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Supporting Information

Controllable Synthesis of Hollow Periodic Mesoporous Organosilica Spheres with Radial Mesochannels and Their Degradable Behavior

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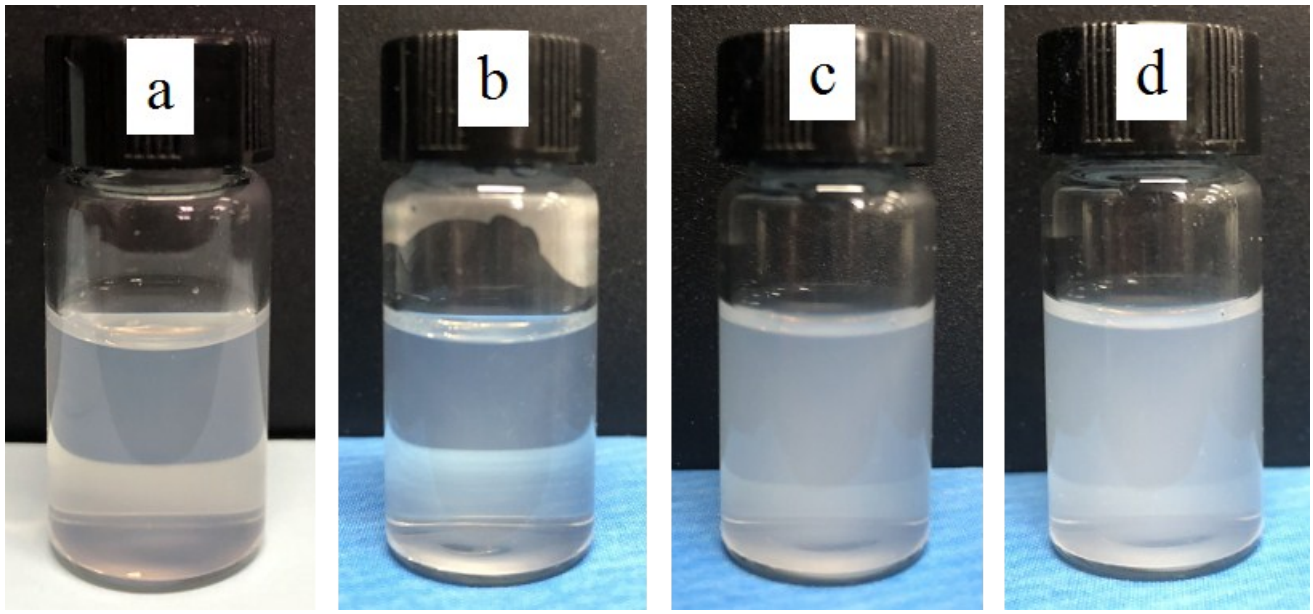

Figure S1. The photographs of the dispersions obtained by adding different amount of E-HMOSs in 8 mL H_2O: (a) 10, (b) 25, (c) 50 and (d) 100 mg.

