

**Virtual filter membranes in a microfluidic system for sorting and
separating size-based micro polystyrene beads by illumination intensity
design in optically induced dielectrophoresis (ODEP)**

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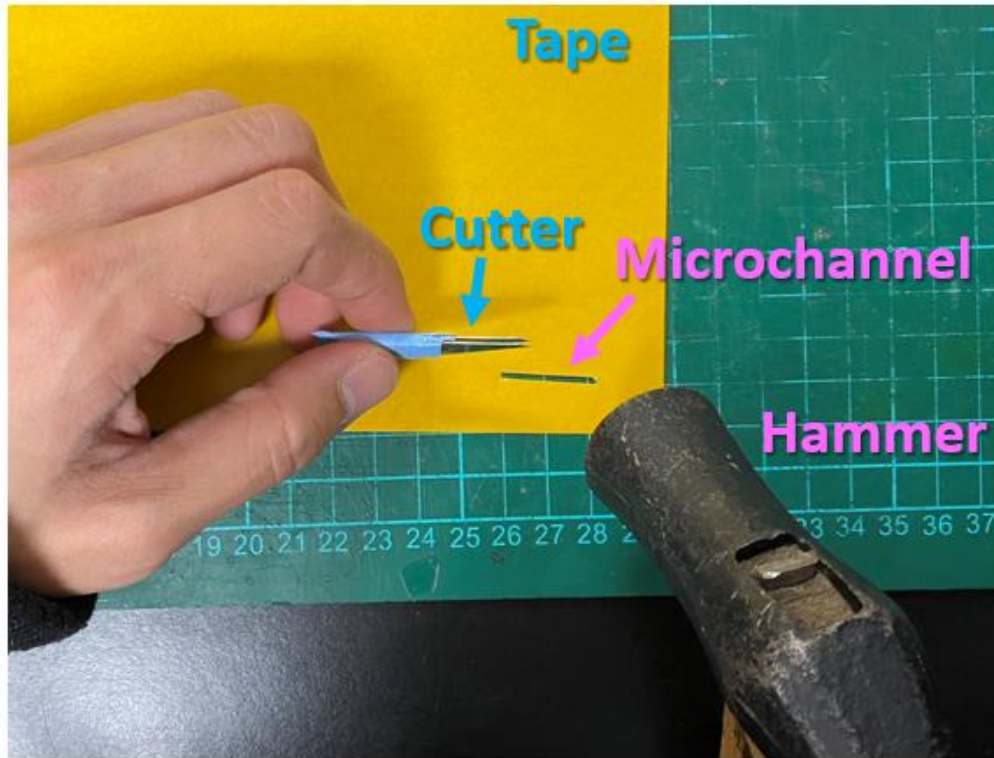


Figure S1 The picture of microchannel fabricated using manual cutting with a custom-made metal mold in double-sided adhesive tape.

