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Supplementary Information

Mesoporous Organosilica Nanoparticles with Large Radial Pores via an Assembly-Reconstruction Process in Bi-phase

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Figure S1. (a) Hydrodynamic diameter and (b) ¹³C MAS NMR spectrum of the ethane-bridged large pore MONs.



Figure S2. (a-d) TEM and corresponding elemental mapping images of b) silicon, c) oxygen, d) carbon of the large-pore PMO nanoparticle.



Figure S3. Hydrodynamic diameters of the large pore MONs prepared with different CTAB concentrations.



Figure S4. TEM images of the traditional (a) MSNs and (b) amorphous silica colloids. The diameters of the MSNs and amorphous silica colloids are 247 nm and 242 nm, respectively.



Figure S5. N₂ absorption-desorption isotherms, and pore size distribution curve of MSNs (a, c) and amorphous silica colloids (b, d).



Figure S6. (a) The zeta potentials of the ethane-bridged MONs, COOH modified MONs (MONs-COOH), and PEI modified MONs (MONs-PEI). (b) Gel retardation assay of siRNA loaded by the large pore MONs. Bands from left to right represent different weight ratios of MONs to siRNA (0, 2, 4, 8, 16, 32).