

Supporting Information

Fabrication of core-shell structured mesoporous silica nanospheres with dually oriented- mesochannels through pore engineering

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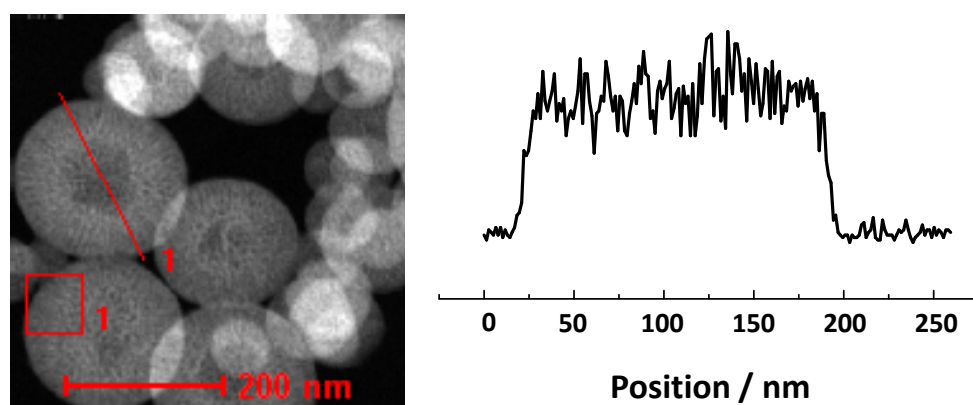


Figure S1 (A) High-resolution-TEM image of MSN-7.5-40 and (B) EDX analysis along the line shown in (A) of MSN-7.5-40.

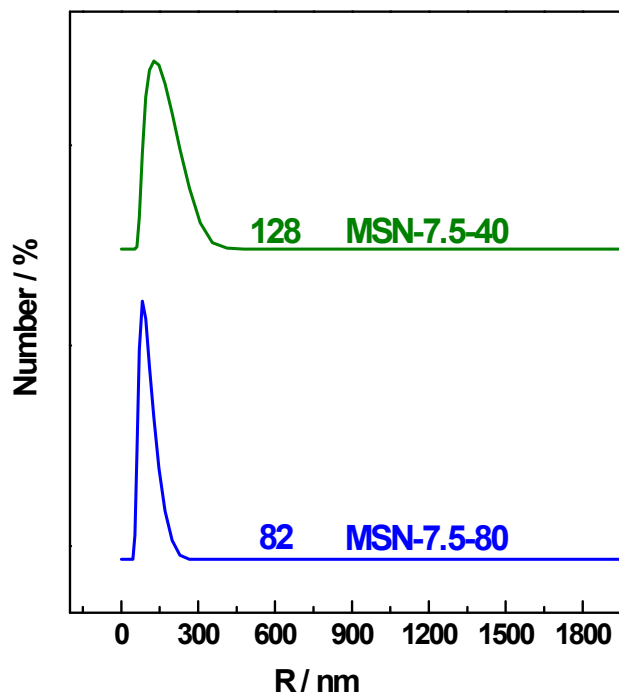


Figure S2 Particle size distribution (Radius) of MSN-7.5-40 and MSN-7.5-80, determined by dynamic light scattering technique at 25 °C, using deionized water as the dispersion medium.

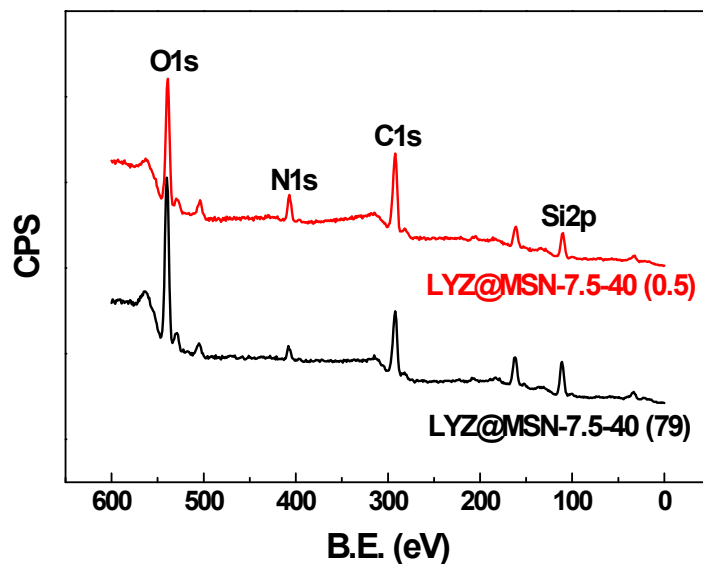


Figure S3 X-ray photoelectron spectroscopy of MSN-7.5-40 after adsorption of LYZ for 0.5 h and 79 h respectively.

