

Electronic Supplementary Information

A Facile and Versatile Partitioned Cooperative Self-assembly Process to Prepare SBA-15s with Larger Mesopores, High Microporosity and Tunable Particle Sizes

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Fig.S1.

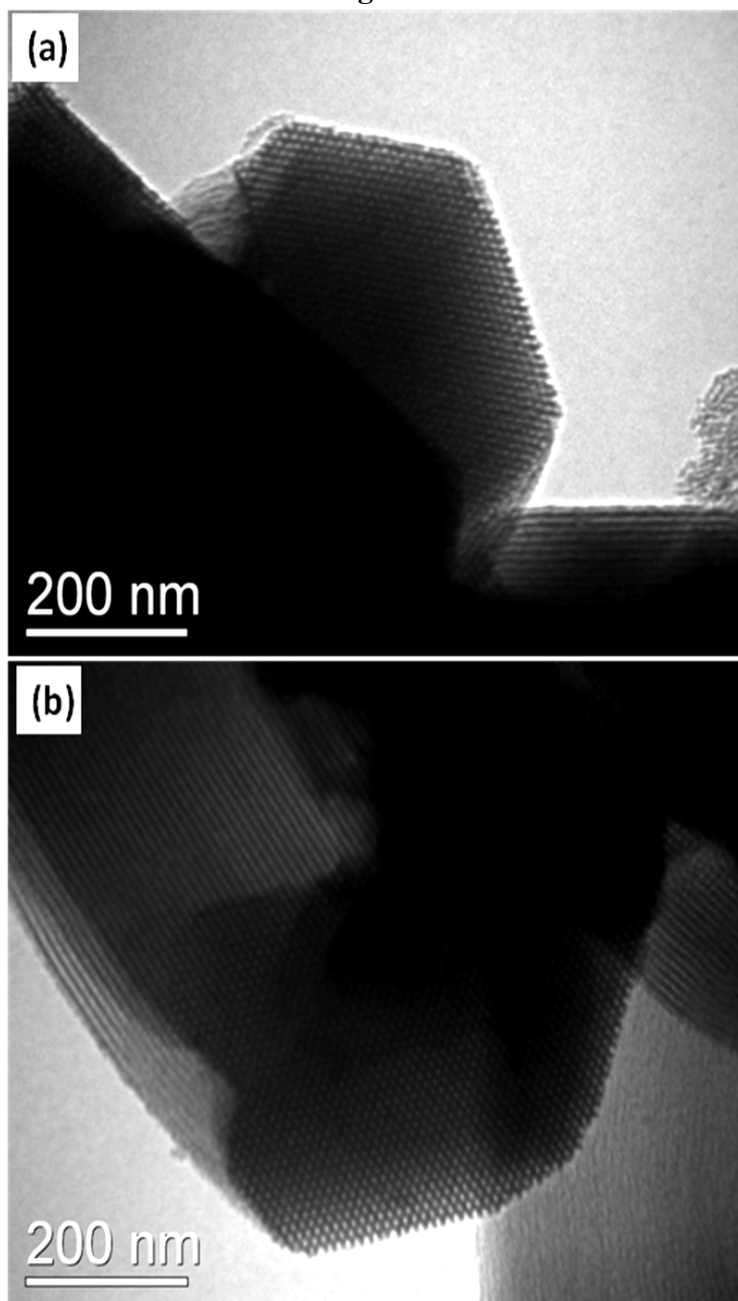


Fig.S1. TEMs of (a) SS2-1h-8.5@95 and (b) SS8-1h-2.5@95.

