

Support Information

Dichlorosilane-Derived Nano-Silicon inside Hollow Carbon Spheres as High-Performance Anode in Li- Ion Batteries

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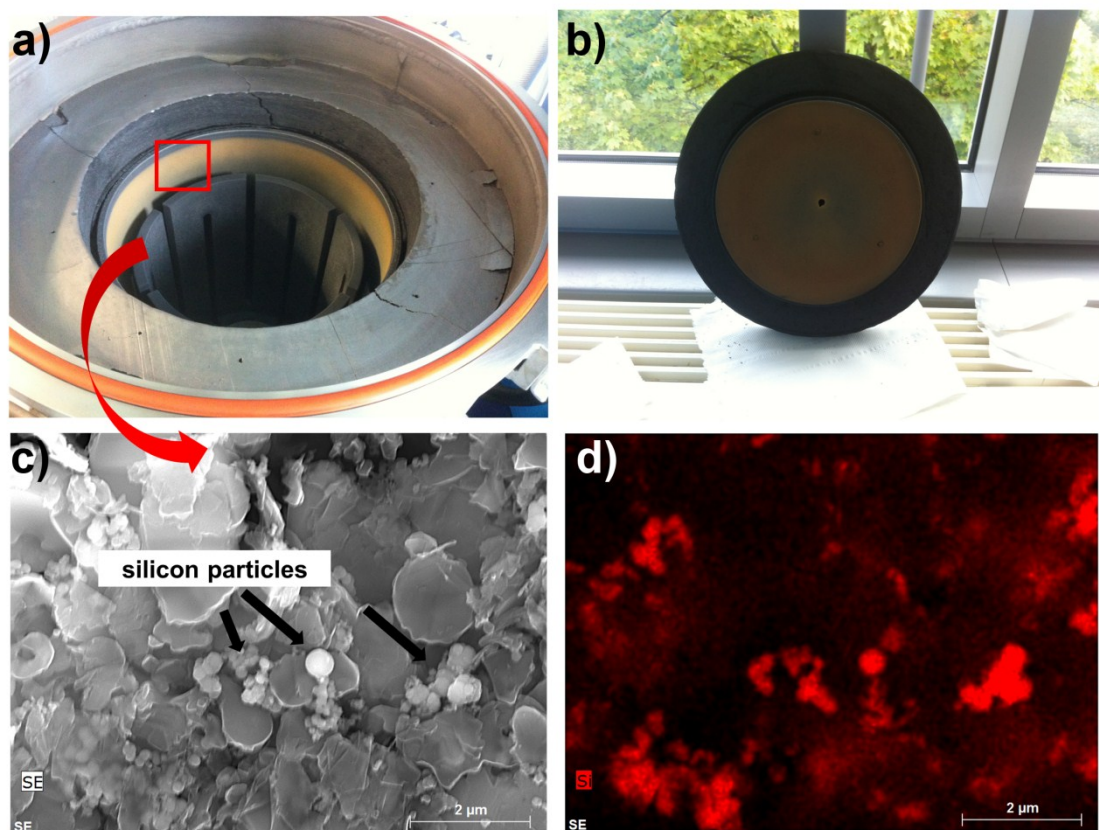


Figure S1. Photographs of (a) the reactor wall and (b) the cap of the oven after annealing of the HDCS (1 g) at 1150 °C. c) SE image of the brownish deposit showing silicon nanoparticles and the corresponding EDX map (d) of silicon.

