



Liquid Crystal Optics and Physics: Recent Advances and Prospects

Guest Editors:

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Deadline for manuscript
submissions:

closed (20 July 2019)

Message from the Guest Editors

This Special Issue is aimed at both basic and applied research, concentrating on the optics and physics of Liquid Crystals, as well as their use in various applications. Besides original research articles, we also encourage submission of review papers on recent advances and future prospects of LC technologies and challenges. Topics for the feature issue will include, but are not limited to, the following:

- Topological defects and nanoparticle self-assembly
- Optical properties and applications of LCs in mid-IR, THz, and microwave regimes
- Nonlinear optics (e.g., EFISH and photorefractive effect)
- Multi-stable operations in LCs and their applications (e.g., smart optical switches, energy-saving windows, and reflective displays)
- Flat optics: diffractive (geometric-phase) optical elements based on photoalignment (e.g., optic-axis grating, q plate, and lens)
- Novel display technologies (e.g., transparent, AR, VR, and holographic displays)
- Bio, chemical, and vibration sensors
- Photonic-crystalline LCs (e.g., chiral nematic, chiral smectic, and blue phases) and LC-infiltrated photonic crystals





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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.

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