Fig.S2

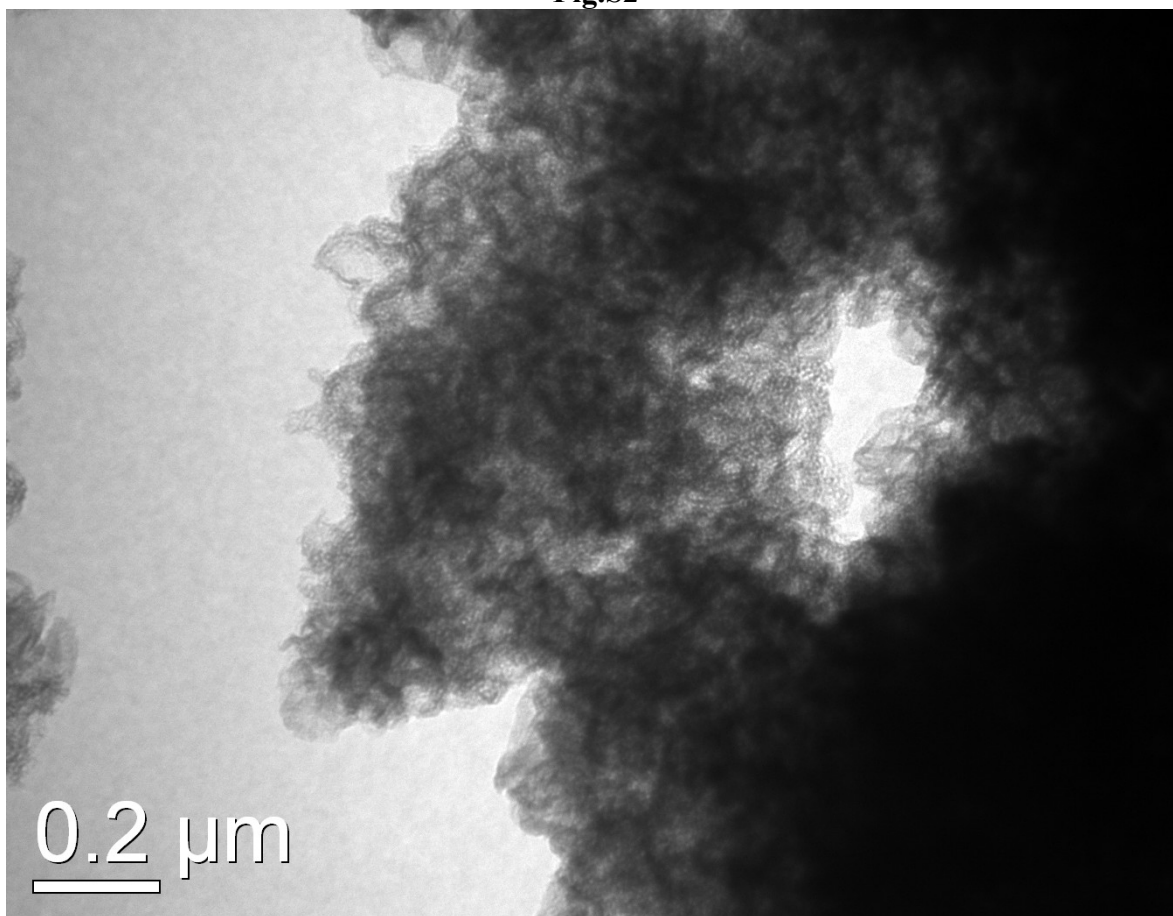


Fig.S2. TEM of SS5-7h-5.5@95

Fig.S3

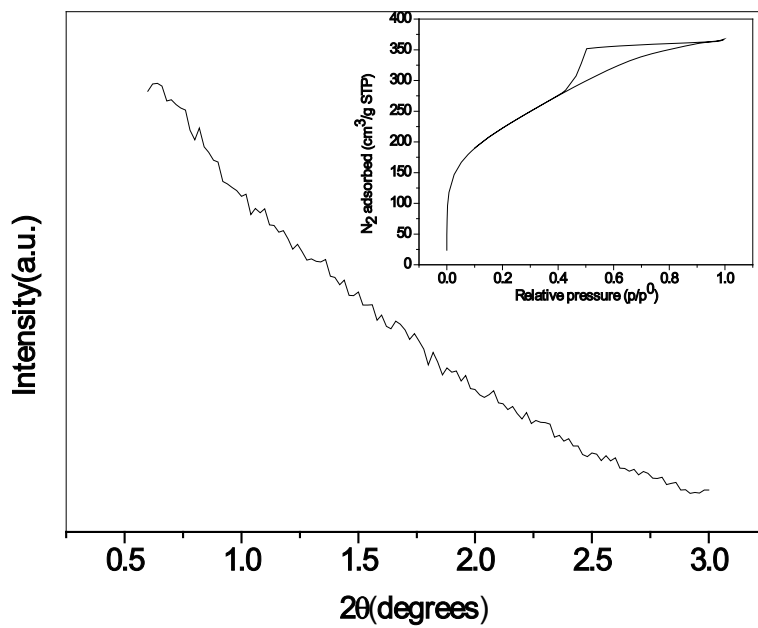


Fig.S3. XRD pattern and Nitrogen sorption results (inset) of SS5.0@95.

