

Supporting Information

Synthesis of Porous Silica with Hierarchical Structure Directed by a Silica Precursor Carrying a Pore-Generating Cage

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Table S1. Physicochemical properties of porous silicas (T7g1) prepared at different aging time obtained from the N₂ adsorption-desorption isotherms.

Aging time (day)	Surface area ^a (m ² g ⁻¹)	Pore volume ^b (cm ³ g ⁻¹)	Pore diameter ^c (nm)	Unit cell parameter ^d (nm)	Wall thickness ^e (nm)
1	611	0.66	8.0	13.2	5.2
2	534	0.63	7.9	13.3	5.4
3	467	0.71	8.3	13.6	5.3

^a Surface area calculated with the BET method from N₂ adsorption. ^b Total pore volume calculated at p/p₀ = 0.974. ^c Pore diameter calculated by the BJH method. ^d Unit cell parameter obtained from SAXS results. ^e wall thickness = d - c.

Table S1 (Cho *et al.*)

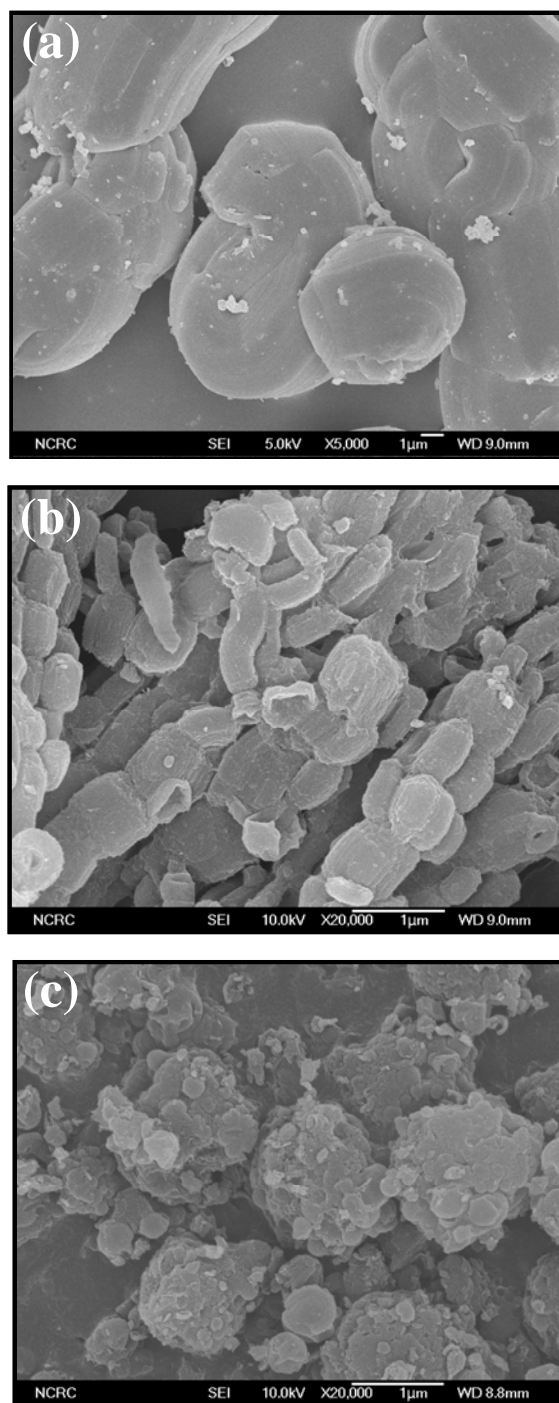


Figure S1: Scanning Electron Microscopy images of calcined porous silicas prepared with: (a) TEOS only (T10); (b) adam-graft SQ introduced first followed by the addition of TEOS; (c) a mixture of TEOS and adam-grafted SQ added simultaneously.

