

Supporting Information

Sandwich-like CNTs/Si/C Nanotubes as High Performance Anode Materials for Lithium-ion Batteries

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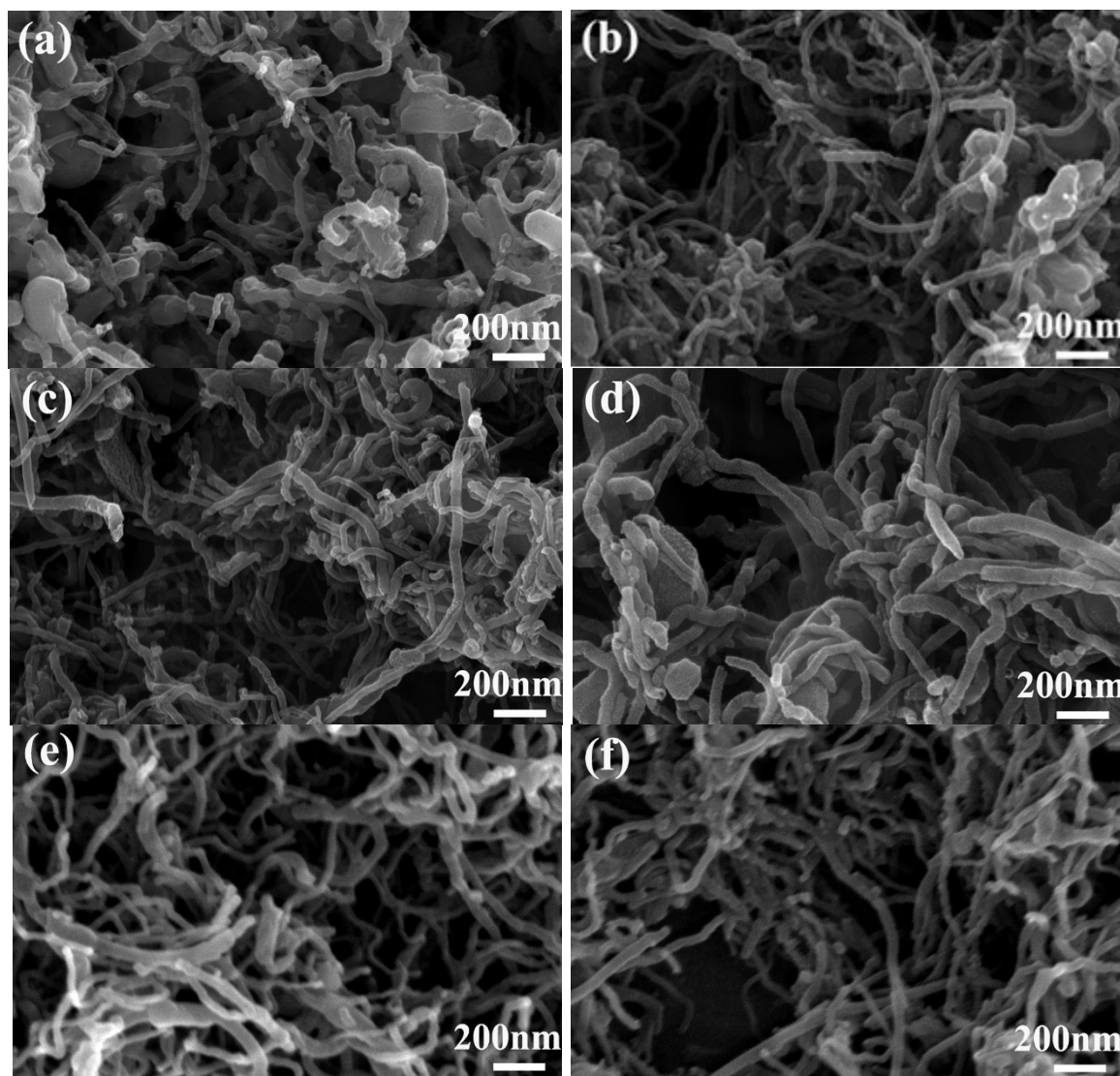


Fig. S1 The SEM images of CNTs/SiO₂ at different hydrothermal reaction time. (a) 0h, (b) 12h, (c) 18h, (d) 36h, (e) 54h and (f) 72h.

