

Supplementary Materials

Using Stereolithographic Printing to Manufacture Monolithic Microfluidic Device with Extremely High Aspect Ratio

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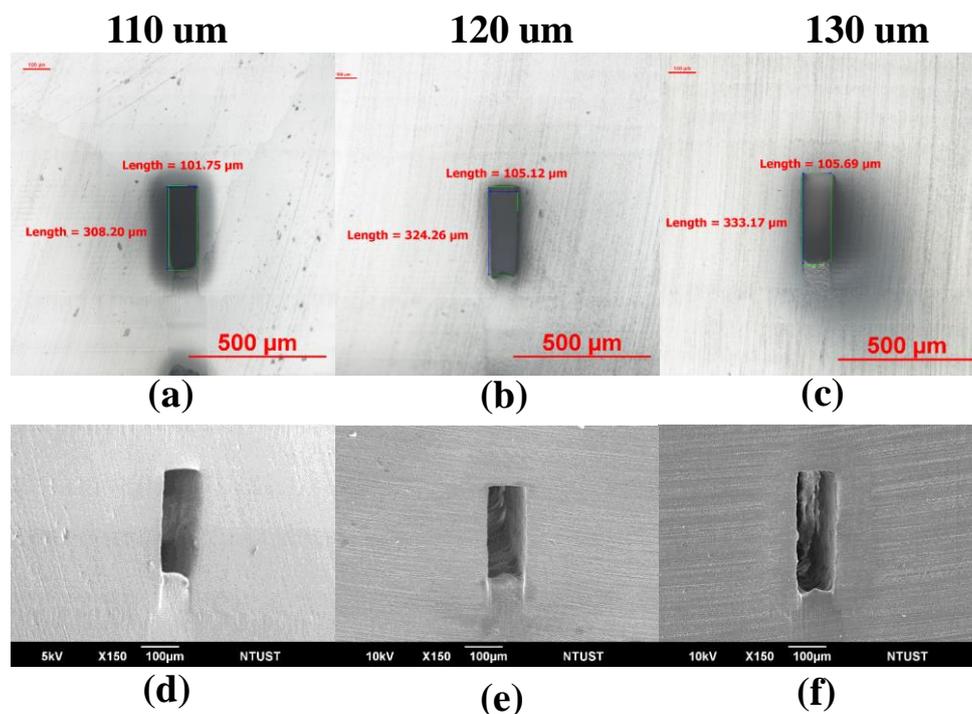


Figure S1: (a) to (c) cross sections with measurements obtained using a tool microscope; (d) to (f) SEM cross sections corresponding to printing thicknesses of 110 μm, 120 μm, and 130 μm, respectively. After completion of the channel layer, the roof layer was printed continuously to seal the microchannel. The roof layer was applied in three printing thicknesses (110 μm, 120 μm, and 130 μm). The intended depth of the microchannel was 400 μm; however, the actual depth varied as a function of printing thickness, as follows: 308 μm (printing thickness of 110 μm), 324 μm (printing thickness of 120 μm), and 333 μm (printing thickness of 130 μm).

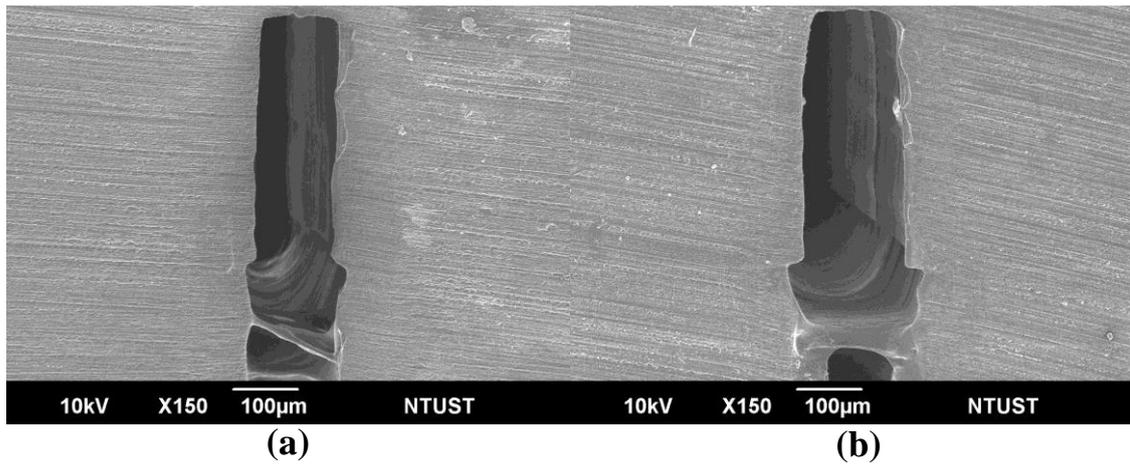


Figure S2: (a)(b) both figures showed the collapsed roof layer due to the reduced exposure energy (either reducing the lighting intensity or reducing the exposure time).