



## Liquid Crystal Optical Device

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Deadline for manuscript  
submissions:

**closed (10 May 2019)**

### Message from the Guest Editors

Liquid crystals (LCs) are one of the key materials used in light beam manipulation, as their pronounced anisotropy and fluidity allow their refractive index to be tuned by small applied voltages. One remarkable feature of these materials is their high versatility. These materials attract scientists across disciplines such as chemistry, physics, materials science and engineering.

These kinds of materials have been used as active elements in different electro-optical devices in the visible and near IR range. By supplying a relatively low voltage, the LC molecules, individually and collectively anisotropic, are reoriented and the effective refractive index seen by an electromagnetic wave varies. This remarkable behavior spans the entire spectrum from visible to THz and microwave frequencies.





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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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