Fig.S4

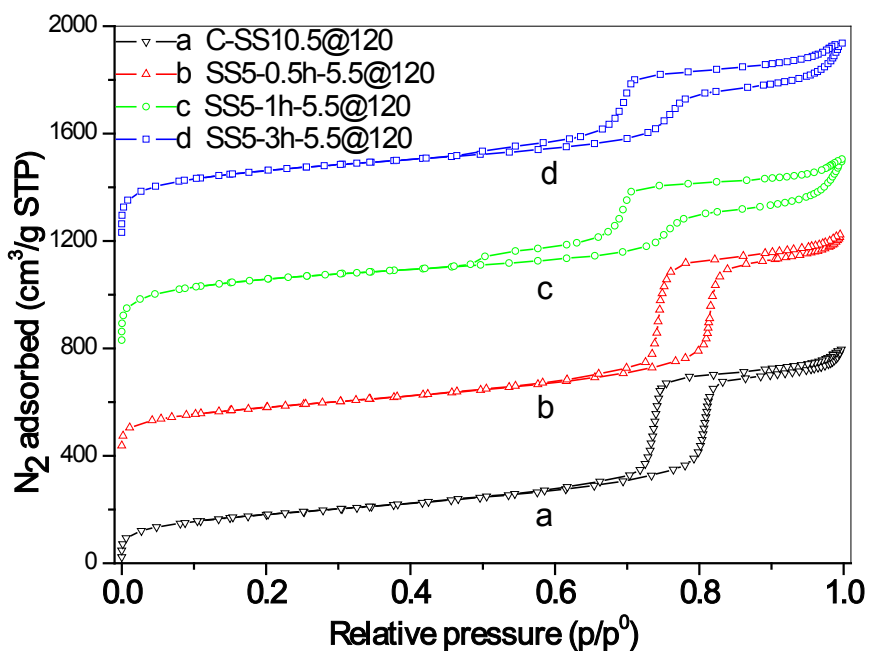


Fig.S4-a. Adsorption and desorption isotherms of (a) C-SS10.5@120, (b)SS5-0.5h-5.5@120, (c)SS5-1h-5.5@120 and (d) SS5-3h-5.5@120. The isotherms of (b), (c) and (d) were offset vertically by 400, 800, 120cm³(STP)/g to avoid overlap.

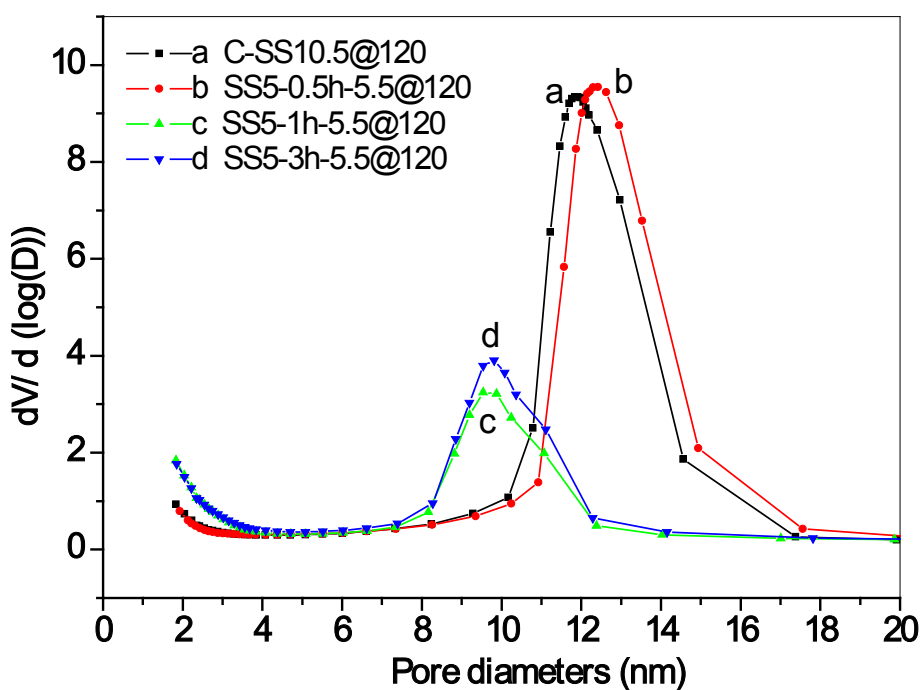


Fig.S4-b. KJS PSDs of (a)C-SS10.5@120, (b)SS5-0.5h-5.5@120, (c)SS5-1h-5.5@120 and (d) SS5-3h-5.5@120.

