Self-assembly of Monodispersed Silica Nano-spheres with a Closed-Pore Mesostructure

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Electronic Supplementary Information

The synthesis of MCM-41

CTAB (0.2 g) was dissolved in water (96 ml) with stirring at room temperature. NaOH (0.7 ml, 2 M) was added into the solution. Then, the temperature of the solution was raised and kept at 80 °C. TEOS (1.25 g) was added into the surfactant solution under stirring and the mixture was allowed to react for 2 h. The resulting product was collected by filtration and dried at room temperature. The final sample was obtained by calcination at 700 °C for 5 h.

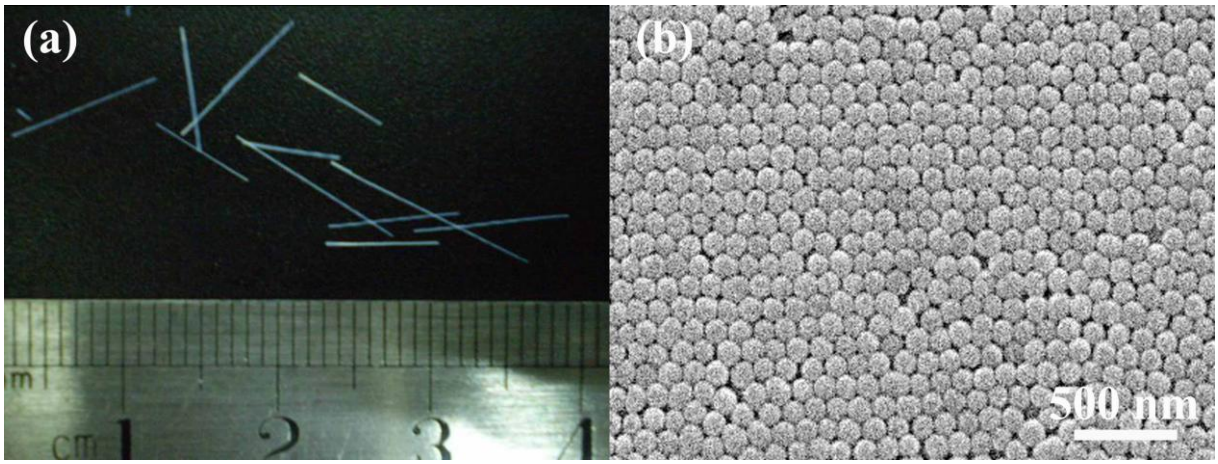

Figure S-1. (a) A digital camera image and (b) SEM image of the rod-like superstructures arrayed from CSSs.

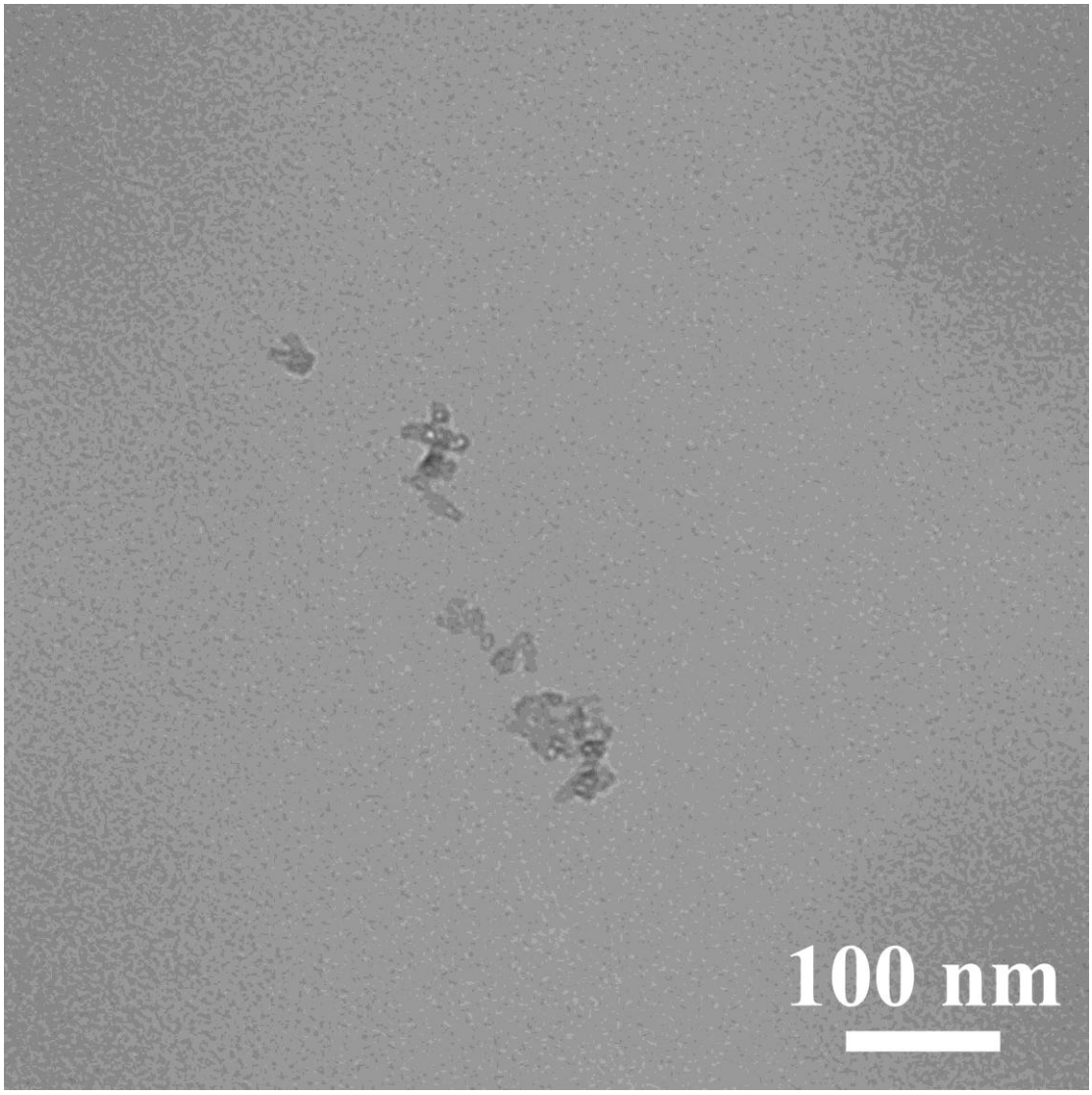

Figure S-2. The cryo-TEM image of the solution after the adding of TEOS and reacting for 15 min.