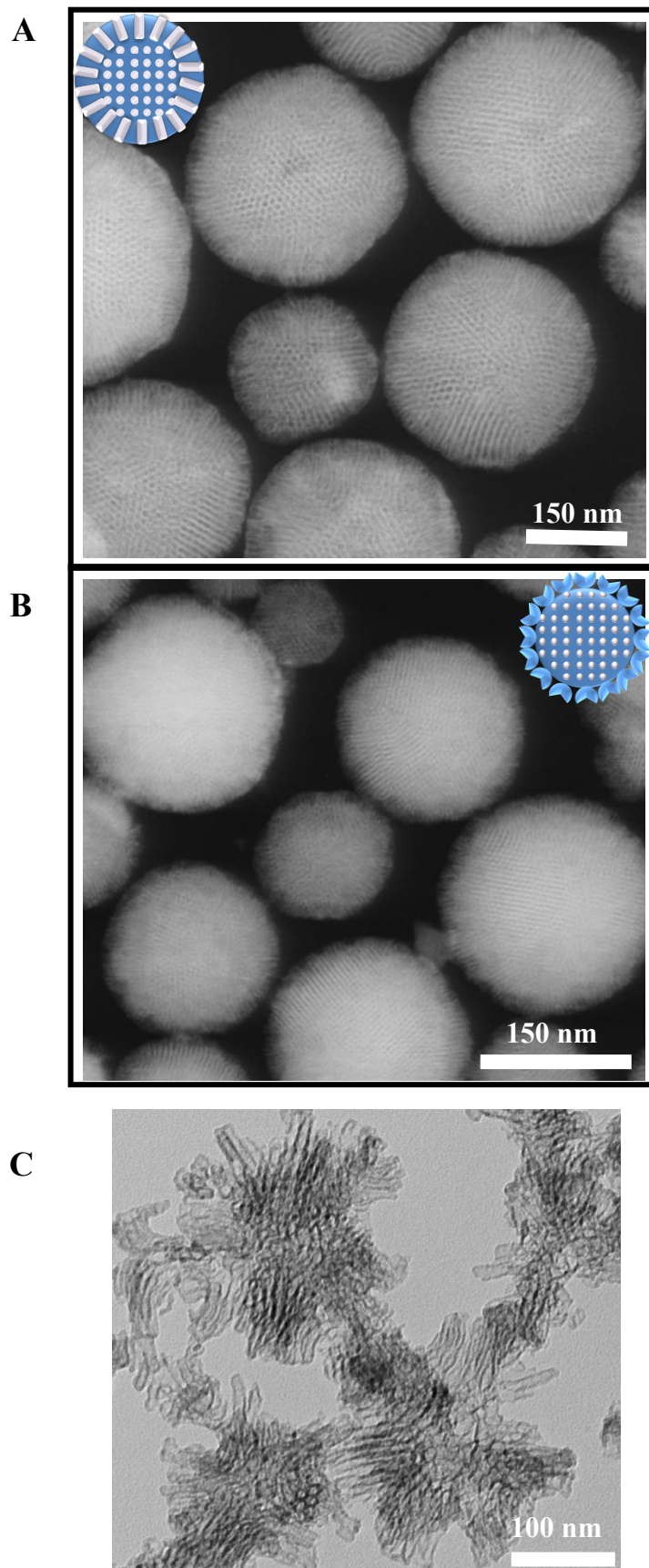


Figure S4 STEM images of (A) MSN-7.5-70 and (B) MSN-7.5-80. (C) is the TEM image of a broken one of sample MSN-7.5-70 obtained by aging at 100°C

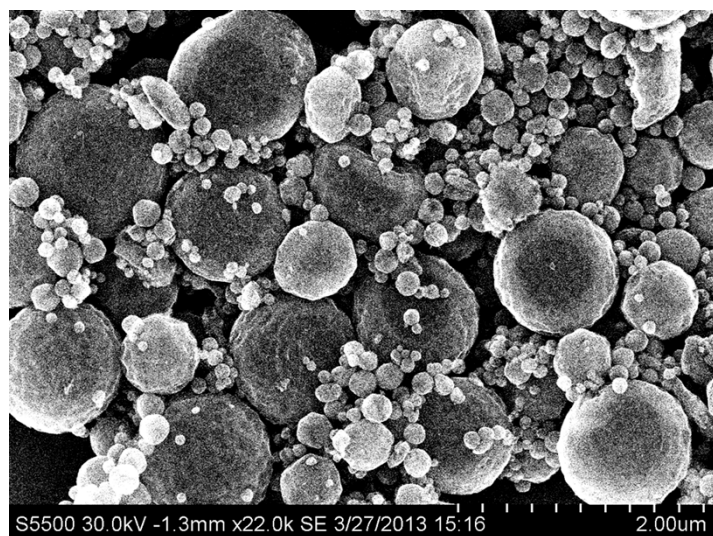


Figure S5 SEM image of MSN-15-70.

