

Supporting Information

for

Self-Assembled Curved Macroporous
Photonic Crystal-Based Surfactant Detectors

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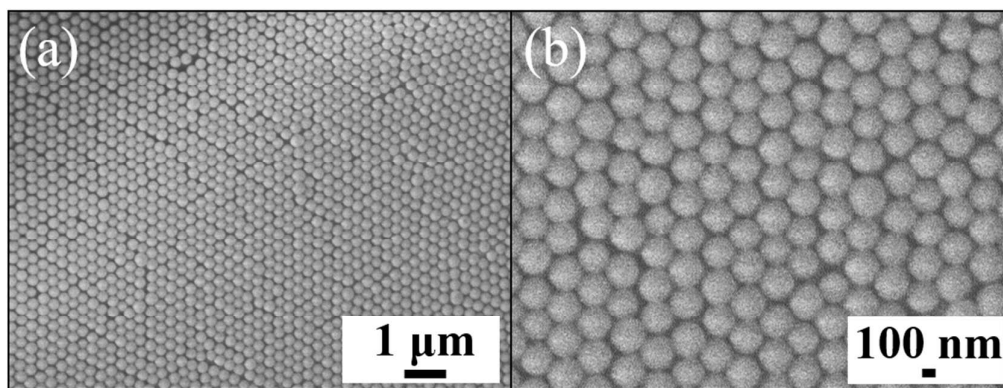


Figure S1. (a) Top-view SEM image of a curved 255 nm silica colloidal crystal-polymer composite fabricated by plasma etching for 1 minute at 0°. (b) Magnified image of (a).

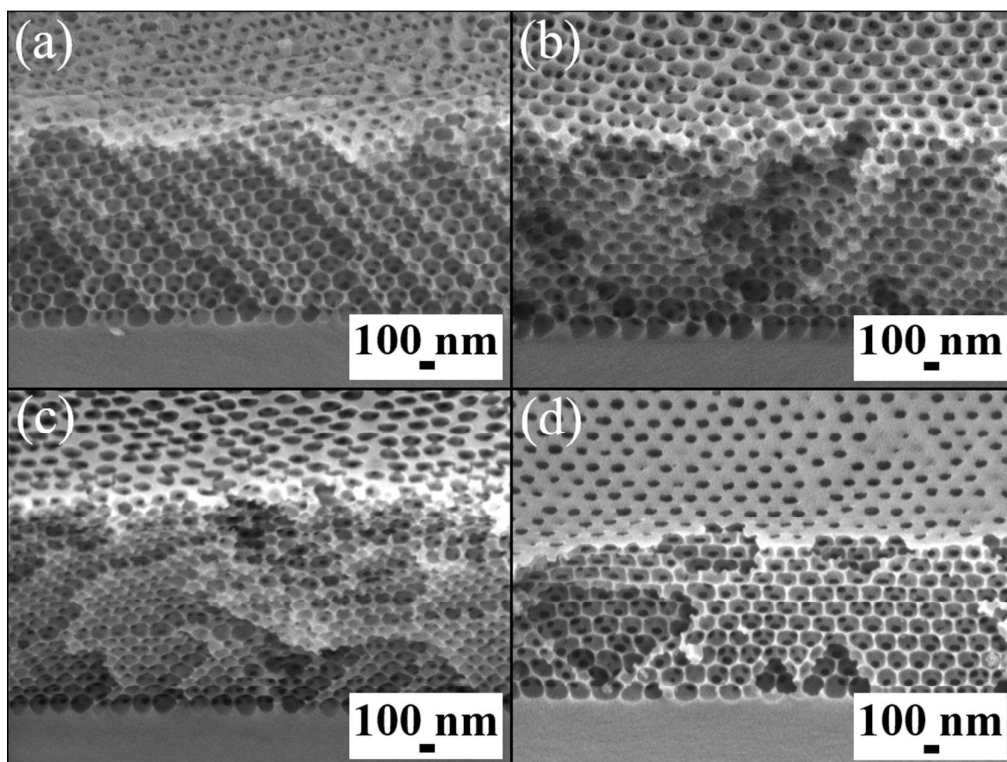


Figure S2. (a)-(d) Cross-sectional SEM images of the curved macroporous photonic crystals fabricated by plasma etching a silica colloidal crystal-polymer composite for 1 minute, followed by selective removal of the templating silica microspheres at (a) 0°, (c) 15°, (b) 30°, (c) 60°, and (d) 90°.

