

Special Issue

Research on Optical Materials and Components for 3D Displays

Message from the Guest Editors

This Special Issue focuses on the development of the 3D displays with high resolution, large field of view, accurate depth cues and high light efficiency. In recent years, significant progress has been made regarding the materials and components utilized in 3D displays. A number of compound lens arrays, lenticular lens arrays and microlens arrays with improved parameters have been developed. Novel planar optical elements such as metasurfaces, liquid crystal gratings, and diffraction flat lenses have promoted promising 3D display results. The tunable materials employed in 3D displays, such as liquid crystal, lithium niobate and vanadium dioxide, have also advanced rapidly. Therefore, the characteristics and parameters of 3D display technology and 3D display systems have been enhanced. In addition, the novel application of novel optical materials and components for 3D displays has been demonstrated.

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