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Supplementary Information for

Porous organic/inorganic hybrid one-dimensional photonic crystals for rapidly visual detection of organic solvents

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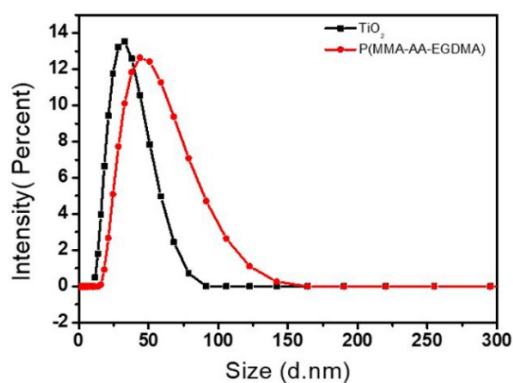


Fig. S1 Particle size distribution (vol %) of the P(MMA-AA-EGDMA) microemulsion (red line filled with circles) and TiO₂ sol (black line filled with square);

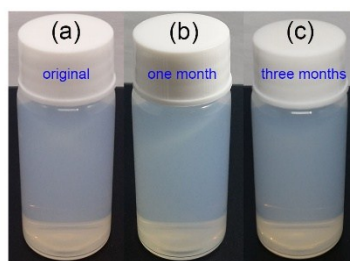


Fig. S2 Photographs of the polymer microemulsion (a) original state, (b) after one month and (c) after three months.

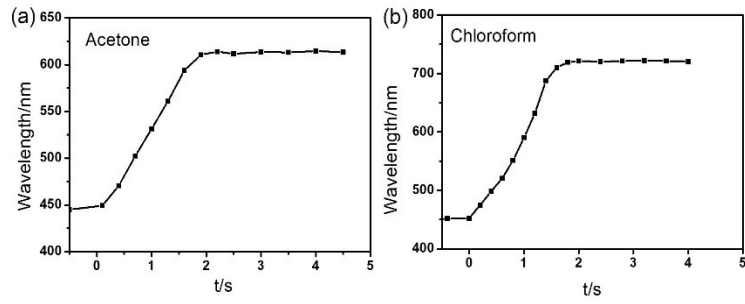


Fig. S3 Relation between the maximum reflectance wavelength of 1DPC sensor and responsive time in (a) acetone and (b) chloroform

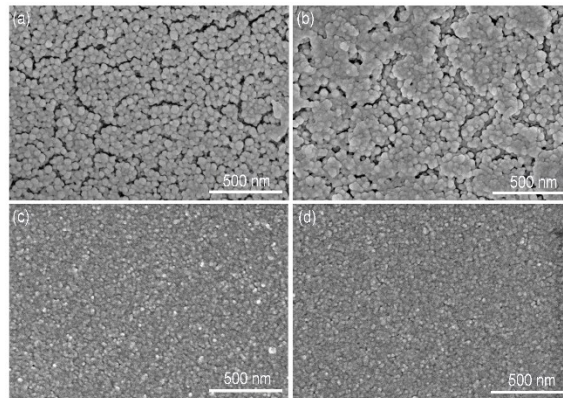


Fig. S4 SEM images of (a) polymer layer before immersing in acetone; (b) polymer layer after immersing in acetone; (c) TiO₂ layer before immersing in acetone; (d) TiO₂ layer after immersing in acetone

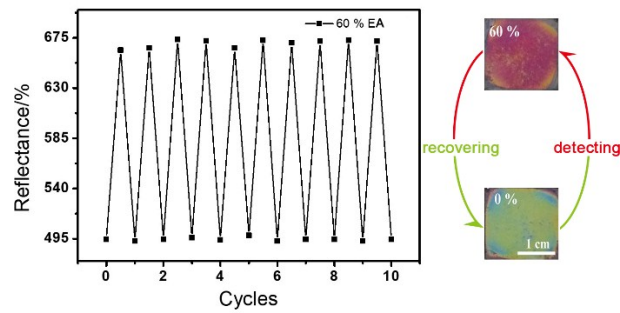


Fig. S5 Recycle detection test of the 1DPC sensor in 60 % ethanol aqueous solution.

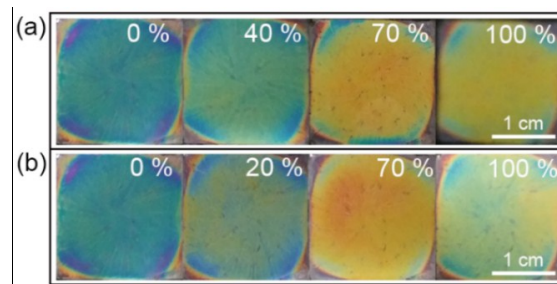


Fig. S6 Color variation of 1DPCs soaked in different concentration (a) alcohol solution (0 %, 40 %, 70 %, 100 %) and (b) acetone-water mixtures (0 %, 20 %, 70 %, 100 %)