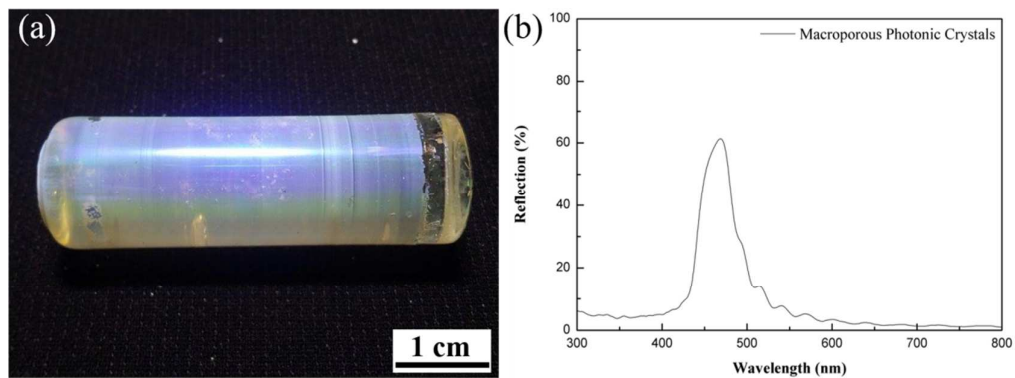


Figure S3. (a) Photograph of curved macroporous photonic crystals templated from 255 nm silica microspheres (1 cm in diameter). (b) Reflection spectrum obtained from the sample in (a).

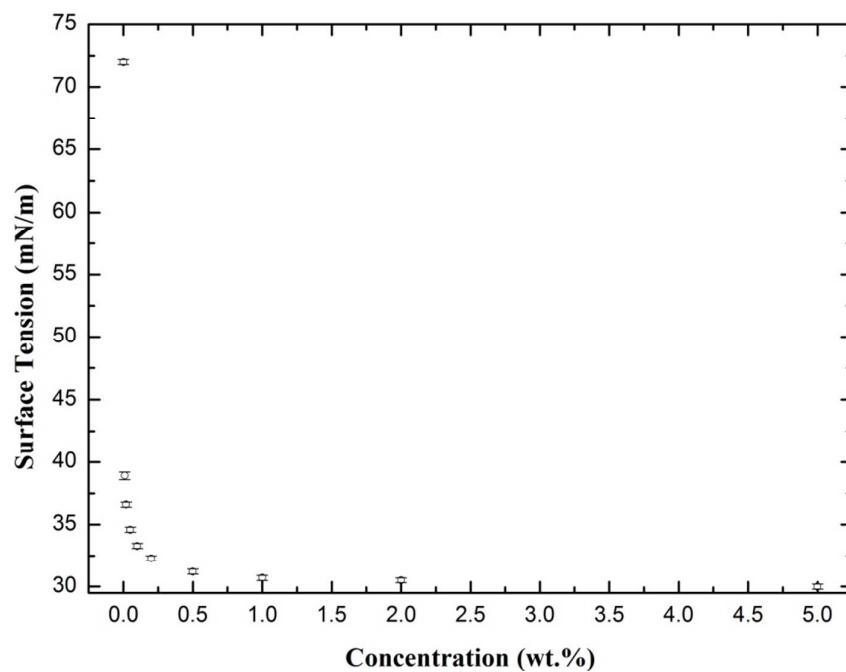


Figure S4. Dependence of the surface tension on the concentration of aqueous sodium dodecyl sulfate solutions.

