

Supplementary Materials

Robust Amino-Functionalized Mesoporous Silica Hollow Spheres Templated by CO₂ Bubbles

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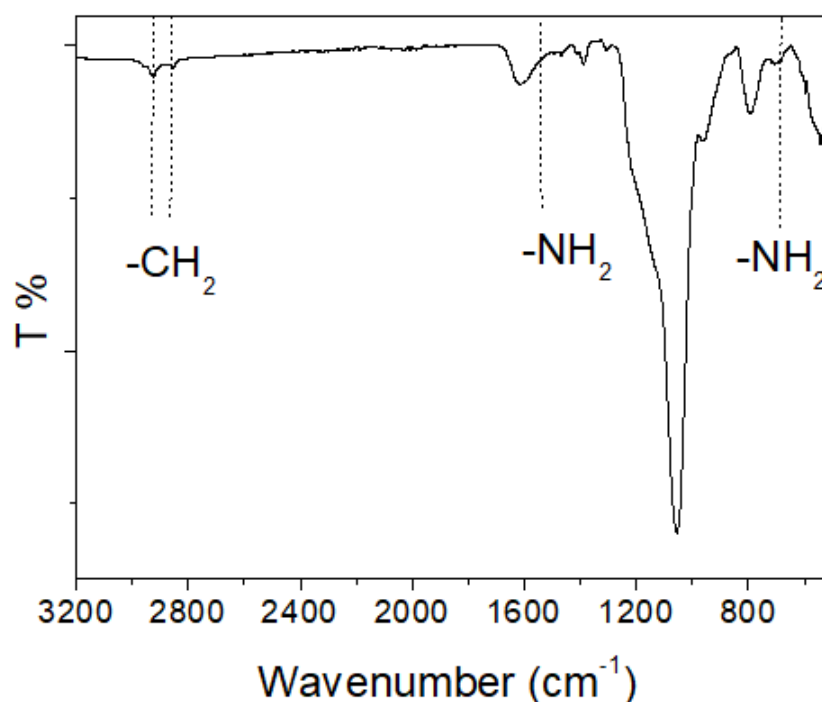


Figure S1. FTIR spectra of amino-functionalized mesoporous silica hollow spheres templated by CO₂ bubbles. The absorption bands at about 1550 cm⁻¹ and 685 cm⁻¹ were corresponding to the vibration of amine. The adsorption bands at 2930 cm⁻¹ and 2858 cm⁻¹ indicated the C–H stretching vibration.

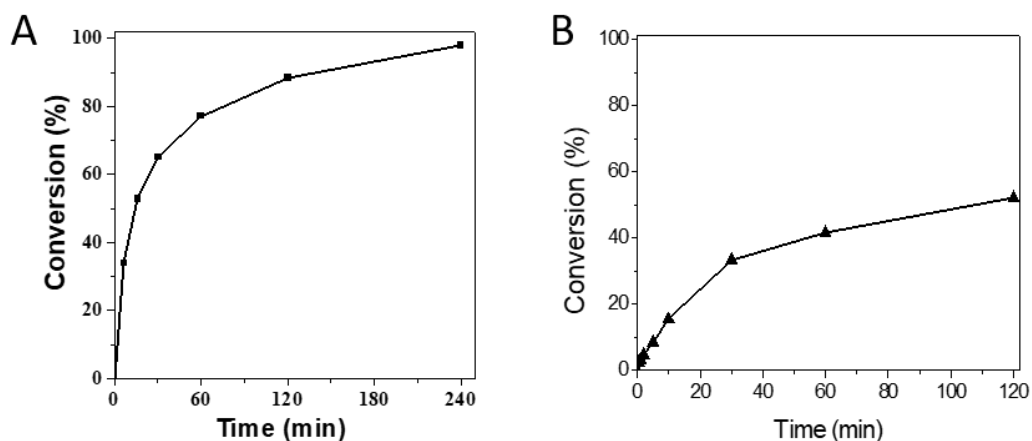


Figure S2. Knoevenagel reaction curve of (a) our sample of amino-functionalized mesoporous silica hollow spheres and (b) control sample of traditional amino-functionalized MCM-41 mesoporous silica.

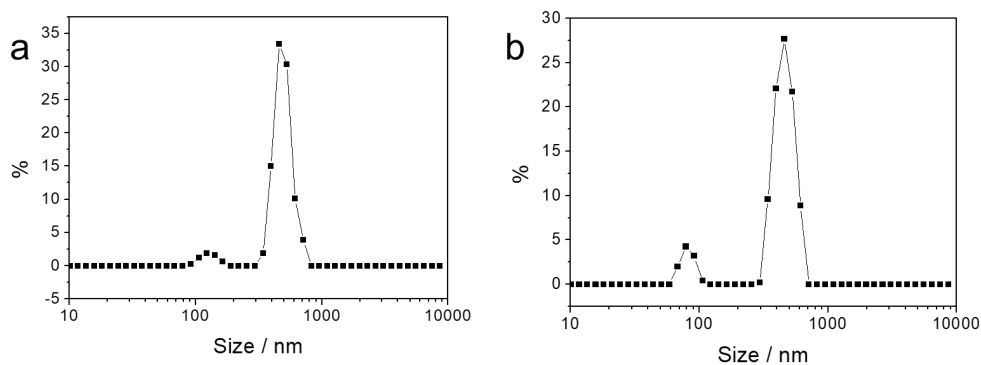


Figure S3. Particle size distribution measured by DLS (a) before and (b) after adding metoprolol to the spheres.

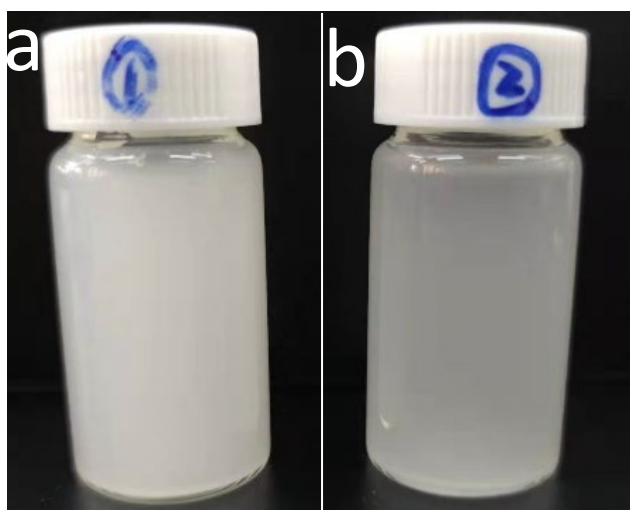


Figure S4. Photos of synthesized hollow spheres dispersed in (a) DI water and (b) ethanol.