

Supplementary Information

Controlling amorphous silicon in scratching for fabricating high-performance micromixers

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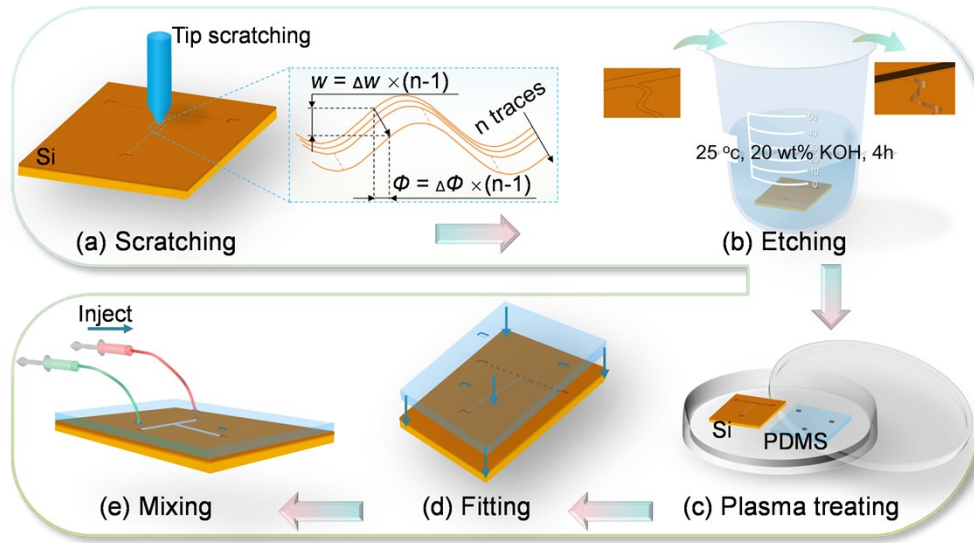


Fig. S1 Schematic diagram of micromixer fabrication. The n means the number of traces, and the increase for adjacent trace is $\Delta w = 2\mu\text{m}$ and $\Delta\phi = 0.8\mu\text{m}$ in here, respectively.

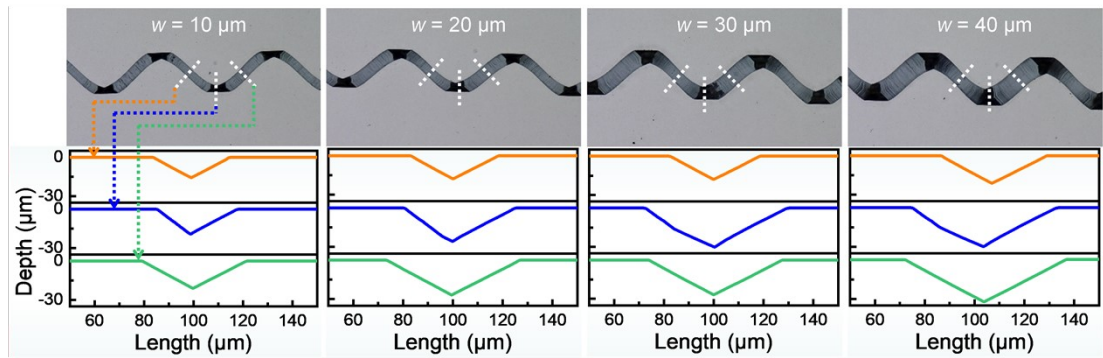


Fig. S2 Microscope images and the profiles of the fabricated channels with different widths, where the measurement of the profiles was schematically indicated on the left.

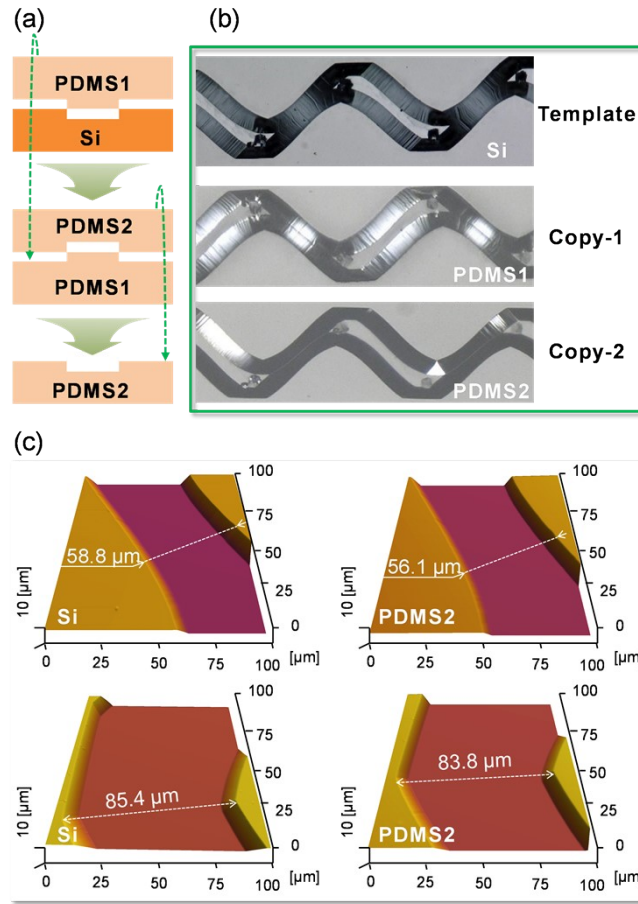


Fig. S3 Replicating of misaligned sine channels. (a) Replicating processes. (b) Microscope images of the misaligned sine channel from Si substrates (Template) to PDMS1 substrates (Copy-1), and then to PDMS2 substrates (Copy-2). (c) AFM images for comparing the misaligned sine channel in Si surface and PDMS2 surface.