

Supplementary Information

**Direct Patterning of Liquid Materials on Flat and Curved
Substrates Using Flexible Molds with Through-hole and Post
Arrays**

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Supplementary Figures

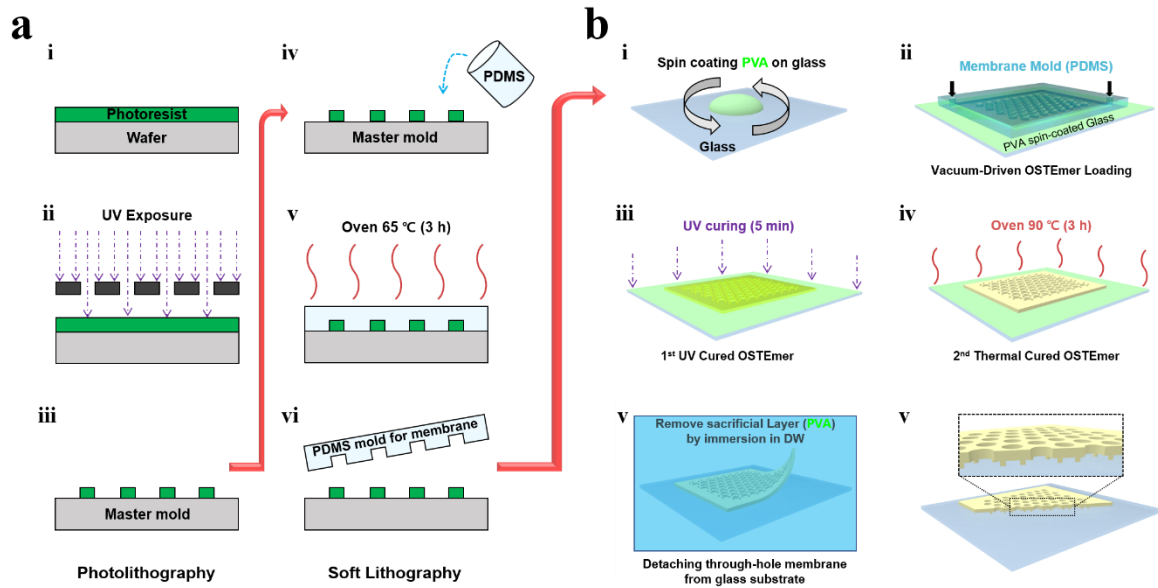


Figure S1. Fabrication process of the microfluidic platform featuring through-hole and post arrays. (a) Schematic of the photolithography process used to fabricate the SU-8 master mold and the subsequent soft lithography process for producing a PDMS mold. **(b)** Schematic of the fabrication of an OSTEMER membrane with through-hole and post arrays using the PDMS mold.

