liquid Crystals

Message from the Guest Editors

Liquid crystals (LCs) are a fascinating class of soft matter that exhibit features of fluidity and long-range order. Considering the outstanding importance of the development of new state-of-the-art liquid crystals, this Special Issue welcomes the submission of original research manuscripts, reviews embracing aspects of LC science and technology, and theoretical and experimental investigations ranging from mesogen design and synthesis to applications. Potential topics include, but are not restricted to:

- Design, synthesis and characterization of rod-like (calamitic), bent-core and discotic LCs
- Functional liquid-crystalline polymers and supramolecular LCs
- LC display science and technologies, optical alignment, switching materials, optical information processing and devices
- Liquid crystalline properties beyond the biological applications
- Liquid-crystalline sensitizers for singlet oxygen formation and solar cells applications
- Investigation of triplet–triplet annihilation (TTA) in liquid crystals
- Liquid-crystalline thermally activated delayed fluorescence (TADF) emitters
- Environmental issues related to disposal of materials used in organic devices

Guest Editors

Dr. Marli Ferreira

Centre for Organic and Nanohybrid Electronics, Silesian University of Technology, Konarskiego 22b, 44-100 Gliwice, Poland

Prof. Dr. Aloir Antonio Merlo

Chemistry Institute, Federal University of Rio Grande do Sul, Bento Gonçalves 9500, Porto Alegre BR-91501970, RS, Brazil

Deadline for manuscript submissions

20 September 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/192166

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

MDPI