Supplementary Materials

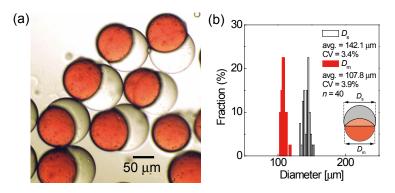


Figure S1. Janus droplets with surfactant KF-6015 in the non-curable phase. (a) Photomicrograph of the Janus droplets off the microfluidic chip. (b) The aperture size distributions of the two droplet segments.

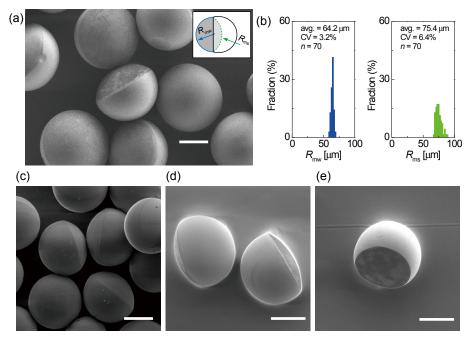


Figure S2. Biconvex polymer microlenses prepared with surfactant KF-6015. (a) An SEM image of the lenses prepared at $Q_m/Q_s = 1/1$. (b) The distributions of two curvature radii R_{mw} and R_{ms} . (c–e) Biconvex particles prepared at (c) $Q_m/Q_s = 1/2$, (d) $Q_m/Q_s = 2/1$, and (e) $Q_m/Q_s = 4/1$. Scale bars are 50 µm.

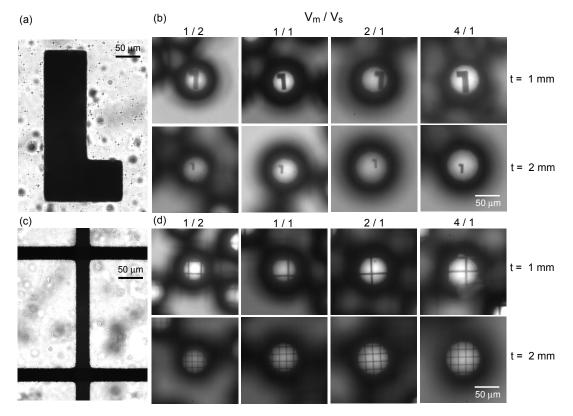


Figure S3. Projection experiments with the KF-6015 biconvex lenses with different curvatures. (**a**,**c**) Micropatterns printed on a photomask sheet. (**b**,**d**) Projected images through biconvex microlenses.