

Supplementary Materials

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

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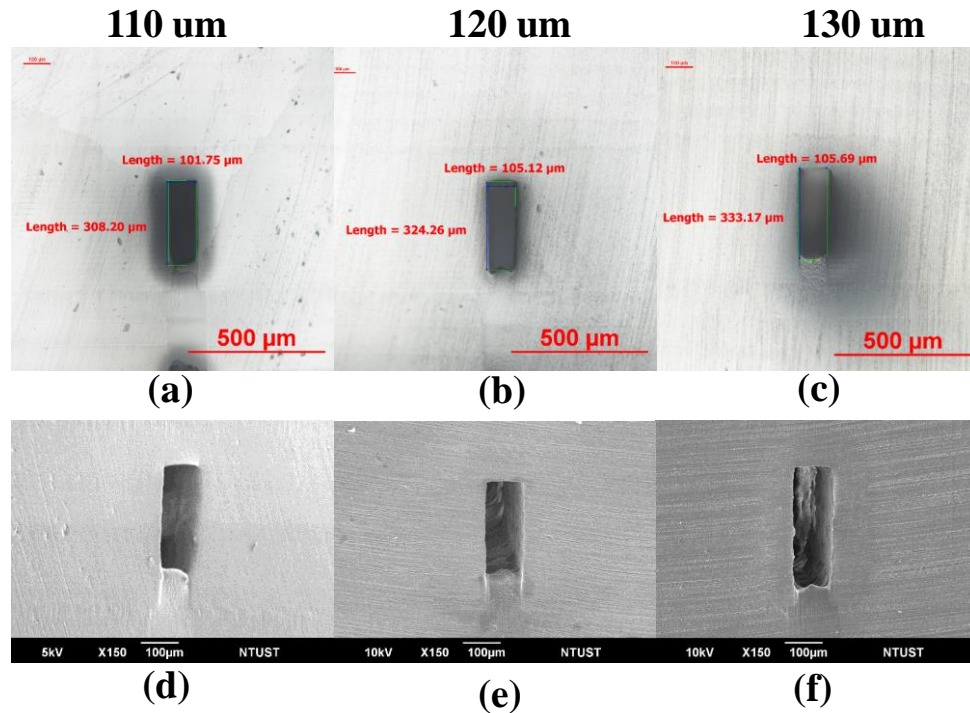


Figure S1: (a) to (c) cross sections with measurements obtained using a tool microscope; (d) to (f) SEM cross sections corresponding to printing thicknesses of 110 μm , 120 μm , and 130 μm , respectively. After completion of the channel layer, the roof layer was printed continuously to seal the microchannel. 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).

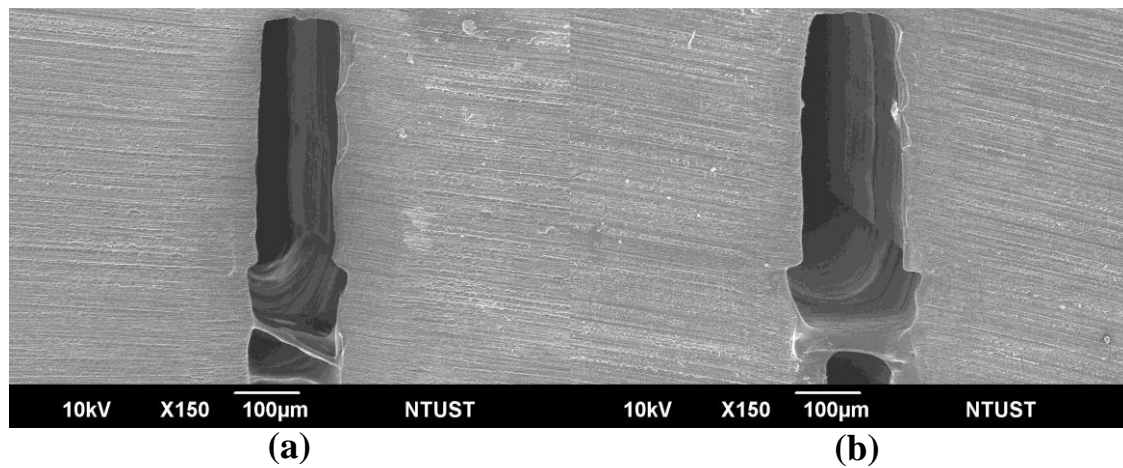


Figure S2: (a)(b) both figures showed the collapsed roof layer due to the reduced exposure energy (either reducing the lighting intensity or reducing the exposure time).