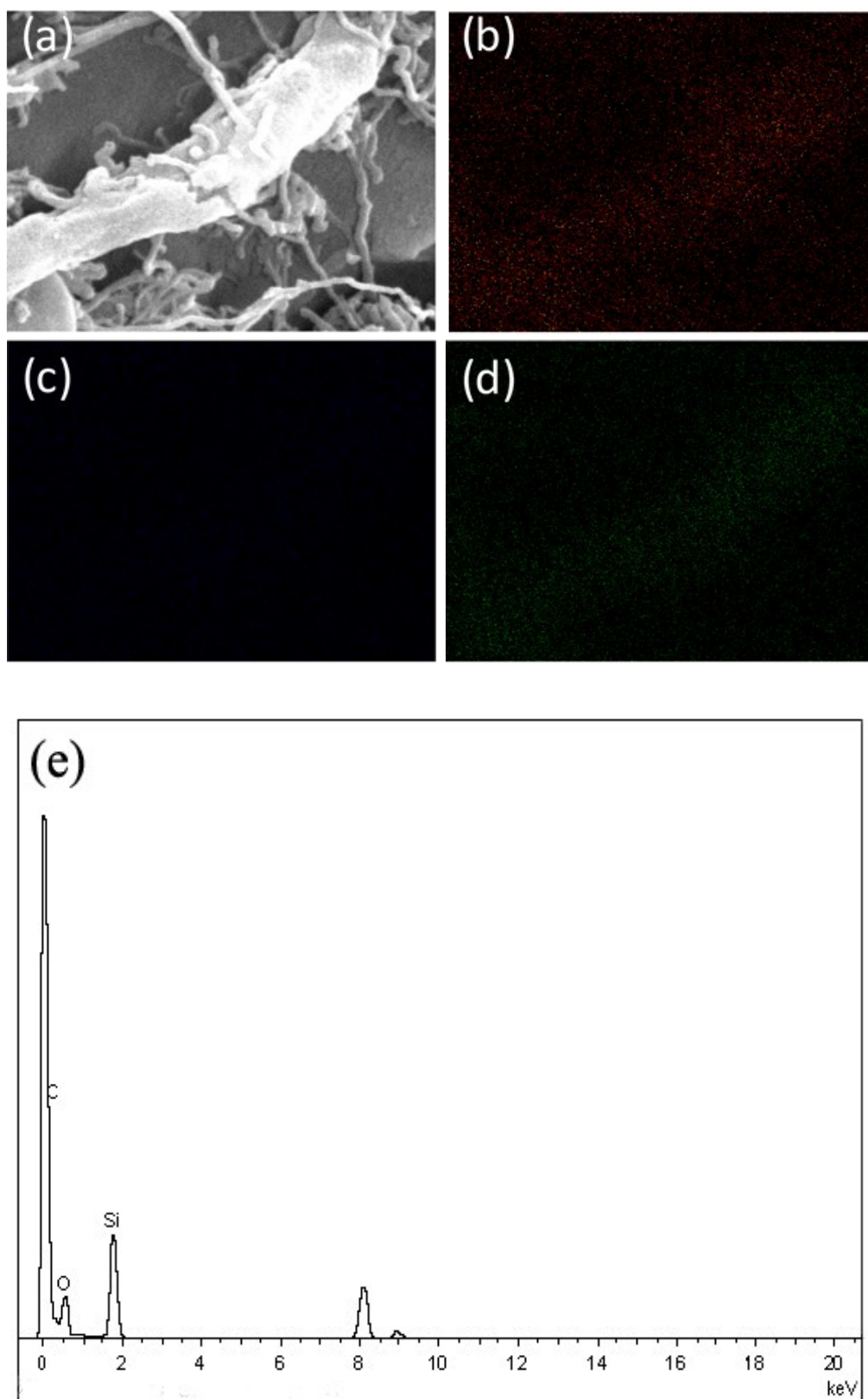


Fig. S2 (a) SEM image of the sandwiched CNTs/Si/C nanotubes. The corresponding EDS results: (b) C, (c) O, and (d) Si. (e) The EDS spectrum.

