

Special Issue

Frontiers in Optics of Liquid Crystals and Displays

Message from the Guest Editors

After decades of extensive material research and development, as well as device innovations, liquid crystal (LC) has extended its applications to cover displays, spatial light modulators, adaptive lenses for sensors, etc. LC exhibits a certain degree of orientational order compared to an isotropic liquid while it is less rigid than a crystalline solid and can flow easily, which enables its unique properties including large physical anisotropies and high susceptibility to external stimuli. LC has widespread applications in flat panel displays, including TVs, projectors, monitors, smartphones, etc. In addition to traditional displays, lately, LC-based diffractive optics have also attracted increasing interest to address the major challenges in augmented reality (AR) and virtual reality (VR) displays due to its advantages of high efficiency, polarization selectivity, switching ability and ultrathin form factor. In the meantime, the phase-only modulation property and photo-patternable characteristic of liquid crystal enable novel photonic applications.

Guest Editors

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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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