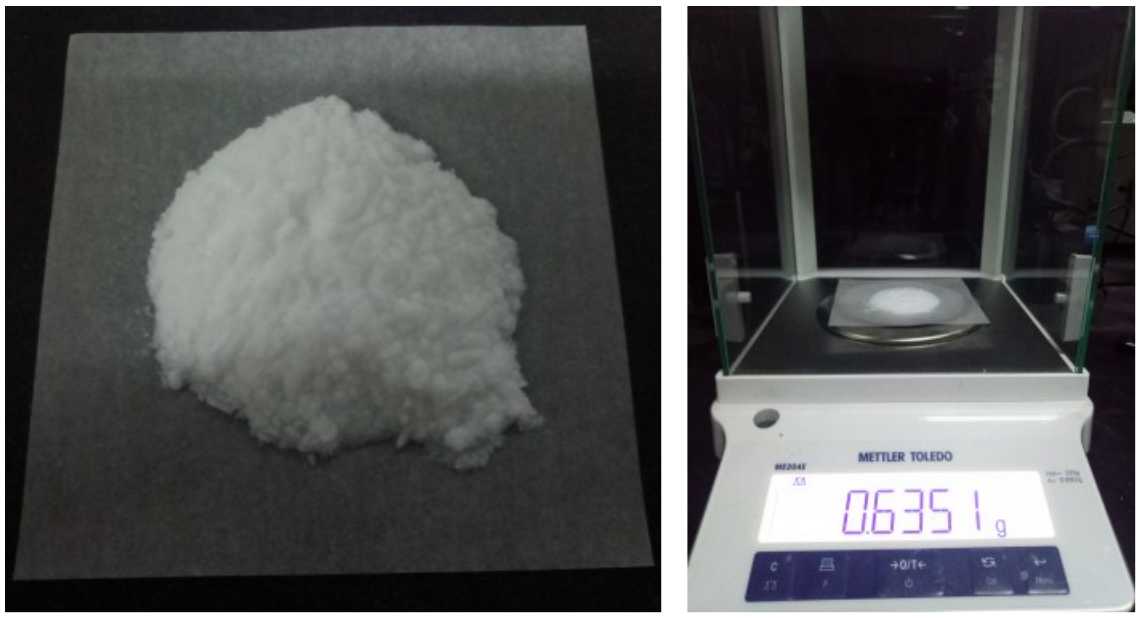

Figure S2. The photograph of the E-HMOSs in one-pot. Typically, the solution B was composed of 0.50 g CTAB, 8 mL ethanol, 12 mL water, and 2 mL BTEE while the reaction solution A was 200 mL deionized water, and 4 mL ammonia. The content of the added solution B to reaction solution A was 20 mL.

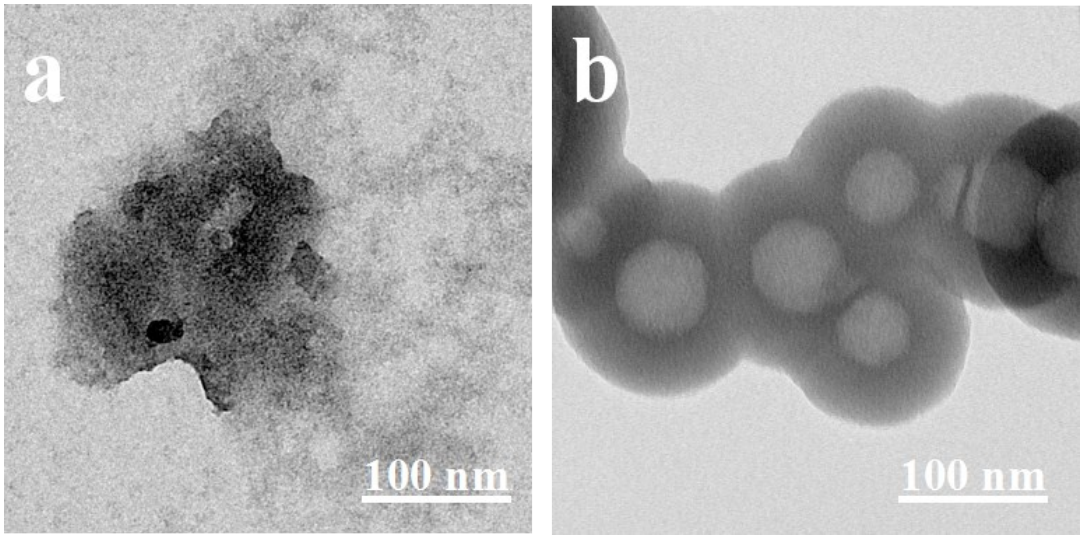

Figure S3. TEM images of the E-HMOSs synthesized with different amount of CTAB in precursor solution A: (a) 0, (b) 0.05 g.

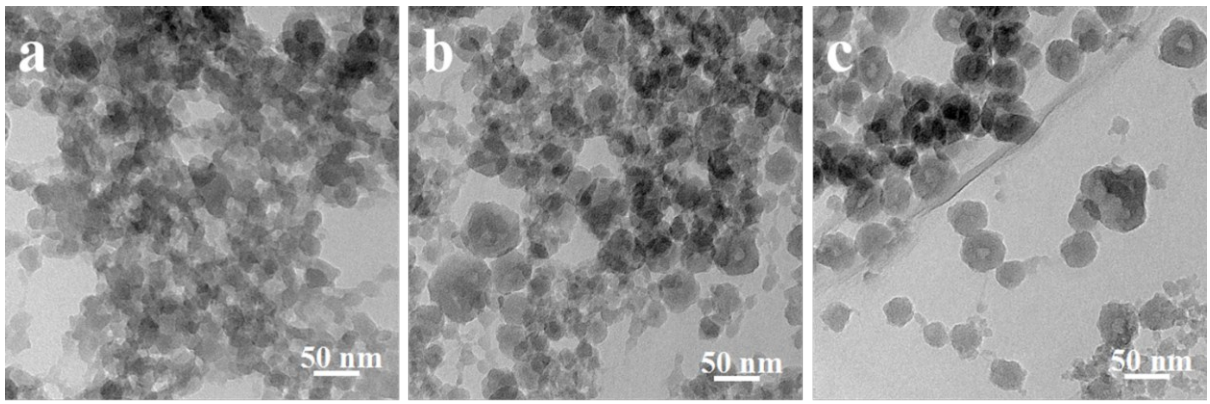

Figure S4. TEM images of ET-HMOSs synthesized from 0.6 mL BTEE/ 0.4 mL BTES with various pre-hydrolysis time of precursor solution B: (a) 10, (b) 20, (c) 25 min.

