

# † Electronic Supplementary Information (ESI)

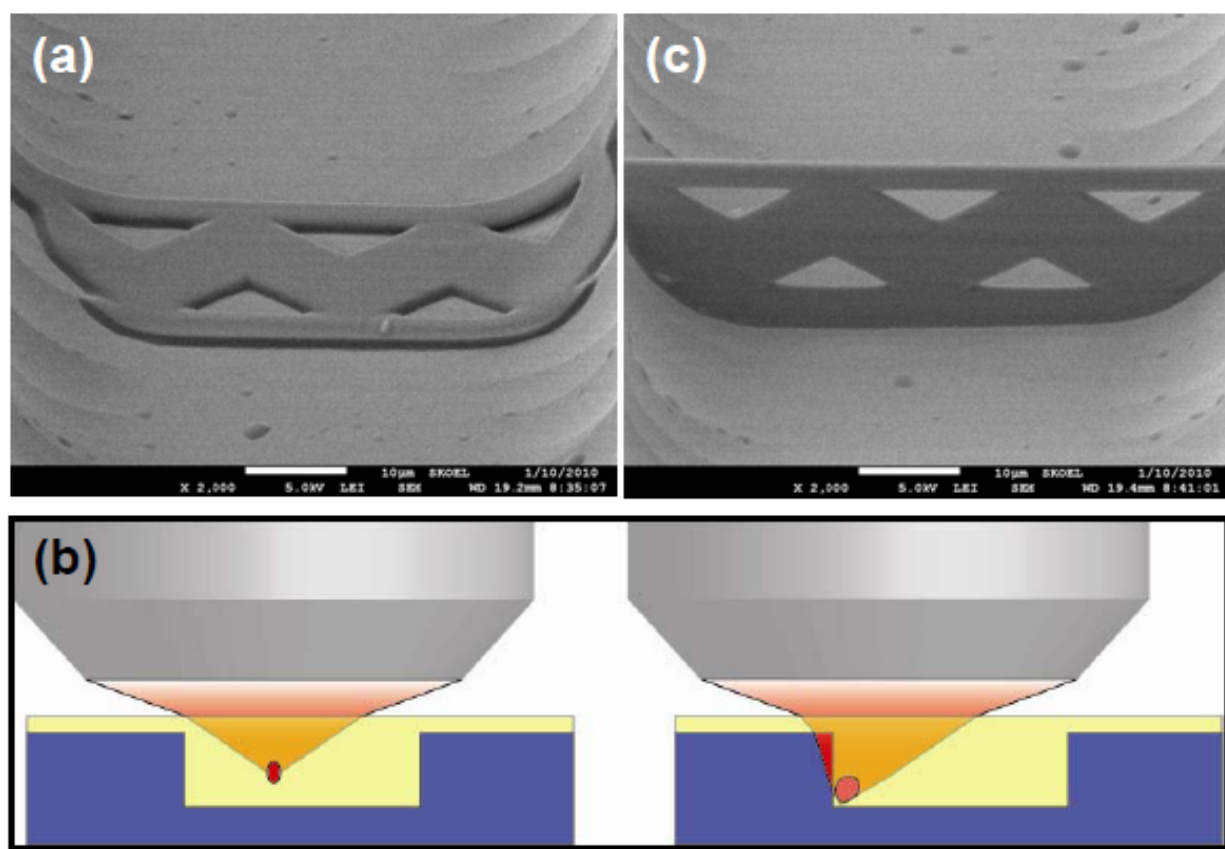
## Embellishment of Microfluidic Devices *via* Femtosecond Laser Micronanofabrication for Chip Functionalization

