Supporting Information

Microfluidic Production of Autofluorescent BSA Hydrogel Microspheres and Their Sequential Trapping for Fluorescence-Based On-Chip Permanganate Sensing

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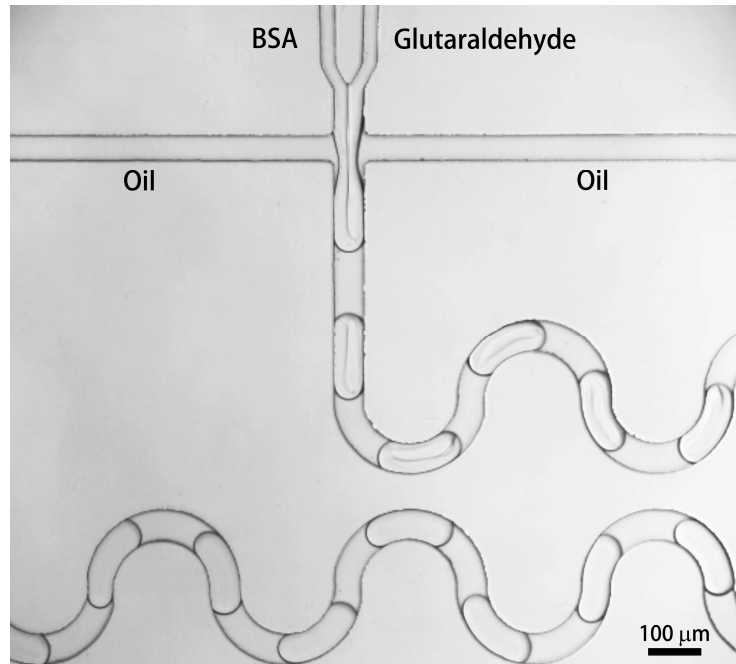
Figure S1. Optical microscope image of the present droplet generation device.
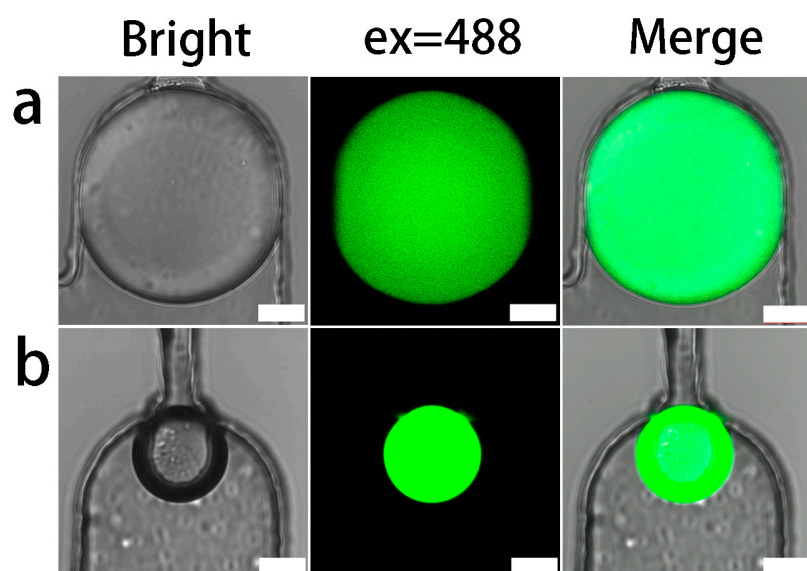
Figure S2. (a) Optical and fluorescence microscope images of the autofluorescent BSA hydrogel microsphere and (b) dried autofluorescent BSA hydrogel microsphere immobilized in the microchannel. All the scale bars are 25 μm.
