3D-Cascade-Microlens Optofluidic Chip for Refractometry with Adjustable Sensitivity

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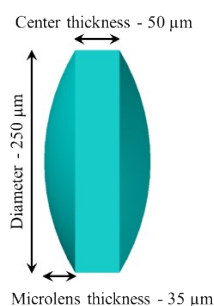# Supporting Information

Fig. S1 Microlens dimensions

Considering no obvious sensitivity enhancement after increasing the curvature radius

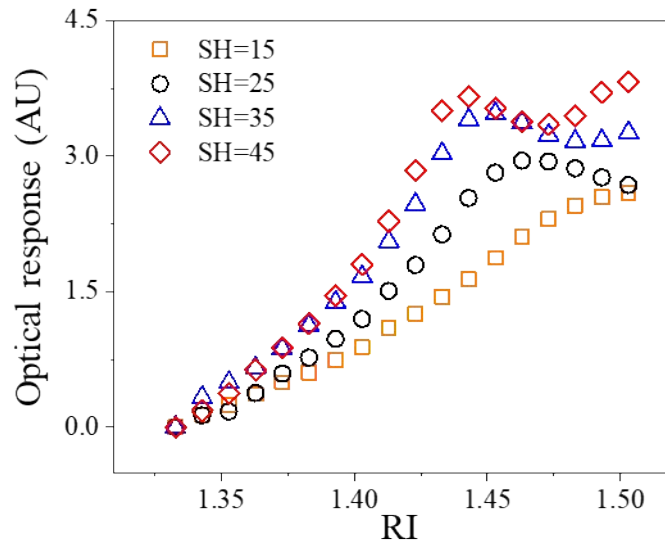of microlens from 35 to 45 μm, 35 μm was determined as the microlens thickness for

3DCMOC.

Fig. S2 Effects of microlens thickness on results originated from the five-microlens
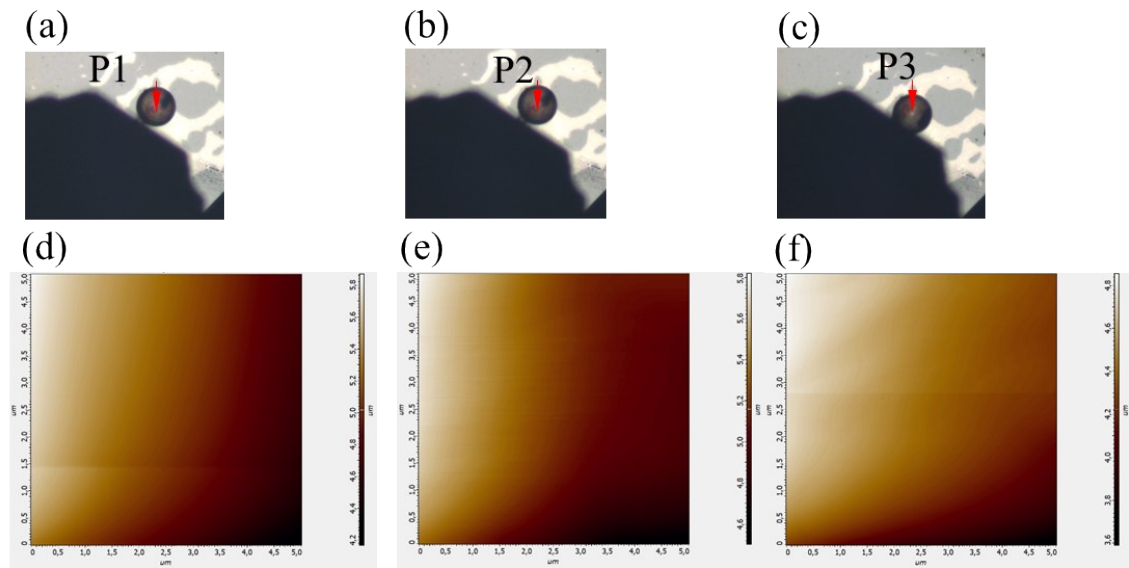
configuration

Fig. S3 Roughness characterization of microlens surface. (a), (b), and (c) are the

captured images showing the scanning area (5×5 μm, as indicated by the arrows in

images) on the microlens. (e), (d), and (f) are the height profile of microlens surface

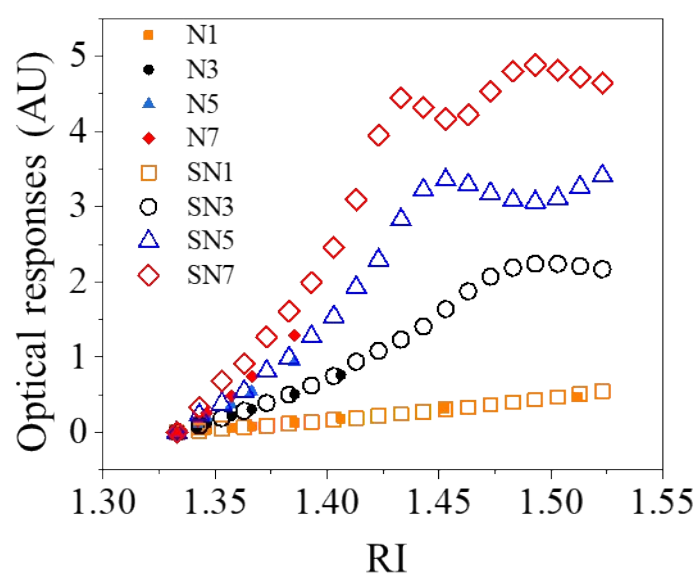corresponding to the areas in (a), (b), and (c).

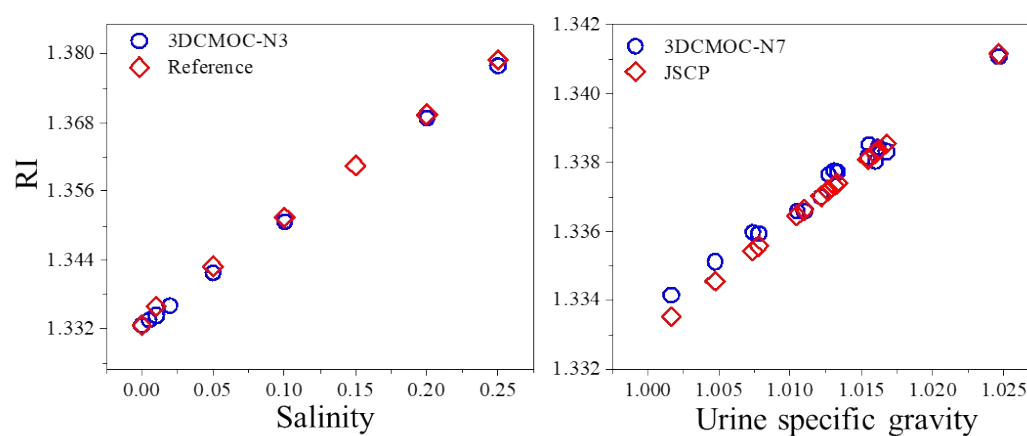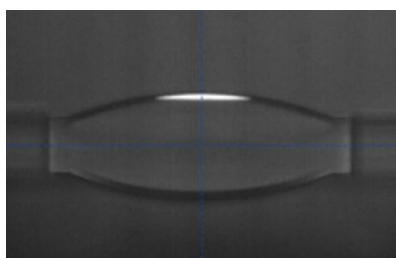**Fig. S4** Comparison of simulation and experiment results

Fig. S5 Comparison between data in this work and reported results. (a) Sodium chloride samples. (b) Urine samples.

Video 1 Process of printing microlens mold