

Abstract Submitted
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Deep-UV interference lithography combined with masked contact lithography for pixel wiregrid patterns DAVID LOMBARDO, PIYUSH SHAH, PENGFEI GUO, ANDREW SARANGAN, Electro-Optics Graduate Program, University of Dayton, Dayton, Ohio 45469 — In this work, we investigate a new technique for quantum-compatible waveform shaping that goes beyond the time- Pixelated wiregrids are of great interest in polarimetric imagers, but there are no straightforward methods available for combining the uniform exposures of laser interference with a masking system to achieve pixels at different rotational angles. In this work we demonstrate a 266nm deep-UV interference lithography combined with a traditional i-line contact lithography to create such pixels. Aluminum wiregrids are first made, following by etching to create the pixels, and then a planarizing molybdenum film is used before patterning subsequent pixel arrays. The etch contrast between the molybdenum and the aluminum enables the release of the planarizing layer.

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