

Oral Presentation

[LCT2]LC Flat Diffractive Optics

Special Topics of Interest on AR/VR and Hyper Reality

Chair: Toshiaki Nose (Akita Prefecture University)

Co-Chair: Hiroyuki Yoshida (Osaka University)

Wed. Nov 27, 2019 3:20 PM - 4:50 PM Room 107 (1F)

4:30 PM - 4:50 PM

[LCT2-4]Fast-response Pancharatnam-Berry Lens for Head-up Displays

Xiuying Ren¹, *Sida Li¹, Yueda Liu¹, Yan Li¹, Yikai Su¹ (1. Shanghai Jiao tong University (China))

Keywords:Pancharatnam-Berry lens, fast-response, head-up display, adjustable distance

In this paper we demonstrate fast-response Pancharatnam-Berry lenses (PBLs) based on polymer-stabilized liquid crystal. After photo-alignment technique and UV curing, the PBLs show submillisecond response time. Based on two identical PBLs, a head-up display system that can generate four different diopters is demonstrated.