Zero-order noise of spatial light modulators

A correction beam is created using a spatial light modulator (SLM) to suppress the zeroth-order diffraction (ZOD) that is produced by the unmodulated light coming from the dead areas of the ...

We propose and demonstrate, both theoretically and experimentally, a direct interferometric method for calibrating liquid crystal spatial light modulators. This method uses a single ...

Our objective is to create an easy and quick method to suppress the ZOD beam from holograms produced by phase-only SLMs. Our primary goal is to effi-ciently suppress the ZOD beam ...

In this investigation, we report that by properly adjusting the high-level and low-level pixel voltages of an SLM, the zero-order light caused by the pixelation effect of an SLM can be significantly eliminated. ...

However, the zero-order noise induced by the pixelated structures of the spatial light modulators (SLMs) adversely affects the optical image quality. In this study, we propose an on-axis ...

Supplementary document for Inhibiting zeroth-order light of spatial light modulator with voltage optimization - 6599695.pdf

hese methods are less effective in a high numerical aperture (NA) optical system. In this investigation, we propose a method that, by properly adjusting the high-level (H) and low-level (L) pixel voltages ...

A technique is proposed theoretically and verified experimentally to eliminate a zero-order beam caused by a pixelated phase-only spatial light modulator (SLM) for ...

A technique is proposed theoretically and verified experimentally to eliminate a zero-order beam caused by a pixelated phase-only spatial light modulator (SLM) for holographic projection.

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