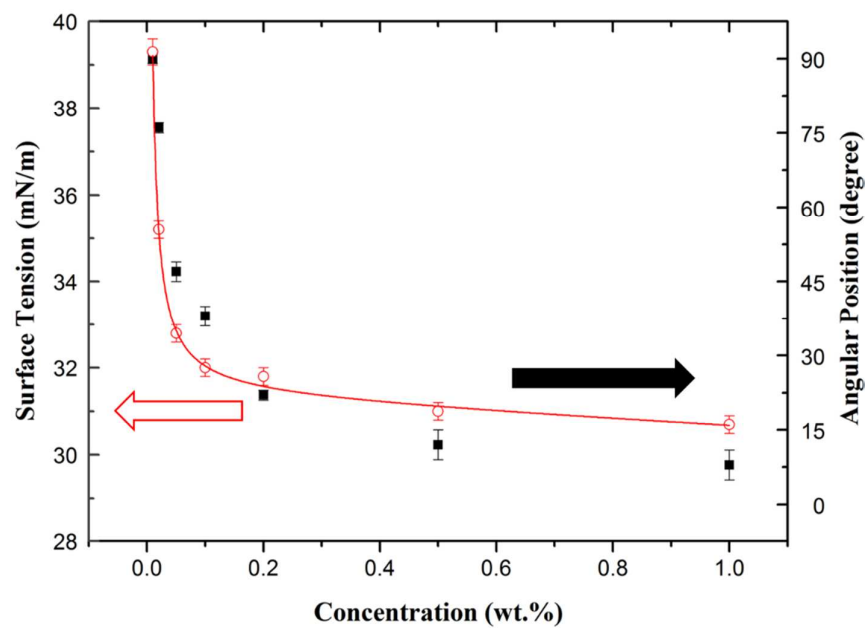


Figure S5. Dependence of the surface tension and the solution-infiltrated angular position on the concentration of aqueous cetyltrimethylammonium bromide solutions.

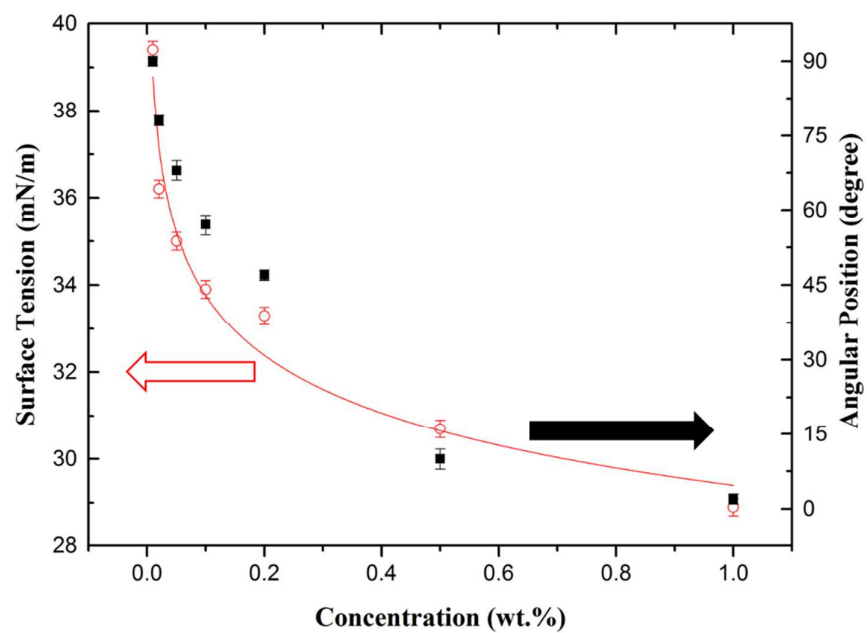


Figure S6. Dependence of the surface tension and the solution-infiltrated angular position on the concentration of aqueous sodium dodecyl sulfate/cetyltrimethylammonium bromide mixtures.