Fig.S5

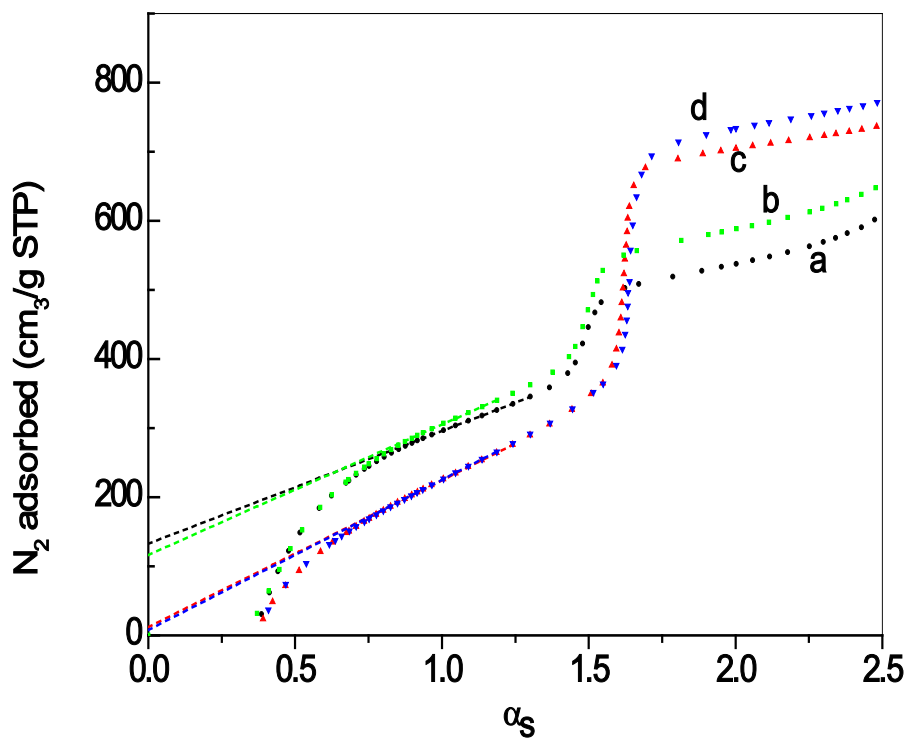


Fig.S5. α_s -plots analysis and microporosities (column chart, inset) of (a) SS5-1h-5.5@120, (b) SS5-3h-5.5@120, (c) C-SS10.5@120 and (d) SS5-0.5h-5.5@120.

Fig.S6

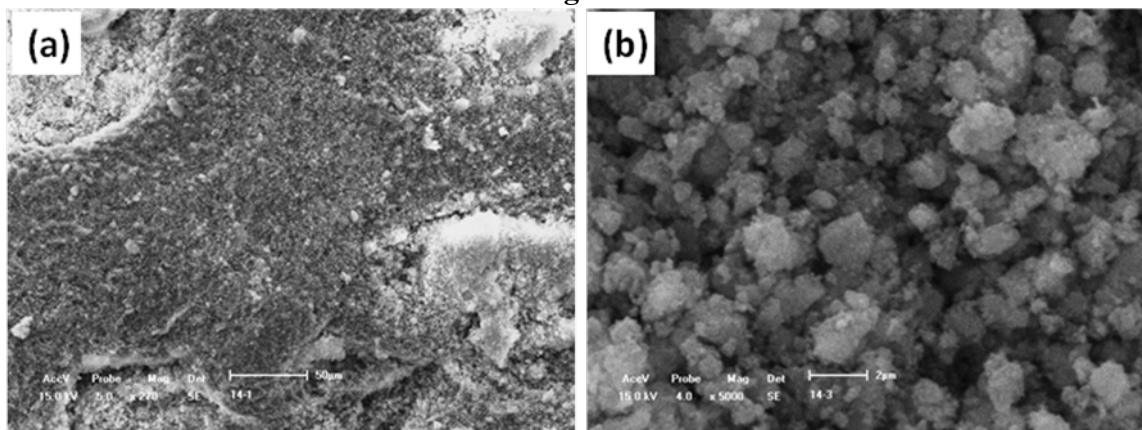


Fig.S6. SEMs of SS5-7h-5.5@95 at different magnifications.