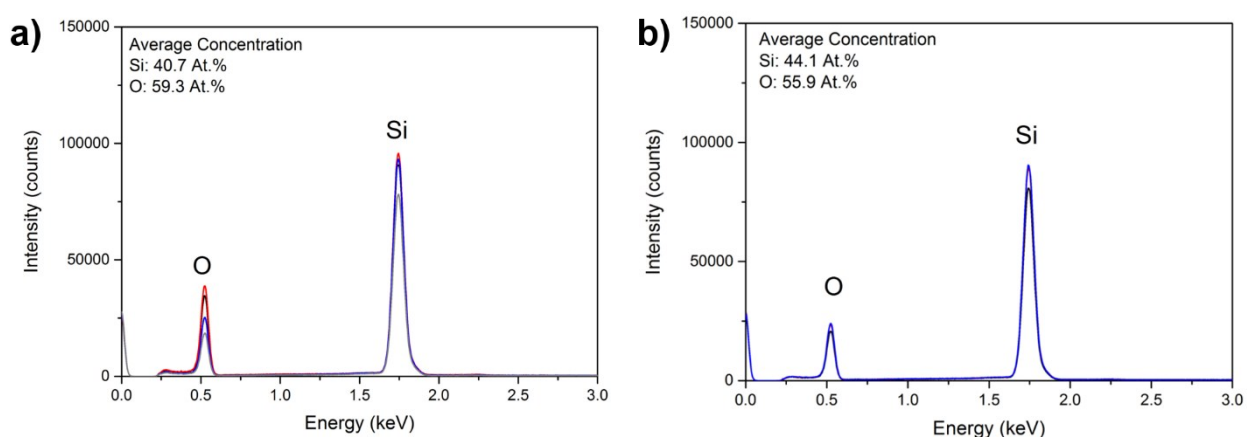


Figure S2. EDX spectra of several different positions of a) the annealed HTCS and b) the annealed HDCS.

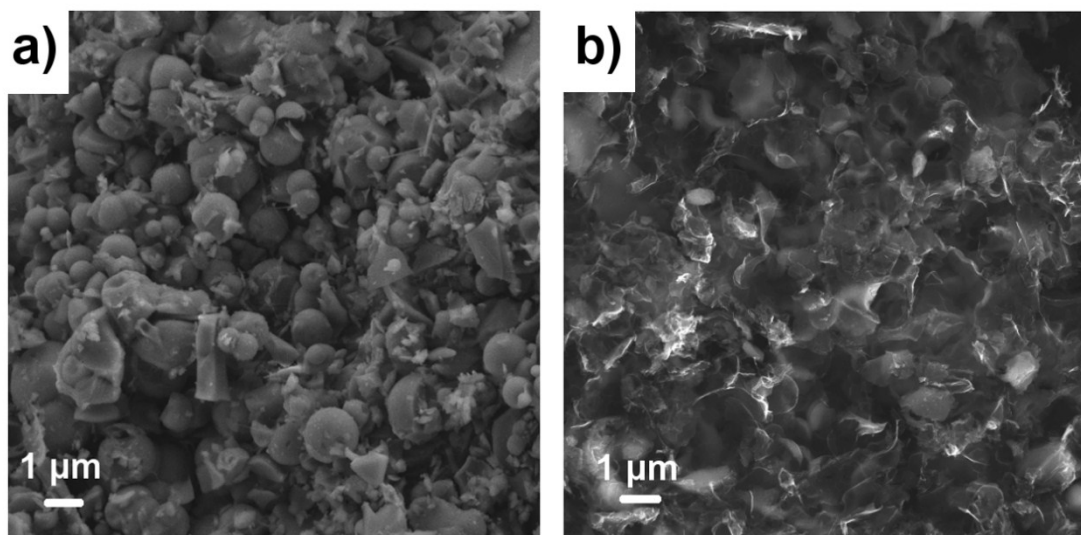


Figure S3. a) SEM analysis of the annealed HDCS and b) of nc-Si@HCS.