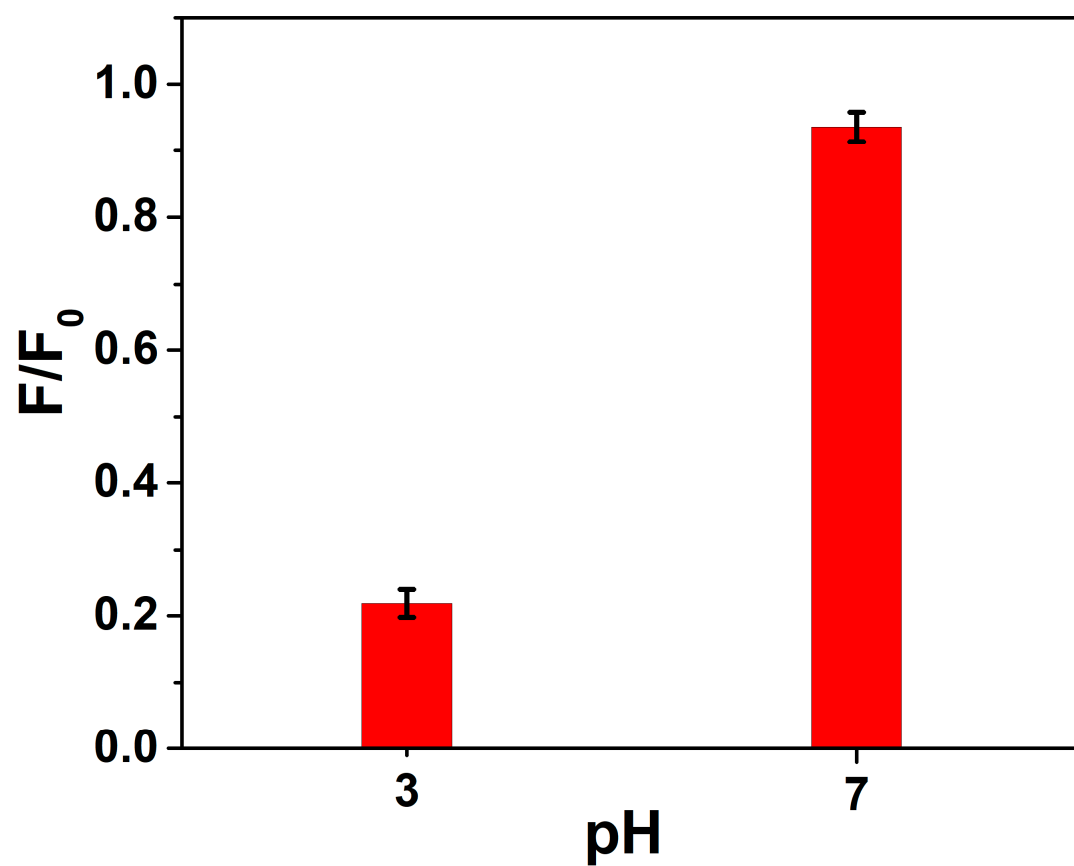
Figure S3. pH-dependent fluorescence property of the autofluorescent BSA hydrogel microspheres in the presence of MnO_4^- (80 μM).
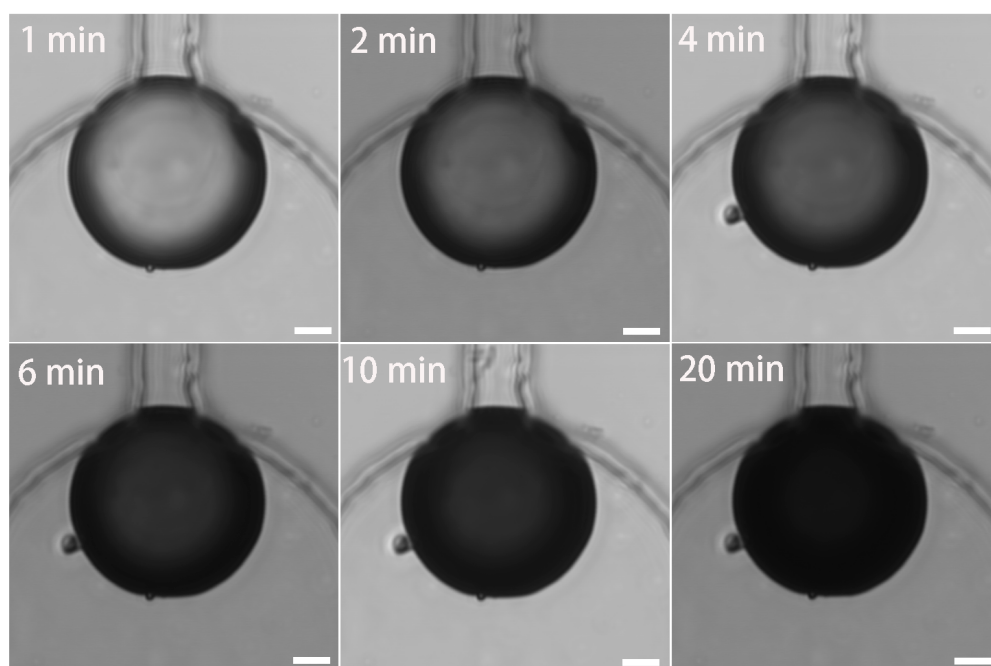
Figure S4. Optical microscope images of the autofluorescent BSA hydrogel microspheres in the presence of MnO_4^- at different concentrations (pH=3). All the scale bars are 10 μm.
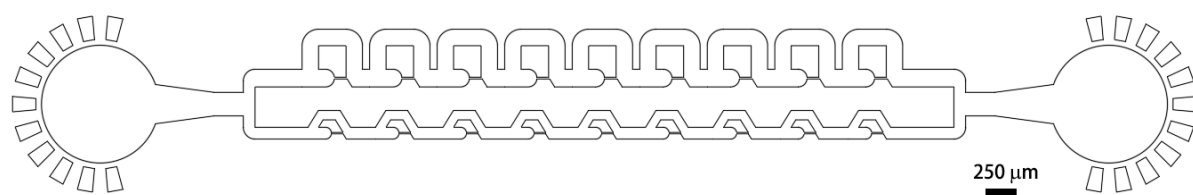
Figure S5. Microfluidic chip design for immobilizing the autofluorescent BSA hydrogel microspheres loaded with rhodamine B dye (bigger traps) and pure BSA hydrogel microspheres (smaller traps).