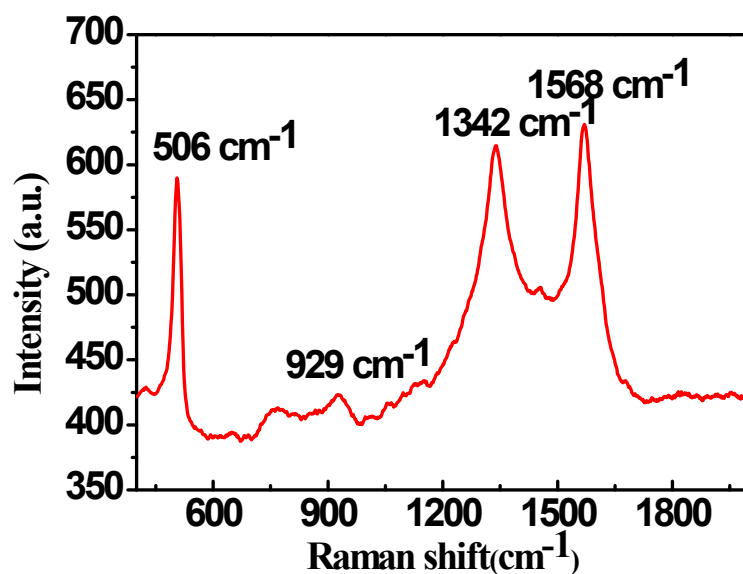


Fig. S3 Raman spectroscopy results for sandwiched CNTs/Si/C nanotubes.

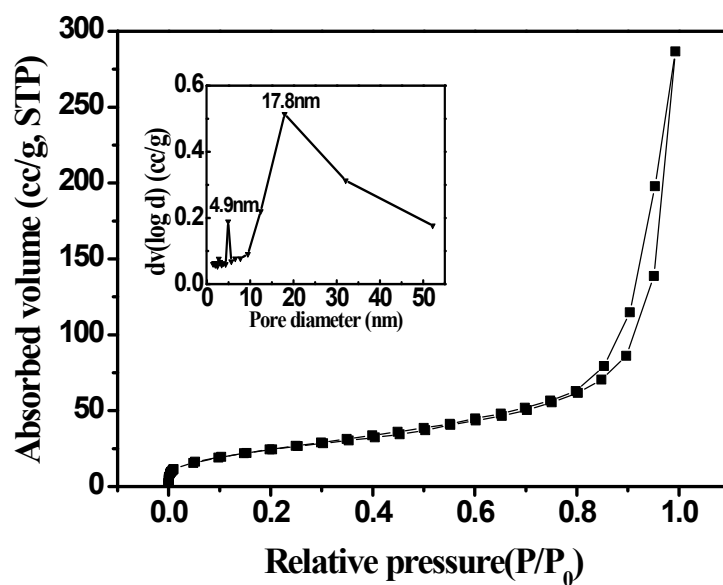


Fig. S4 Nitrogen adsorption-desorption isotherm of the sandwiched CNTs/Si/C nanotubes. The inset shows the pore size distribution of the sandwiched CNTs/Si/C nanotubes.