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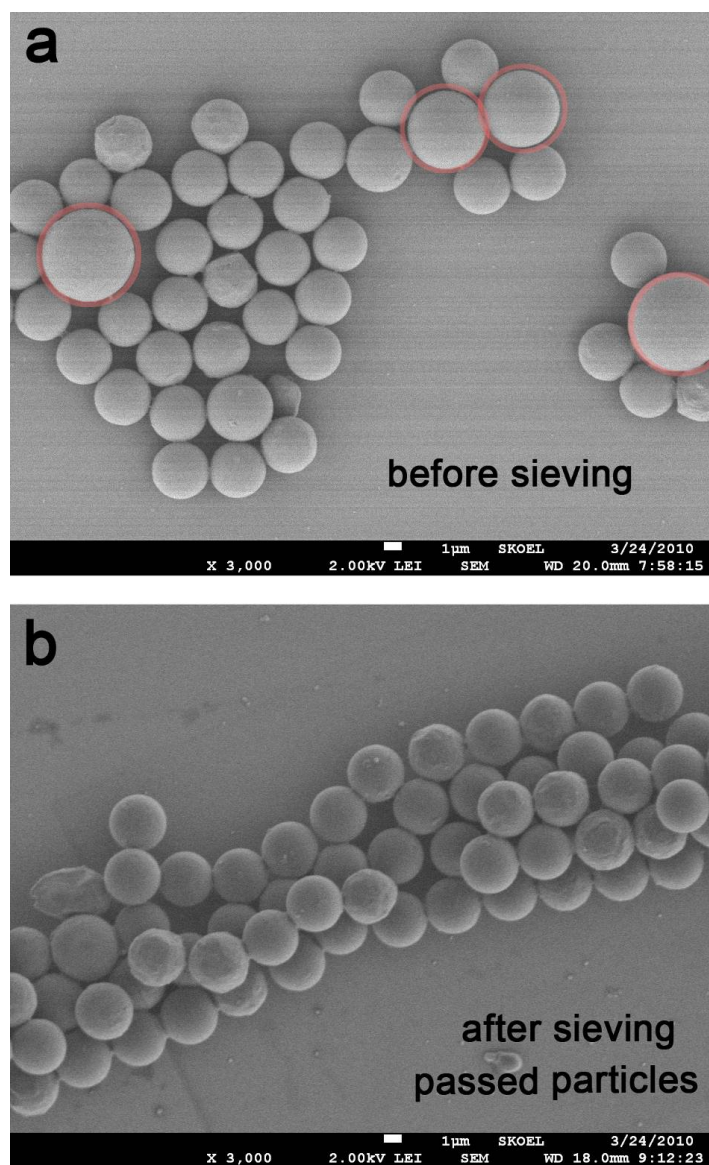
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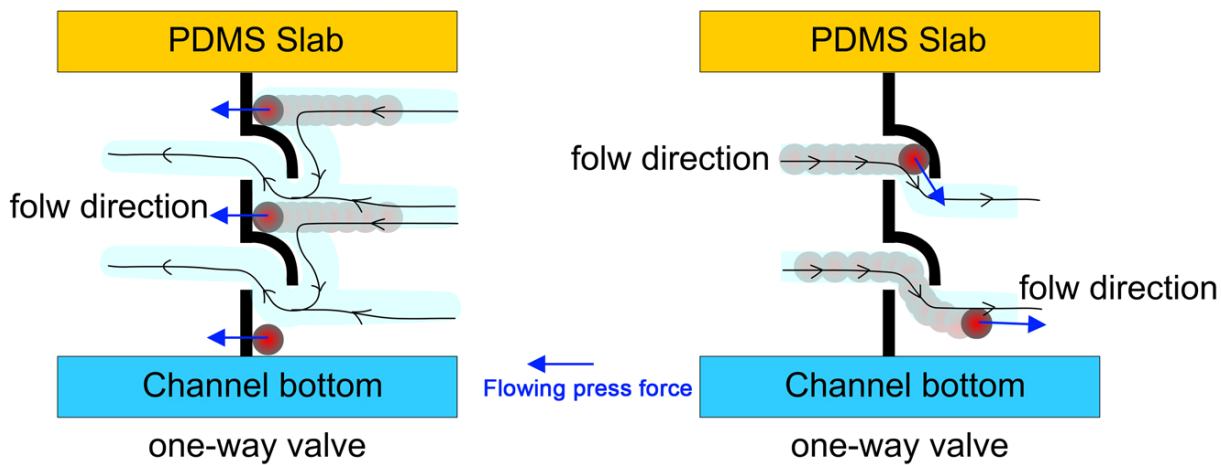
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**Fig. S1** “Wall effect” and the proposed reason. (a) SEM image of a collapsed microsieve. (b) proposed reason of the “wall effect”: when the laser does not pass through the channel wall, it will focus on a very small region with very high intensity; but when the laser passes through the channel wall, due to the different refractive index between the glass and the photoresist, the laser can not focus on a small region, and the intensity of the laser power may be not high enough to induce the photoresist polymerization. (c) SEM image of a microsieve fabricated by higher laser energy.



**Fig. S2** SEM images of microparticles before and after sieving. Obviously, larger particles have been headed off by our microsieves. The statistic results are based on 1000 of microparticles.



**Fig. S3** Scheme for particle movements in one-way microvalve test.