Embellishment of Microfluidic Devices via Femtosecond Laser Micronanofabrication for Chip Functionalization

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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 cannot 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.