

Supplementary Figures and Captions

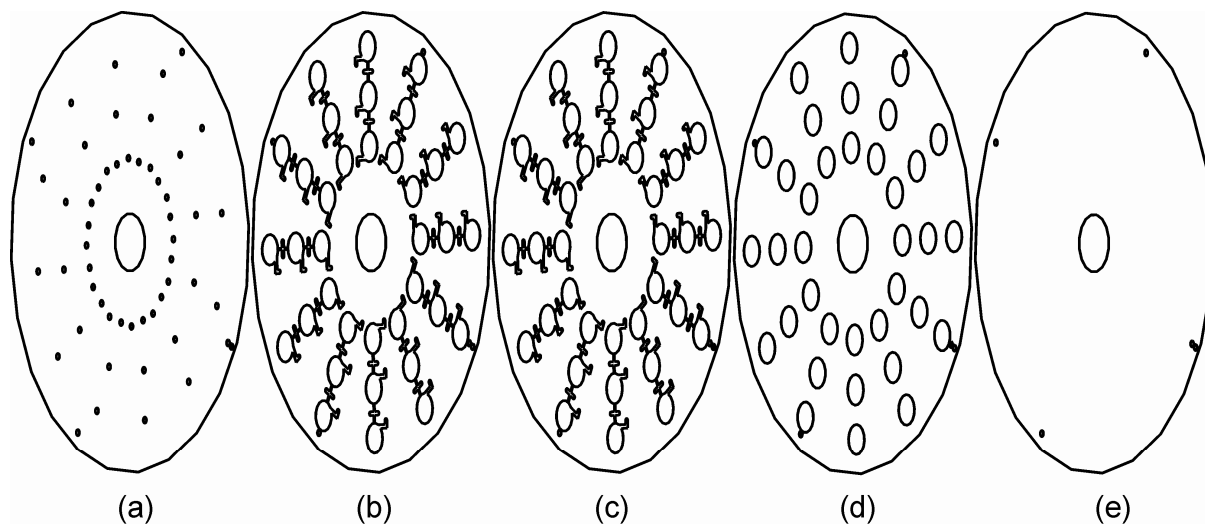


Fig. S1 Disc assembly : (a) DVD, (b) 100 μm adhesive, (c) CD with capillary valves, (d) 100 μm adhesive, and (e) DVD. Two 100 μm adhesive layers were applied to the CD before capillary valves were glued into the CD. Once epoxy was applied, the release layers of the adhesives are removed and the DVD layers were added.

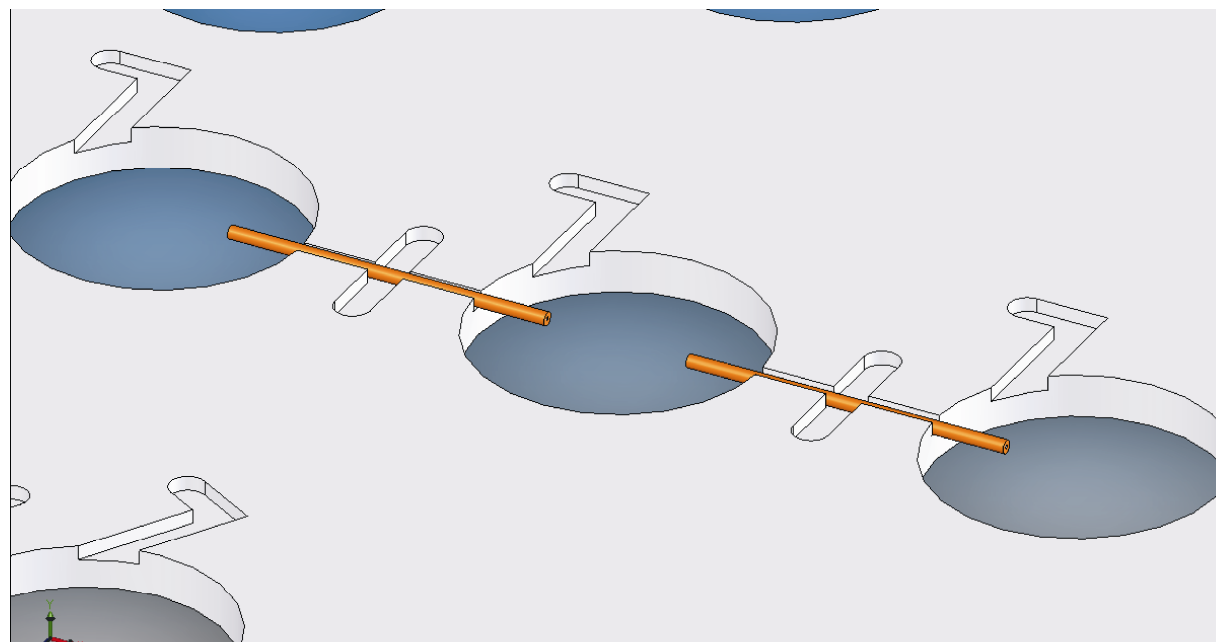


Fig. S2 Construction of Configuration B with 9 mm long capillaries as valves in the CD layer (epoxy is not shown as it is clear).