

A 'microfluidic pinball' for on-chip generation of Layer-by-Layer polyelectrolyte microcapsules

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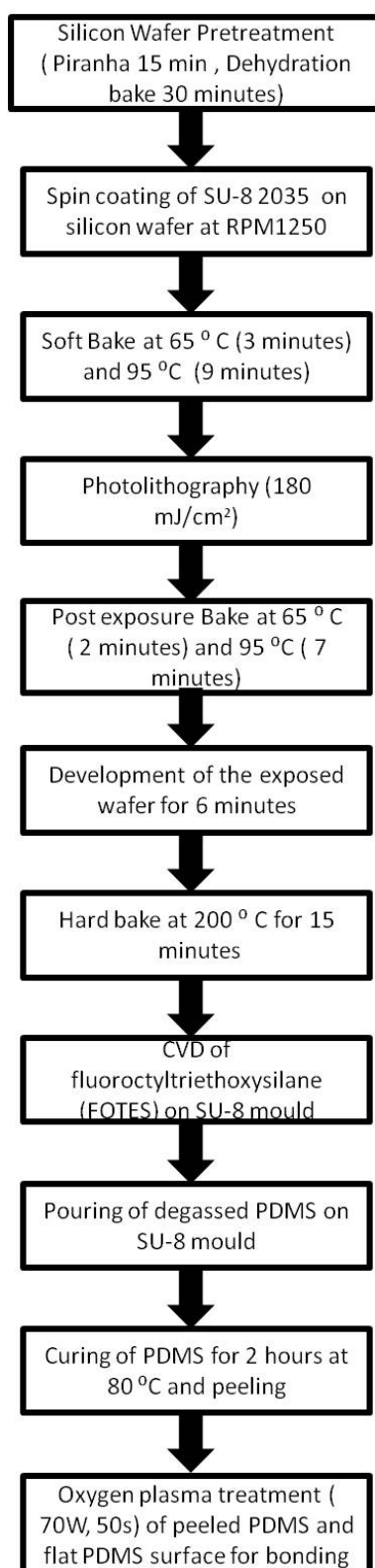


Figure 1: Flow chart of the fabrication process and parameters for obtaining SU-8 moulds and fabricating the device with soft lithography

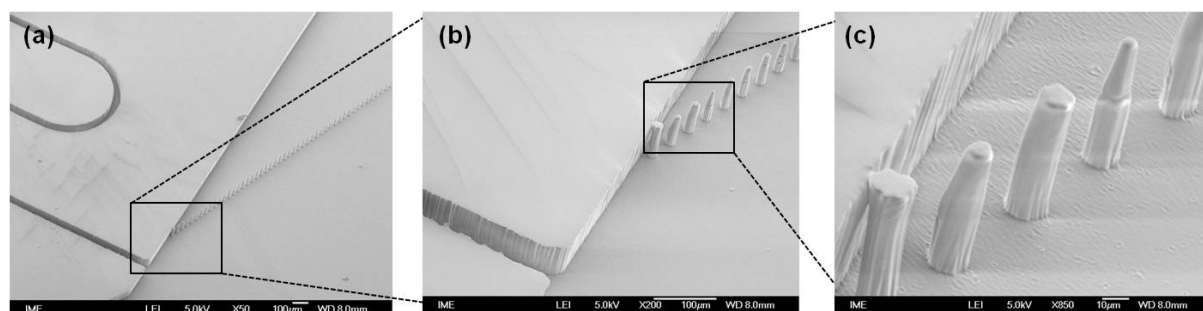


Figure 2: SEM images of the PDMS microdevice showing micropillars (80 μm height, 20 μm diameter) in a microchannel. The relative smooth surface of micropillars offers uninterrupted travel of microcapsules.

