

Special Issue

New Challenges of Liquid Crystal Materials and Composites—Next Steps

Message from the Guest Editor

Liquid crystal materials have attracted significant interest from both physicists and chemists since their discovery by Reinitzer in 1888. The development of display applications in the 1960s rapidly led to the exponential growth of the liquid crystal display (LCD) industry. Nowadays, beyond LCDs, various forms of polarization control have been achieved using LCOS and other spatial light modulators, leading to applications in diverse fields such as fiber optics, Lidar, microscopy, and laser beam control, some of which have already been commercialized. Moreover, applications have expanded beyond the visible light range to control millimeter waves. On the other hand, liquid crystal polymer materials have enabled the creation of high-strength and high-precision products. This Special Issue aims to gather research that presents the novel application of liquid crystals, with the goal of providing an overview of the future of liquid crystal materials.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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