

Oral Presentation

[PRJ2]Optical Components

Chair: Hidekazu Hatanaka (USHIO)

Co-Chair: Juiwei Pan (Chiao Tung Univ.)

Thu. Nov 28, 2019 9:00 AM - 10:20 AM Room 108 (1F)

9:20 AM - 9:40 AM

[PRJ2-2]Laser Beam Modulation with a Fast Focus Tunable Lens for Speckle Reduction in Laser Projection Displays

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Keywords: speckle reduction, focus tunable lens, angular diversity, spatial diversity

We propose a laser speckle reduction method using a fast focus tunable lens (FTL). Different laser beams are generated after modulating the FTL. Thus, when the laser beams are used to illuminate a diffuser, various speckle images are obtained, and the summed speckle images yield a speckle image with reduced speckle contrast ratio.