Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics

Supporting information:

Silicon core-hollow carbon shell nanocomposites with tunable voids for high capacity anodes of lithium-ion batteries

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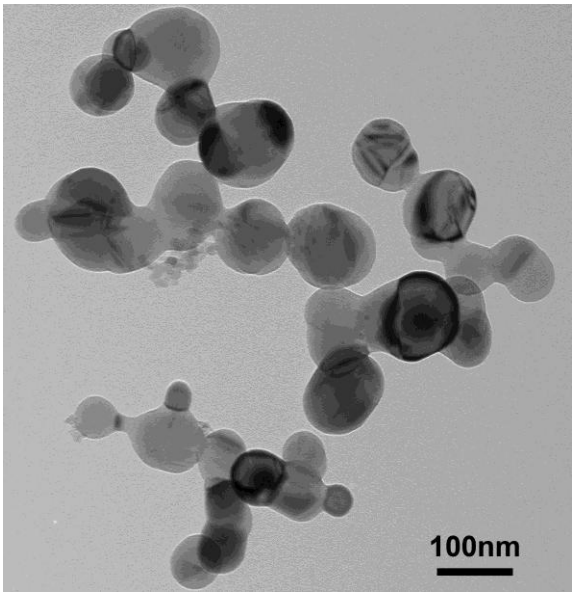

Fig. S1 TEM image of post-washed Si NPs.

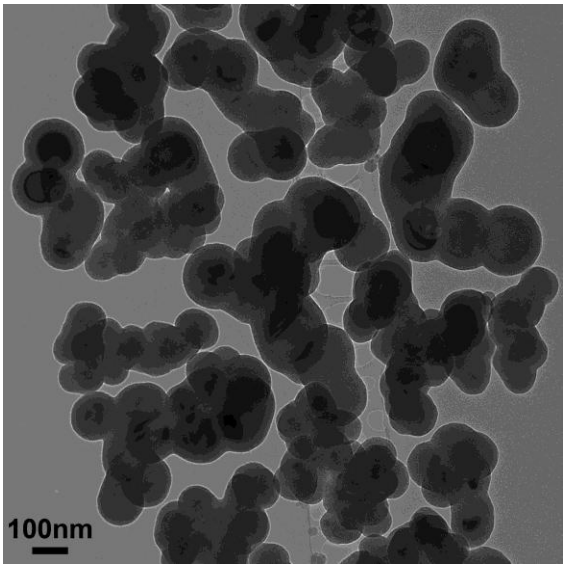

Fig. S2 TEM image of Si@SiO_2 when TEOS/Si mass ration is 10:1.

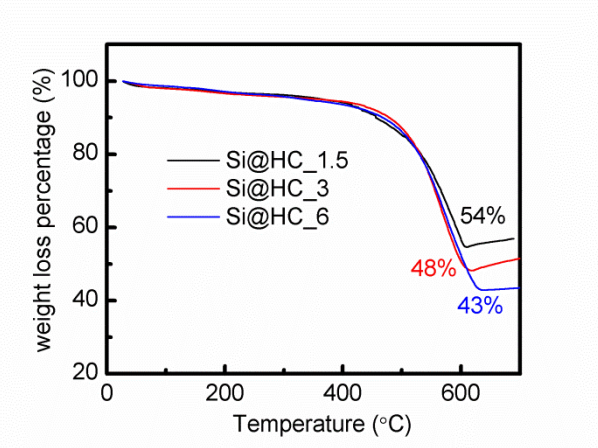

Fig. S3 TGA curves of Si@HC_1.5, Si@HC_3 and Si@HC_6 under air flow. Weigh loss corresponds to the burning of carbon in the air.

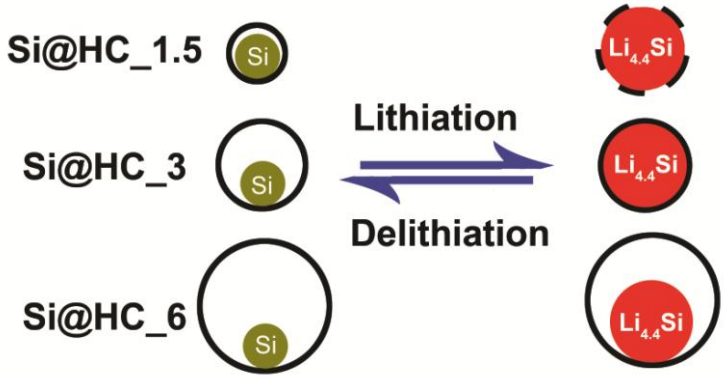

Fig. S4 Scheme of different Si@HC nanocomposites before and after cycling.

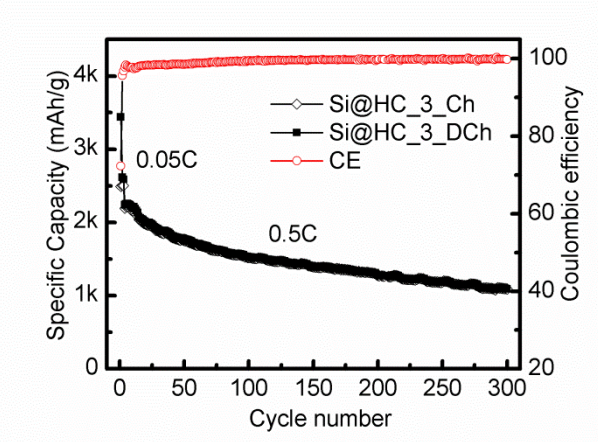

Fig. S5 Long time cycling performance of Si@HC_3 at 0.05 C for first 3 cycles then at 0.5 C for up to 300 cycles.