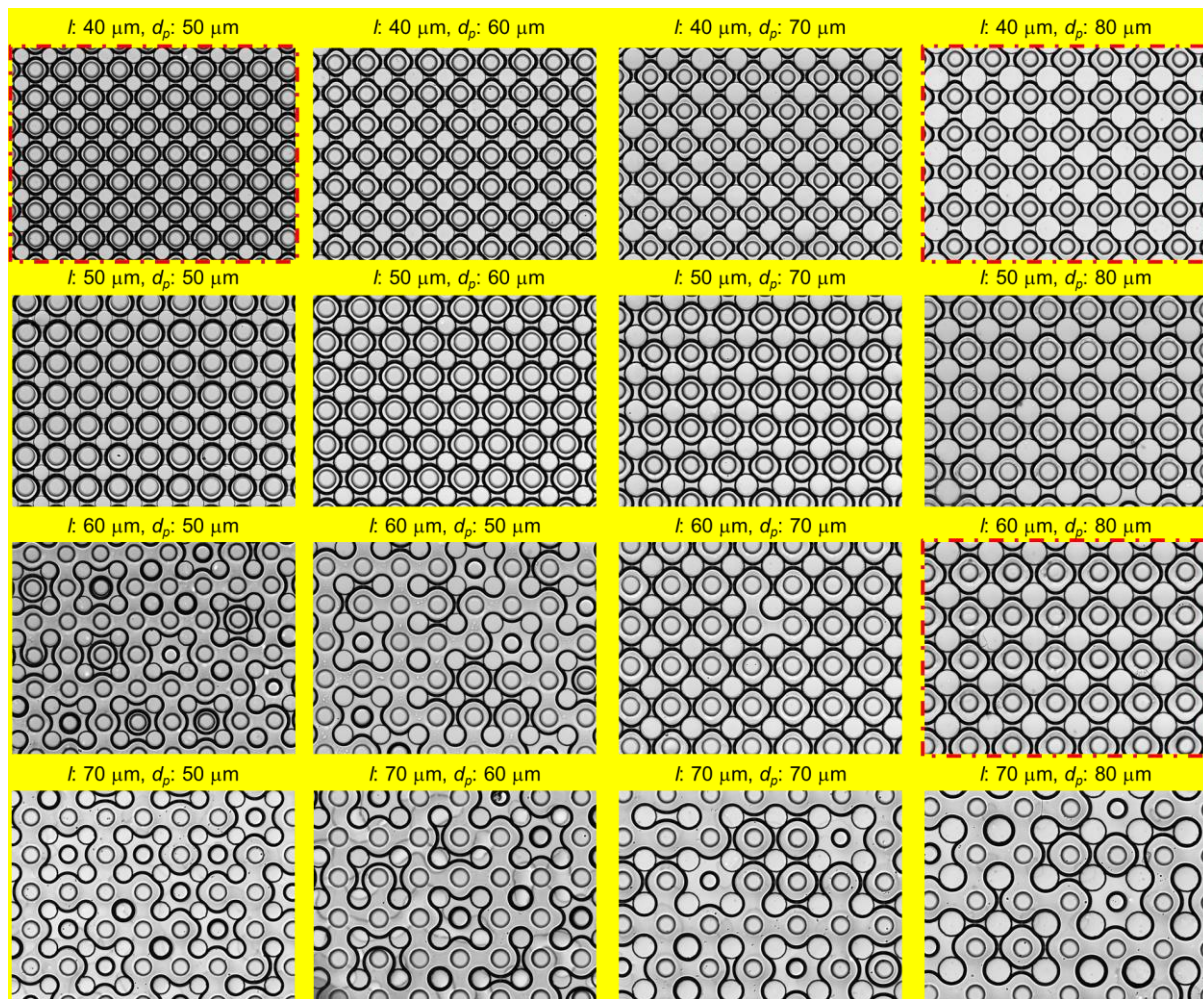


Figure S2. Characterization of defects in oil films patterned by varying the parameters of the square array of through-holes and posts. The diameter of the posts is d_p , and the distance between posts is l . The images marked in red dashed rectangles correspond to the case shown in Fig. 4c.

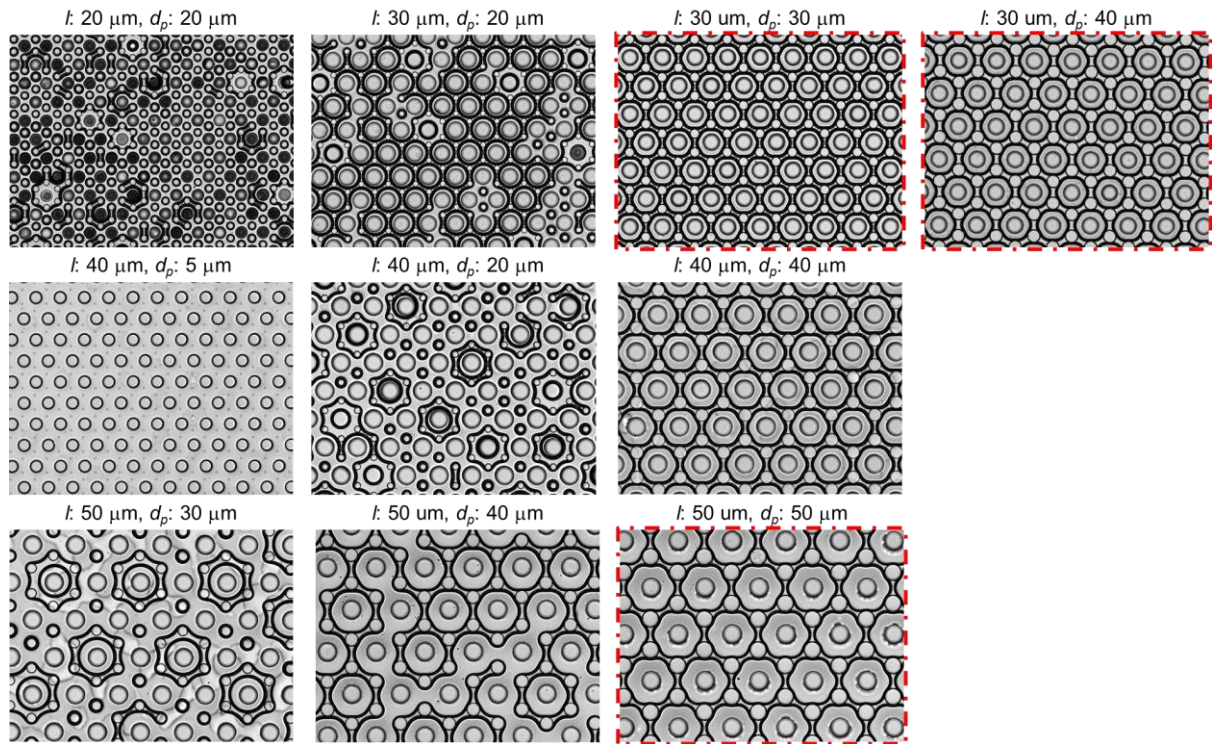


Figure S3. Characterization of defects in oil films patterned by varying the parameters of the hexagonal array of through-holes and posts. The diameter of the posts is d_p , and the distance between posts is l . The images marked in red rectangles correspond to the case shown in Fig. 4f.

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