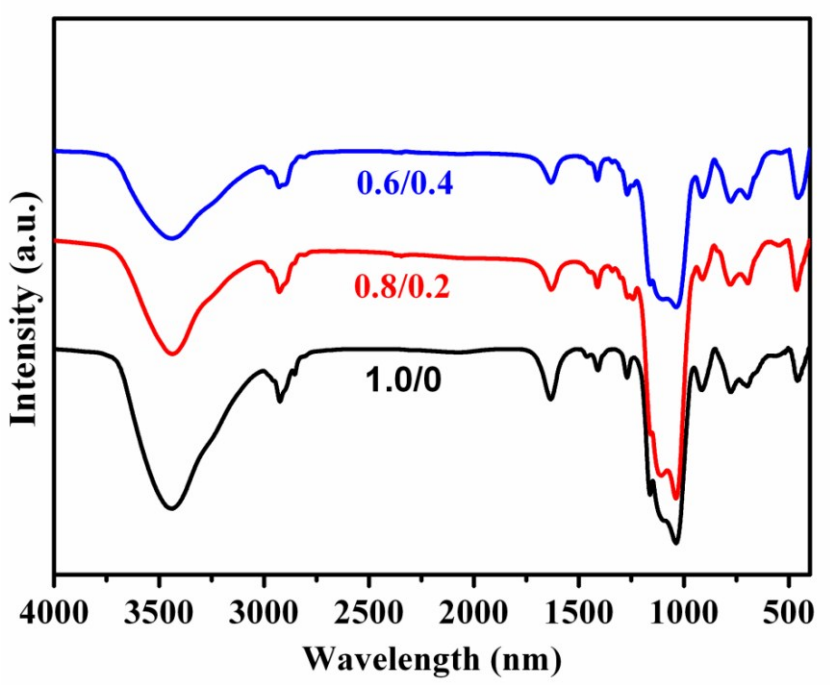

Figure S5. FT-IR spectra of the HMOSs: 1.0 mL BTEE/ 0 mL BTES, pre-hydrolysis 20 min; 0.8 mL BTEE/ 0.2 mL BTES, pre-hydrolysis 40 min; 0.6 mL BTEE/ 0.4 mL BTES, pre-hydrolysis 50 min.

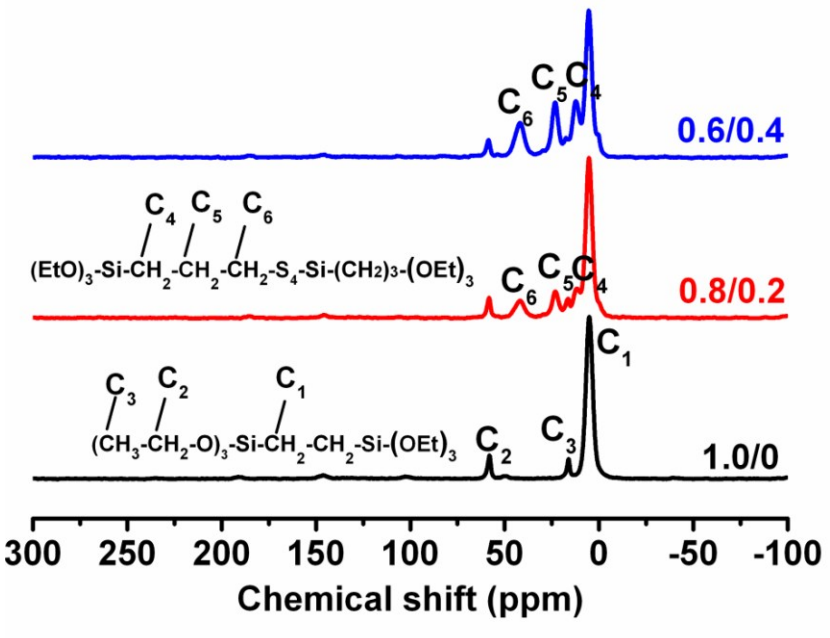

Figure S6. Solid-state ^{13}C CPMAS NMR spectra of the HMOSs synthesized by: 1.0 mL BTEE/ 0 mL BTES, pre-hydrolysis 20 min; 0.8 mL BTEE/ 0.2 mL BTES, pre-hydrolysis 40 min; 0.6 mL BTEE/ 0.4 mL BTES, pre-hydrolysis 50 min.