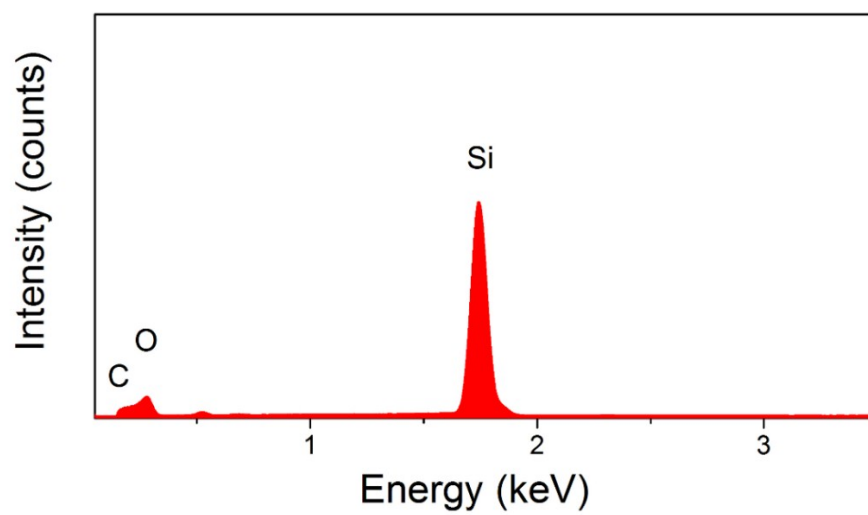


Figure S4. EDX spectrum of the as-prepared nc-Si@HCS derived from HDCS

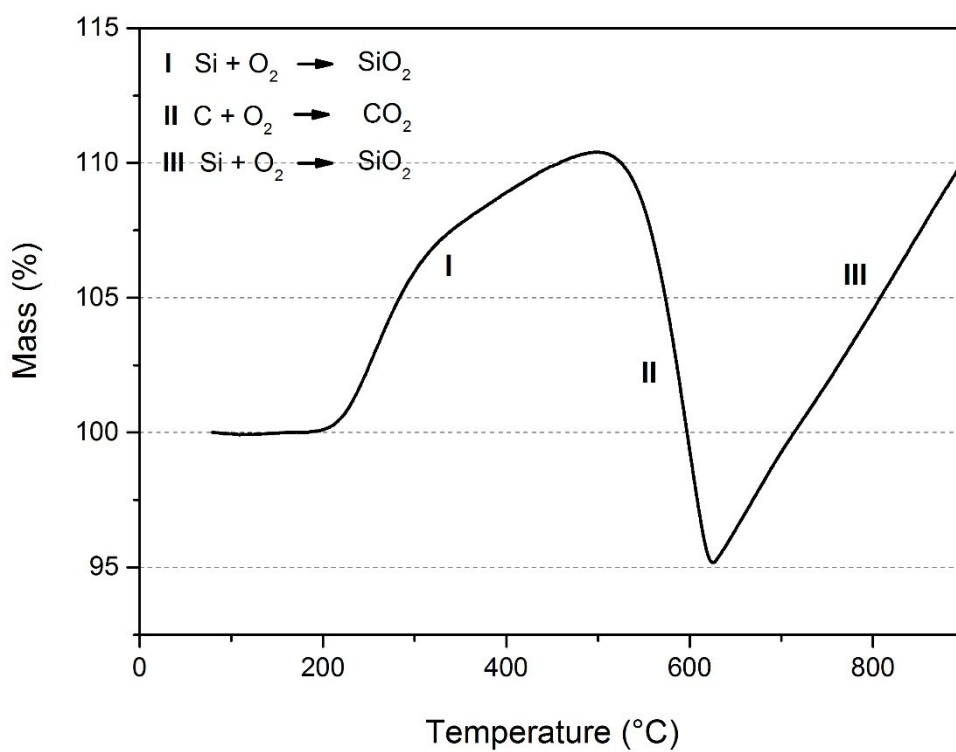


Figure S5. Thermogravimetric combustion of the nc-Si@HCS in synthetic air (10 K/min) with proposed reaction scheme over temperature increase.

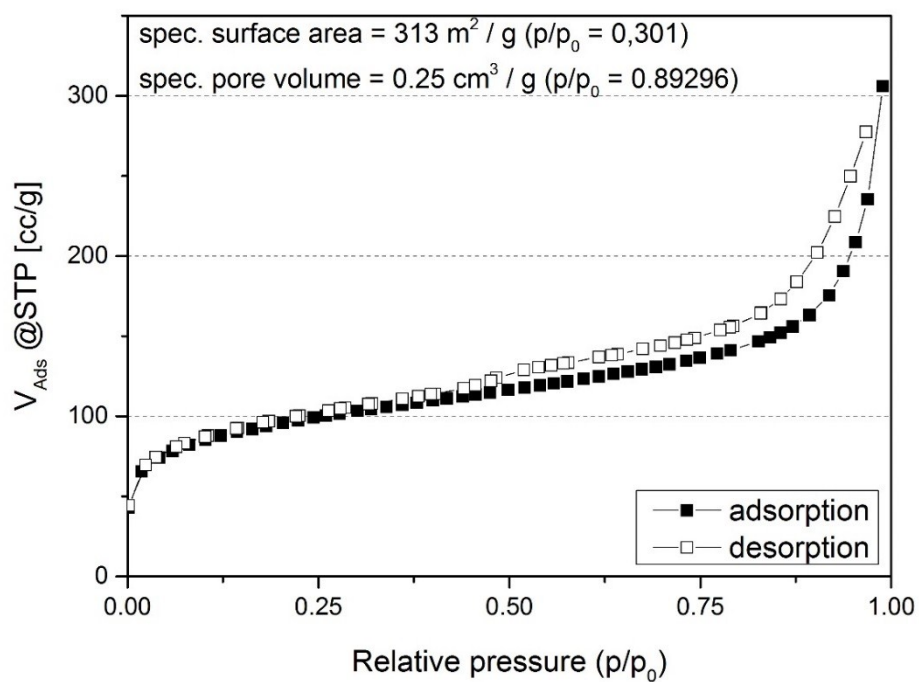


Figure S6. Nitrogen physisorption isotherms of the nc-Si@HCS with calculated BET surface area and pore volume.