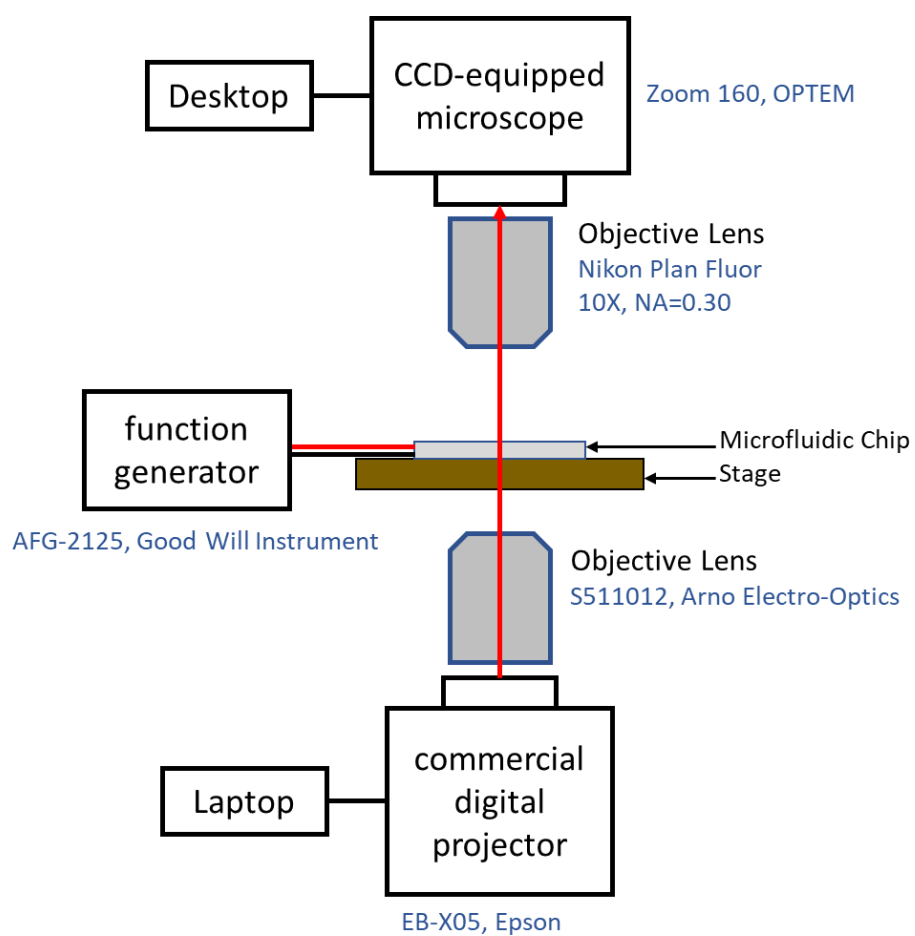


Figure S2 The schematic plot of optical setup including the optical path and objective lens fixed in the projector.

