

The construction of liquid crystal spatial light modulators is imperfect, leading to aberrations in its surface. These aberrations decrease the quality of the light fields that can be formed with the device. ...

We are creating commercial displays using dynamic phase-only spatial light modulators (SLMs). The main advantages of this approach are light efficiency and fault tolerance.

After calibration, the phase-grayscale relationship diagrams of the LC-SLM under various wavelengths are presented, and the feasibility of using the LC-SLM to correct the wavefront distortion ...

By employing experimental calibration curves for nonlinear correction, the nonlinear error of the phase-gray modulation characteristic curve was reduced from 8.39% to 2.68%, validating the ...

We present a liquid crystal method of correcting the phase of an aberrated wavefront using a spatial light modulator. A simple and efficient lab model has been demonstrated for wavefront correction.

After the aberrations being measured with a wavefront sensor, the correction wavefront is automatically obtained by analyzing these aberrations. Then, the correction wavefront can be used to ...

Because the modulation accuracy and precision of liquid crystal spatial light modulator (LC-SLM) are strongly influenced by difference in operation conditions and the manufacturing errors of spatial light ...

Spatial Light Modulation Dynamic aberration correction via spatial light modulator (SLM) for femtosecond direct laser writing: towards spherical voxels, Gabrieli Kontenis

In this paper, we propose to use several phase retrieval techniques to measure the corresponding wavefront directly and employ the obtained wavefront to correct the aberration ...

I would like to ask you for an advice in adresssing a phase map to a spatial light modulator (reflective and transmissive), precisely in generating a ...

By employing experimental calibration curves for nonlinear correction, the nonlinear error of the phase-gray modulation characteristic curve was ...

Correction is accomplished by using two spatial light modulators in series. The first performs the necessary amplitude modulation, also introducing a phase change. The second SLM restores the ...

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