

Poster Presentation

[LCTp6]Hybridized Material Technologies

Thu. Nov 28, 2019 2:30 PM - 5:00 PM Main Hall (1F)

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[LCTp6-2]Photo-patterned Cholesteric Liquid Crystals for Transparent Computer-generated Waveguide Holography with Visible Playback Capability

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Keywords:Holographic optical elements, Waveguide holography, Cholesteric liquid crystals

A completely transparent waveguide holography in the visible light region is demonstrated based on a photo-patterned cholesteric liquid crystal, which reflects only infrared light. The transparent device also demonstrates that the encoded optical phase information can be coupled out of waveguide mode through visible wave-guided light and observed in free-space.