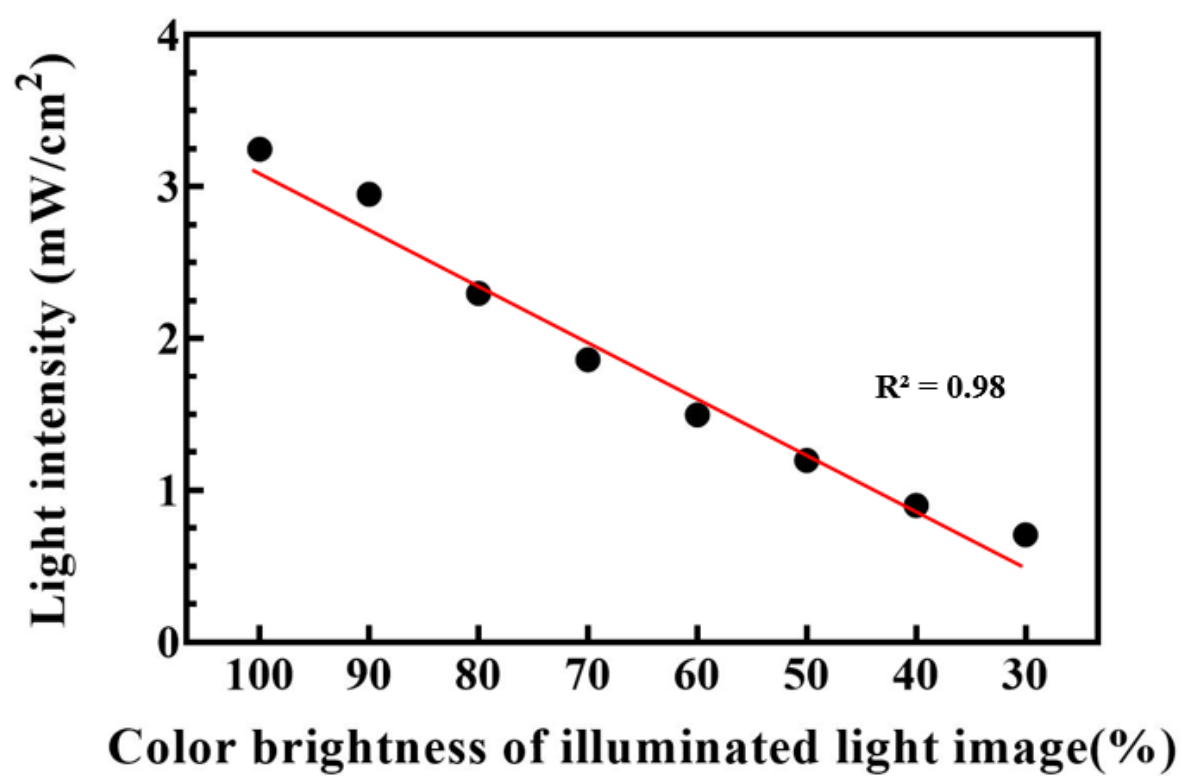


Figure S3 Light intensity versus the setting of color brightness in the PowerPoint file.

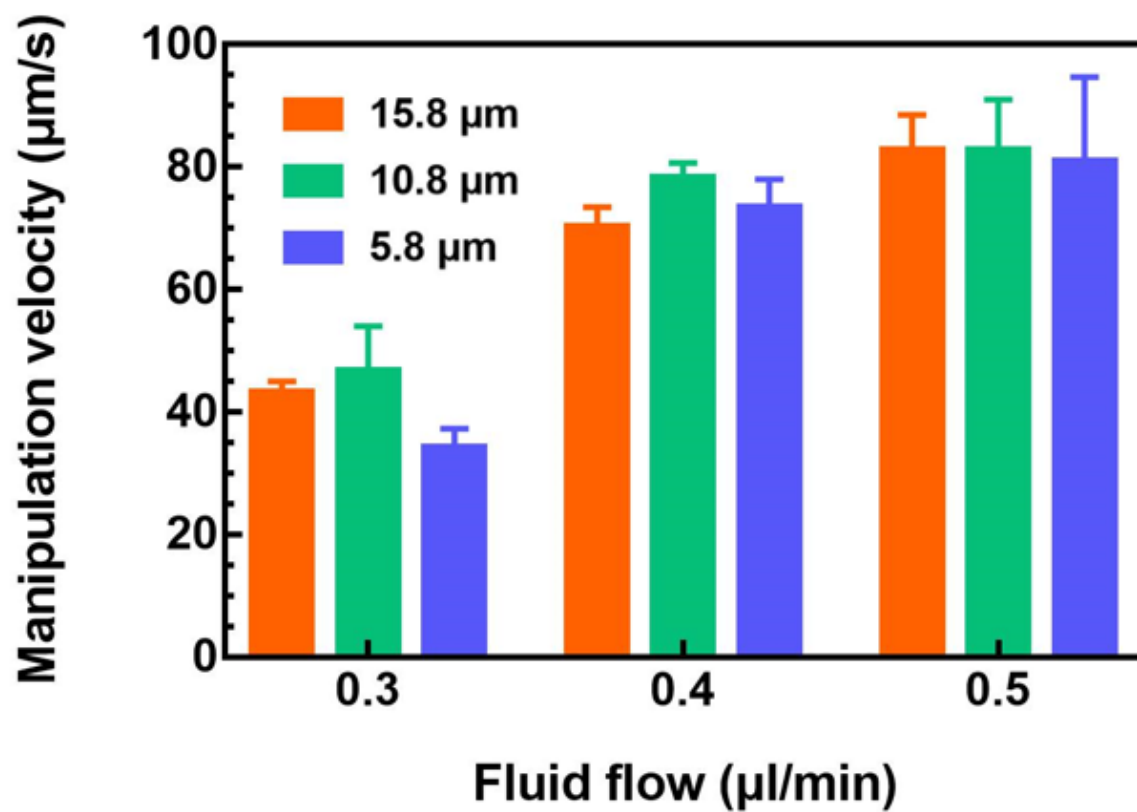


Figure S4 The actual velocity of three types of PS microparticles versus the fluid rate supplied by the syringe pump.