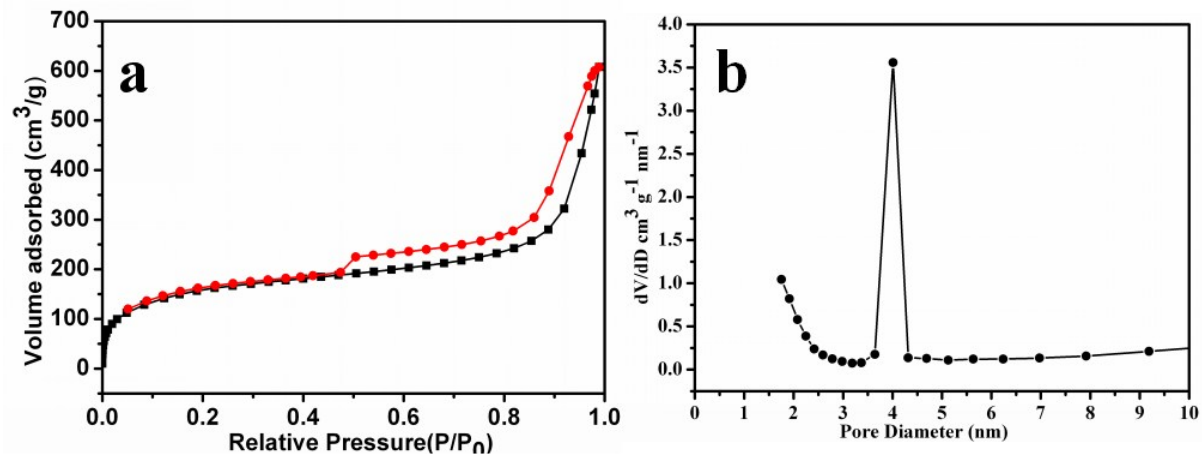

Figure S7. (1) Nitrogen sorption-desorption isotherm and (b) the corresponding pore size distribution of the E-HMOSs synthesized with 0.6 mL BTEE/ 0.4 mL BTES with pre-hydrolysis time of 50 min.

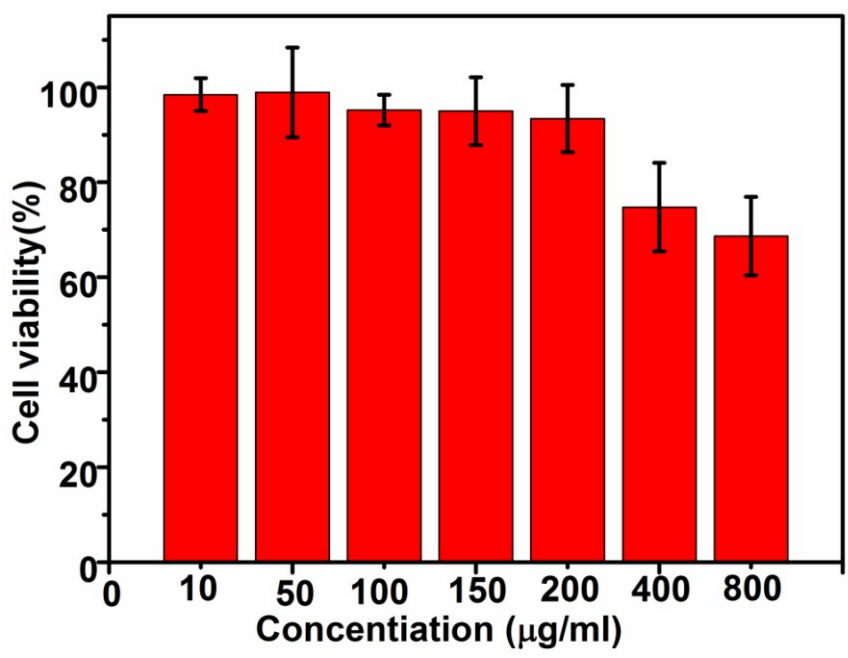

Figure S8. *In vitro* viability of MCF-7 cell incubated 24 h with the ET-HMOSs synthesized with 0.6 mL BTEE/ 0.4 mL BTES with pre-hydrolysis 50 min at different concentrations.

Table S1. Atomic compositions by EDX of the HMOSs synthesized by: 1.0 mL BTEE/ 0 mL BTES, pre-hydrolysis 20 min; 0.8 mL BTEE/ 0.2 mL BTES, pre-hydrolysis 40 min; 0.6 mL BTEE/ 0.4 mL BTES, pre-hydrolysis 50 min.

Samples	Atomic percent (mol %)			
	C	O	Si	S
1.0 mL BTEE/ 0 mL BTES, 20 min	59.83	20.06	11.11	0
0.8 mL BTEE/ 0.2 mL BTES, 40 min	46.76	33.0	17.47	2.77
0.6 mL BTEE/ 0.4 mL BTES, 50 min	35.88	33.06	24.04	7.02