

Special Issue

Liquid Crystal Optical Sensor

Message from the Guest Editor

The advanced development of liquid crystal technologies has attracted great attention in recent years. Liquid crystal (LC) exists in an intermediate phase between crystalline solid and isotropic liquid, simultaneously exhibiting fluidity and anisotropy. As a highly sensitive, stimuli-responsive material, LC responds quickly to external stimuli, including temperature, electric field, magnetic field, light and surfactants. The long-range order of LC molecules enables it to be used in optical signal amplifiers in sensing platforms. It can achieve a simple, rapid and sensitive detection of various targets, such as temperature, chemical analytes and biomolecules. LC-based chemical sensors and biosensors are regarded as up-to-date sensing platforms for application in environmental monitoring, industry and the disease diagnostics field.

This Special Issue aims to collate recent, innovative research and review papers—surrounding liquid crystal optical sensing technology—which provide a state-of-the-art study in materials, structure, detection techniques, device fabrication, sensing performances and applications.

Guest Editor

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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

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