Fig.S7

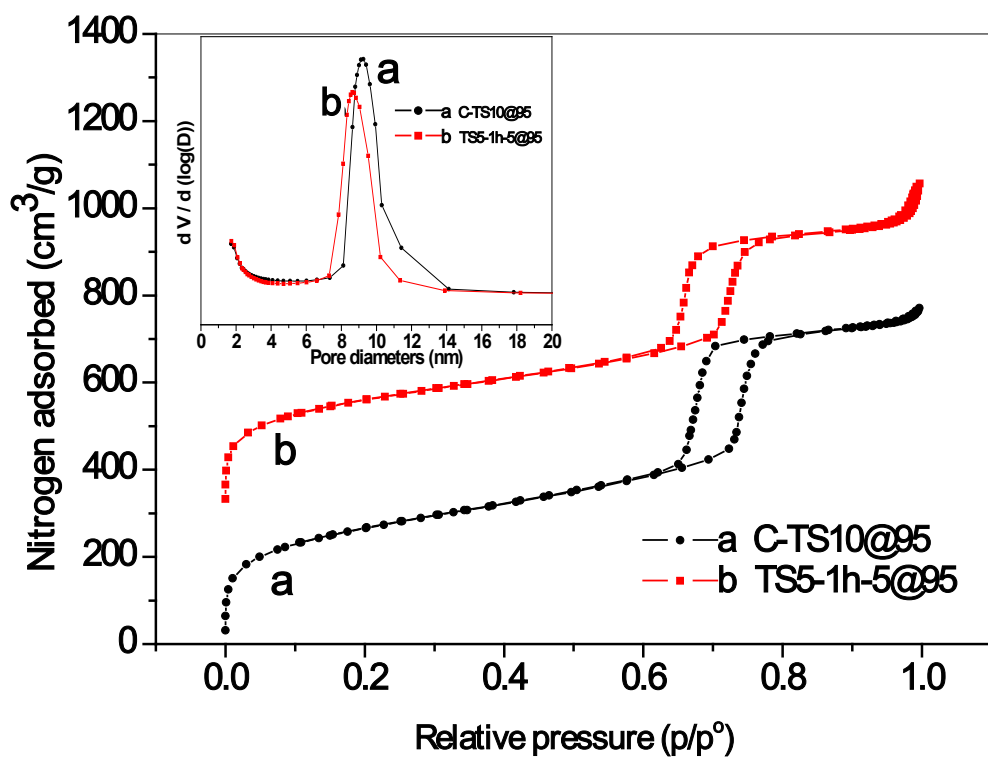


Fig.S7. N₂ sorption measurement and PSDs (inset) of (a) C-TS10@95 and (b) TS5-1h-5@95.

Fig.S8

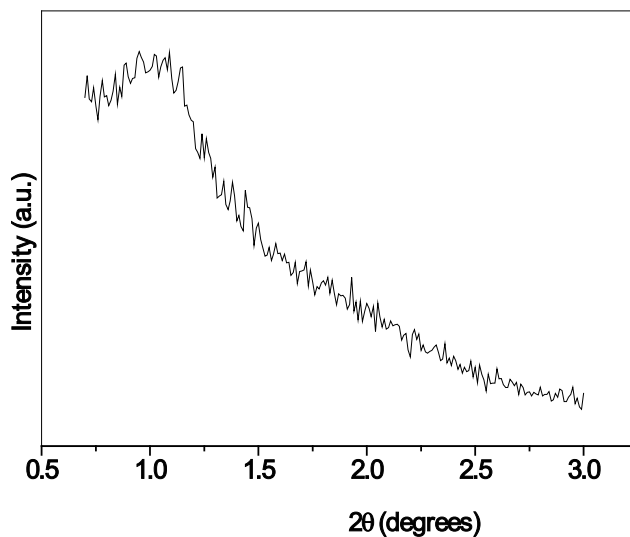


Fig.S8. XRD pattern of TS5-3h-5@95.