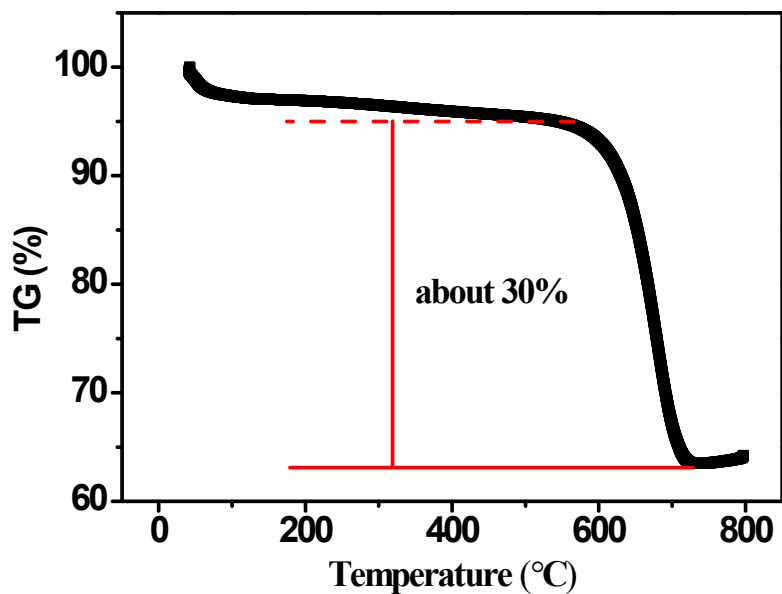


Fig. S5 TG curve for sandwiched CNTs/Si/C nanotubes.

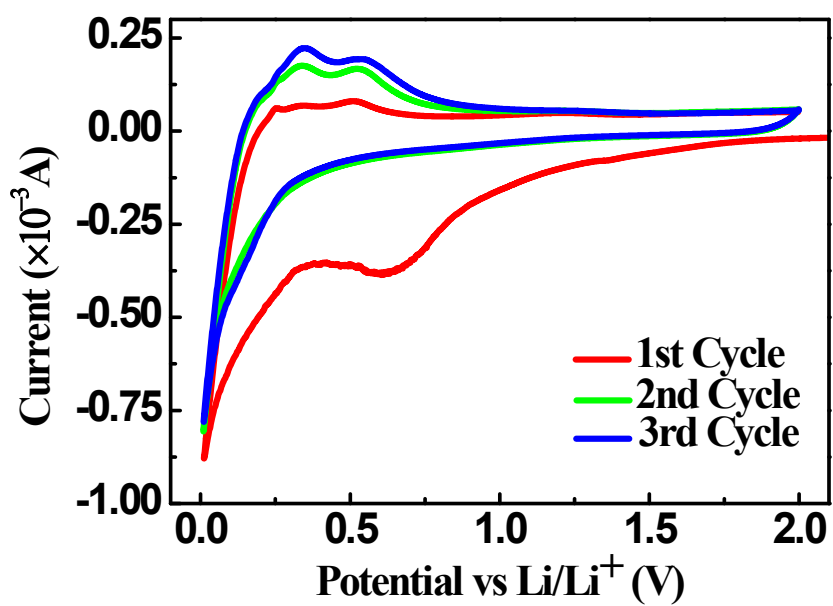


Fig. S6 CV curves of cell with CNTs/Si/C as the anode material during different cycles.

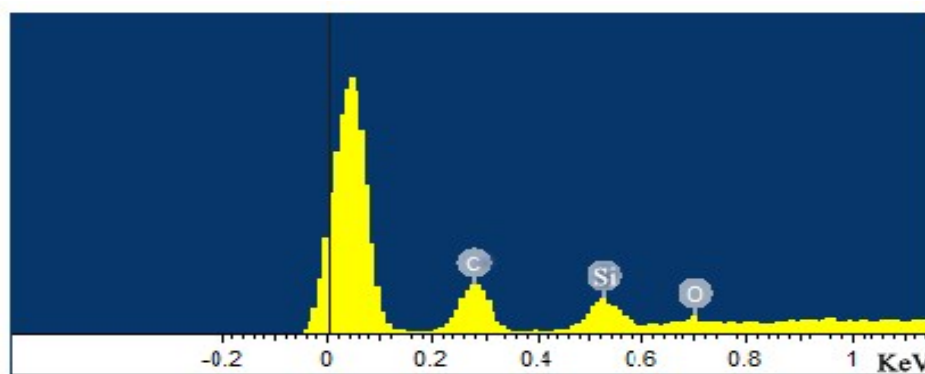


Fig. S7 EDS spectrum of CNTs/Si/C anode after 1000 cycles at the current density of 1000 mA/g.

Table S1 Fitting results of cells with CNTs/Si and CNTs/Si/C as anodes

	Rs	Rct	CPE	W
CNTs /Si	3.495	350.5	1.8666E-5	249.8
CNTs/Si/C	0.3506	132.4	1.5385E-5	107.4