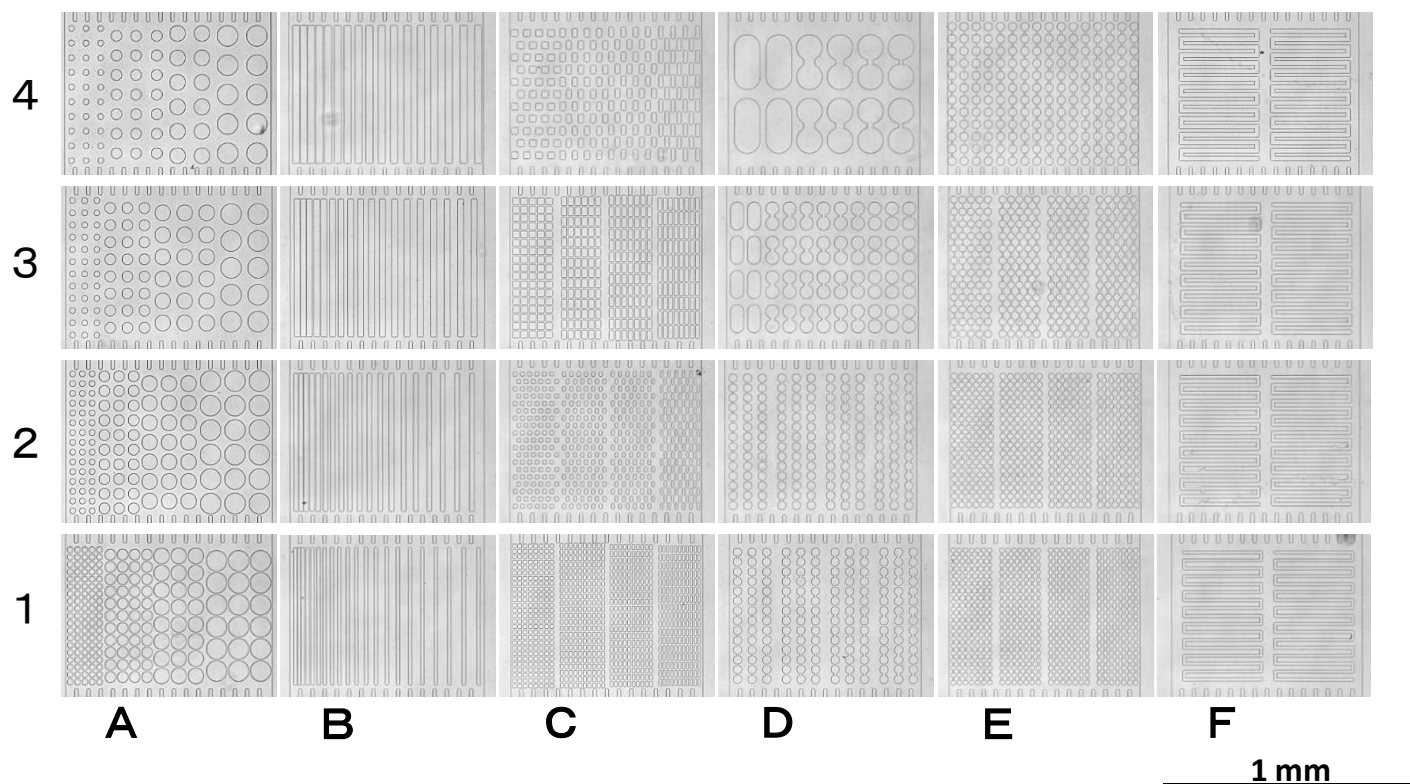
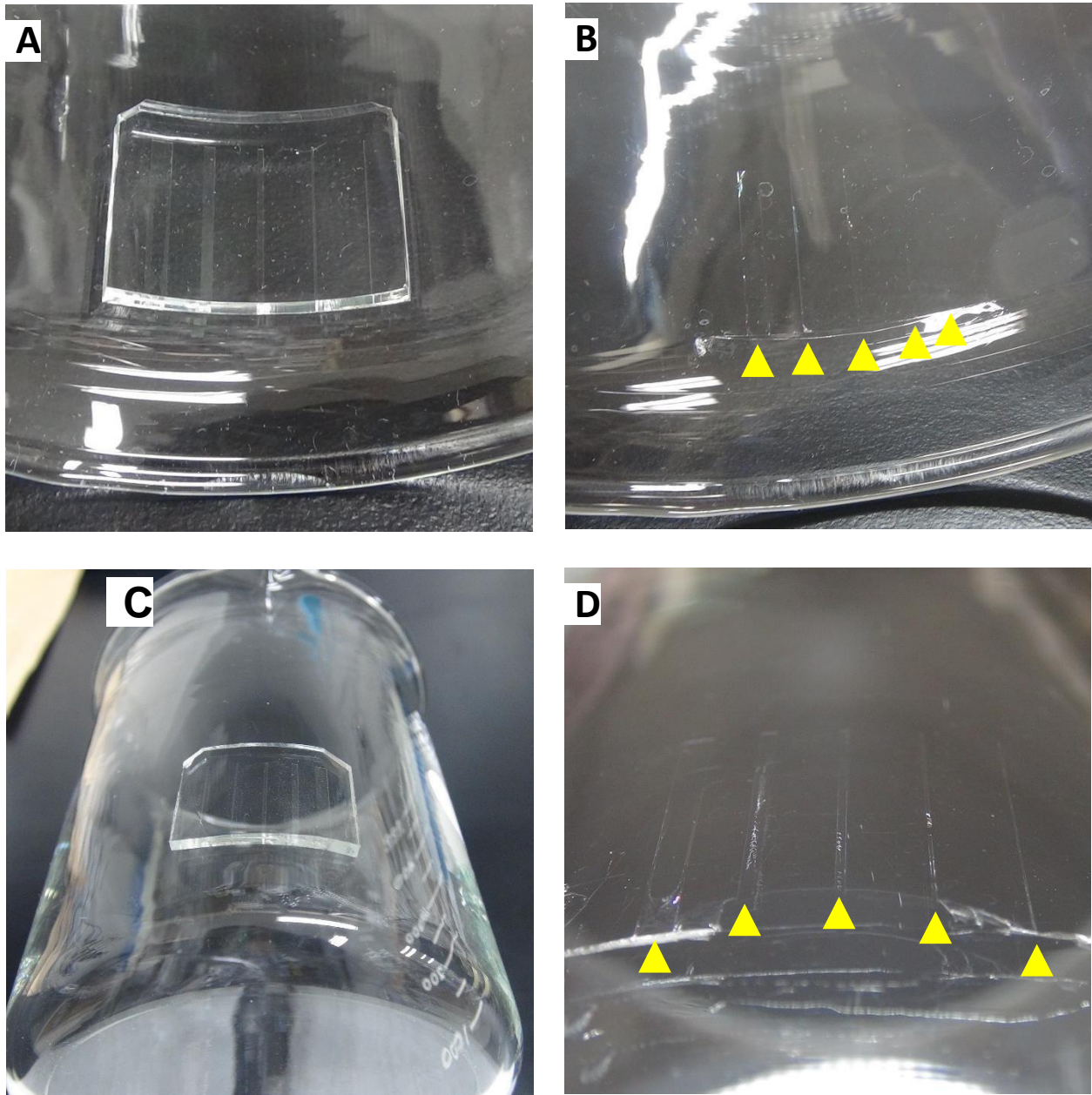


**Supplementary Figure 1.** Various patterns produced by vacuum-assisted molding of agarose gel. The black bar indicates 1 mm and the scales of all panels are the same.



**Supplementary Figure 1.**

**Supplementary Figure 2.** Agarose casting on curved surfaces. Photographs (A) and (B) show PDMS mold and cast agarose patterns on a concave surface (the inside surface of a 300 mL beaker with ID of 7.5 cm), respectively. Photographs (C) and (D) show PDMS mold and cast agarose patterns on a convex surface (the outside surface of a 1,000 mL beaker with OD of 11 cm), respectively. Yellow arrowheads indicate the ends of the cast agarose lines with widths of 100, 200, 500, 1,000, and 2,000  $\mu\text{m}$ .



**Supplementary Figure 2.**

**Supplementary Movie 1.** Vacuum-assisted filling of agarose solution into 19-mm-length micro-channels with widths of 100, 200, 500, 1,000, and 2,000  $\mu\text{m}$ .