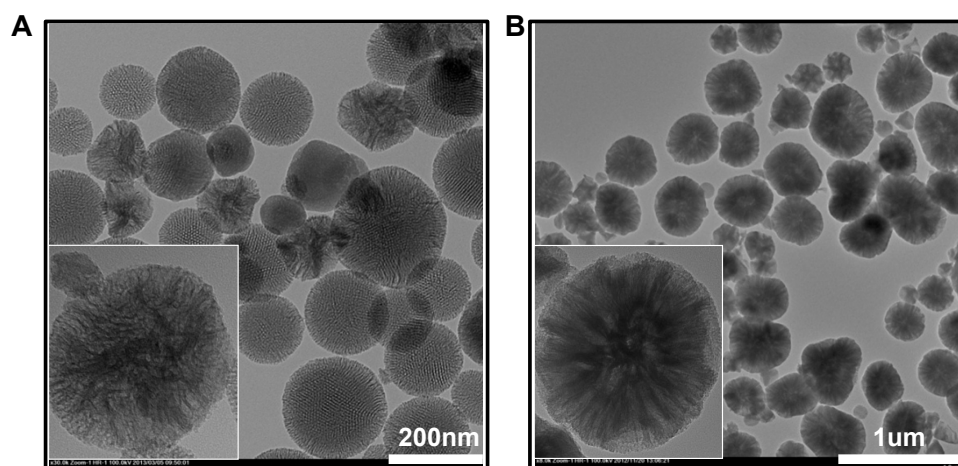


Figure S6 TEM images of MSN-7.5-70 with (A) 1 ml and (B) 5 ml extra ethanol added at the beginning of the synthesis.

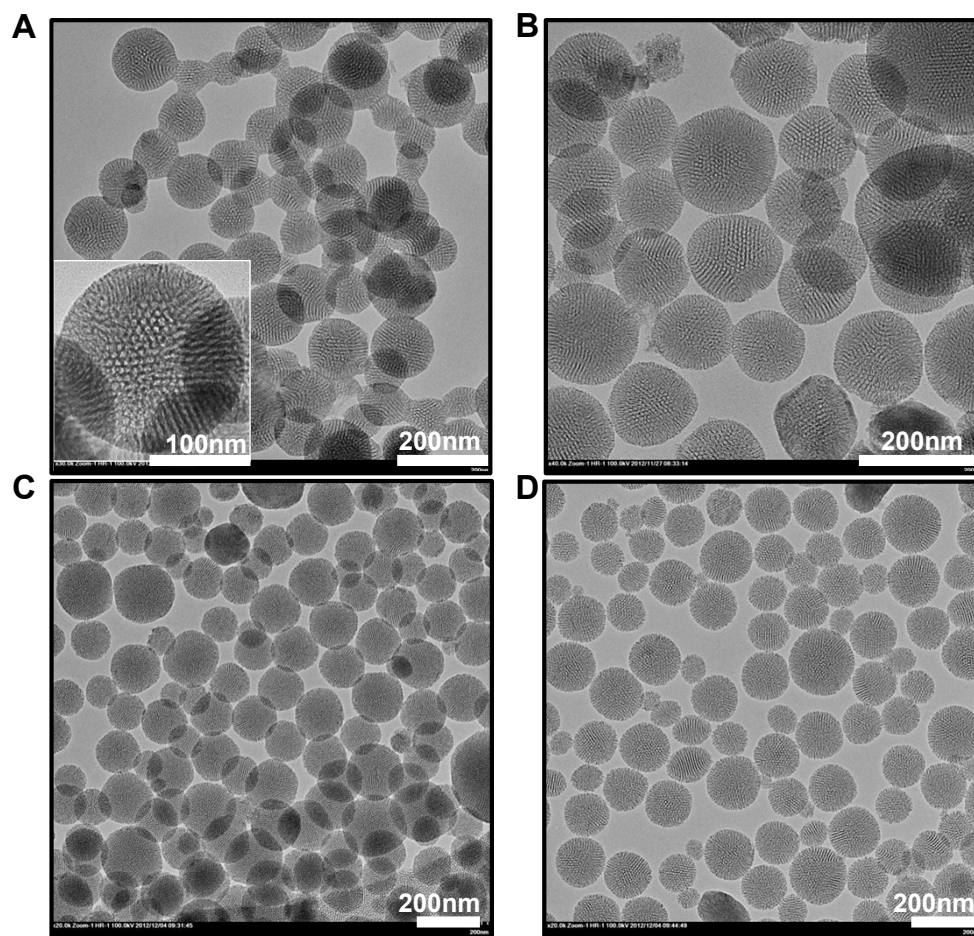


Figure S7 TEM images of MSN-7.5-70 prepared with different amount of ethyl acetate: (A) 0 ml; (B) 0.4 ml; (C) 0.8 ml and (D) 1.2 ml.