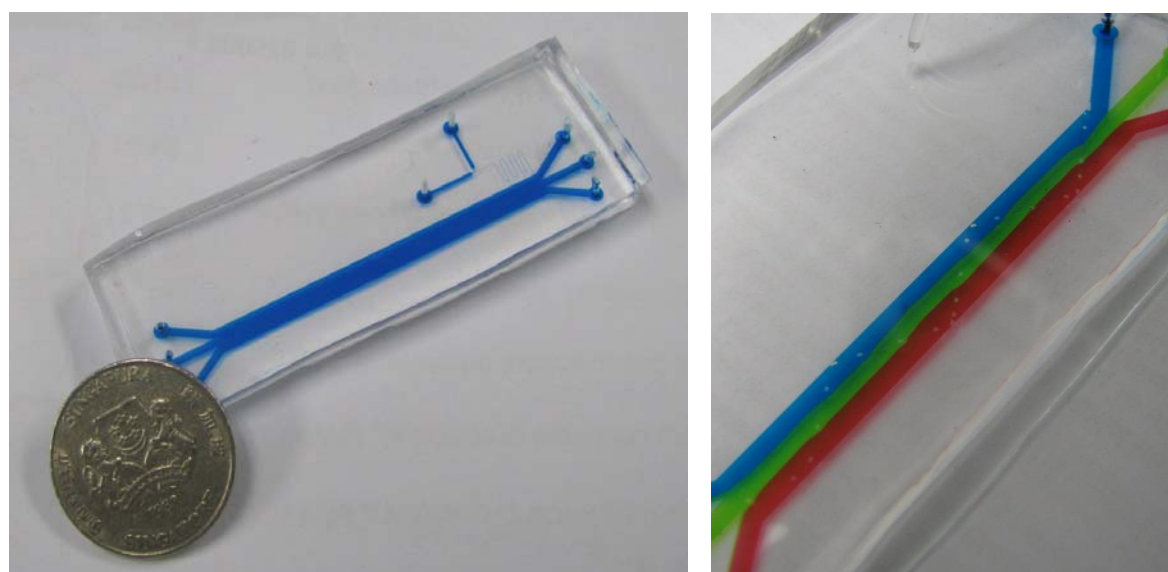


Figure 3: Actual PDMS device for generation of microcapsules for 6 layers of polyelectrolytes. Primed with different dye solutions for illustration of channel length and width.

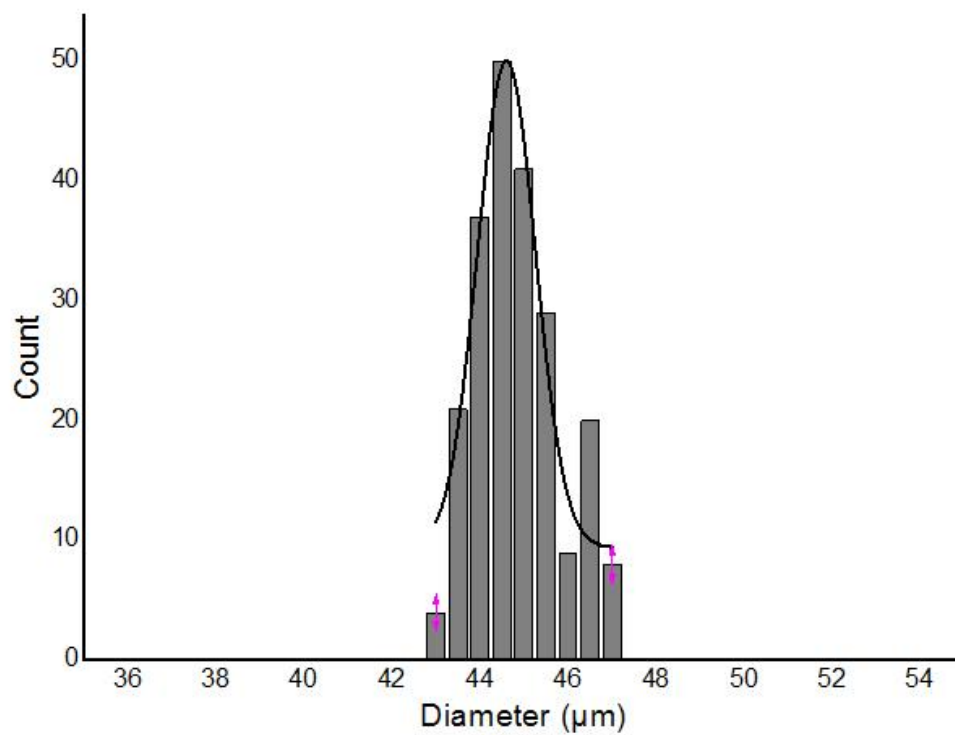


Figure 4: Narrow distribution of droplet size. Monodisperse droplets were obtained with a size of $45 \mu\text{m} \pm 2 \mu\text{m}$