Figure S1 (Cho *et al.*)

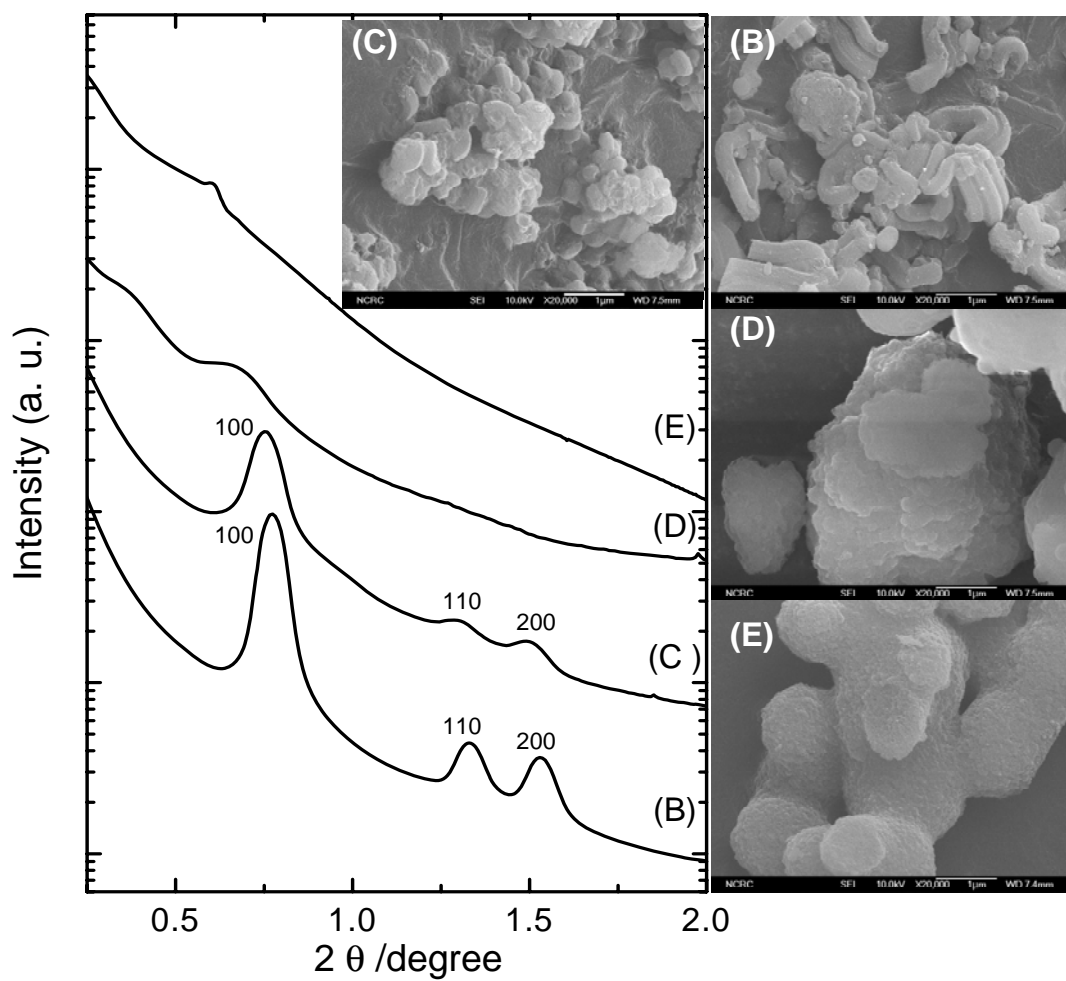


Figure S2: Small angle X-ray scattering patterns and FE-SEM images of porous silicas synthesized with varying the molar ratios between TEOS and adam-graft SQ in the presence of a triblock Pluronic P123 ($\text{EO}_{20}\text{PO}_{70}\text{EO}_{20}$; $M_w = 5,800$) template: (B) T7g1; (C) T5g1; (D) T4g1; (E) T3g1. (All scale bars are 1 μm .)

Figure S2 (Cho *et al.*)