

## Special Issue

# Symmetry and Liquid Crystal Optics

### Message from the Guest Editors

In the last twenty years, liquid crystal (LC) has been widely used in industrial displays, replacing CRT. In addition, research on LC materials, LC optical devices and their practical applications has also attracted a lot of attention. For example, blue phase LCs, ferroelectric LC and nematic liquid crystal are investigated to improve their properties. Nematic LC was used to generate 3D solitary waves in nonlinear optics. LC could also be used to manipulate the flow of light in photonic microstructures, nano-optics and nanophotonics. Many novel opportunities need to be found on the basis of understanding LC molecular configuration and physical properties. This Special Issue of *Symmetry* features articles about LC optics with symmetry as the unifying theme. We are soliciting contributions that cover a broad range of topics, including the latest theory and experimental work on LC materials and their optical applications; dynamics of LC and polymer; the latest research on LC displays; LC polarization grating and its application; and symmetry and asymmetry in LC optics.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 2023)



## Symmetry

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### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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### Editor-in-Chief

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