

Supporting Information

TiO₂ Hollow Nanocrystals Through the Nanoscale Kirkendall Effect for Lithium-ion Batteries and photocatalysis

Jicai Liang^a, Xiangbo Han^a, Yi Li^a, Kaiqi Ye^b, Changmin Hou^c and Kaifeng Yu^{a*}

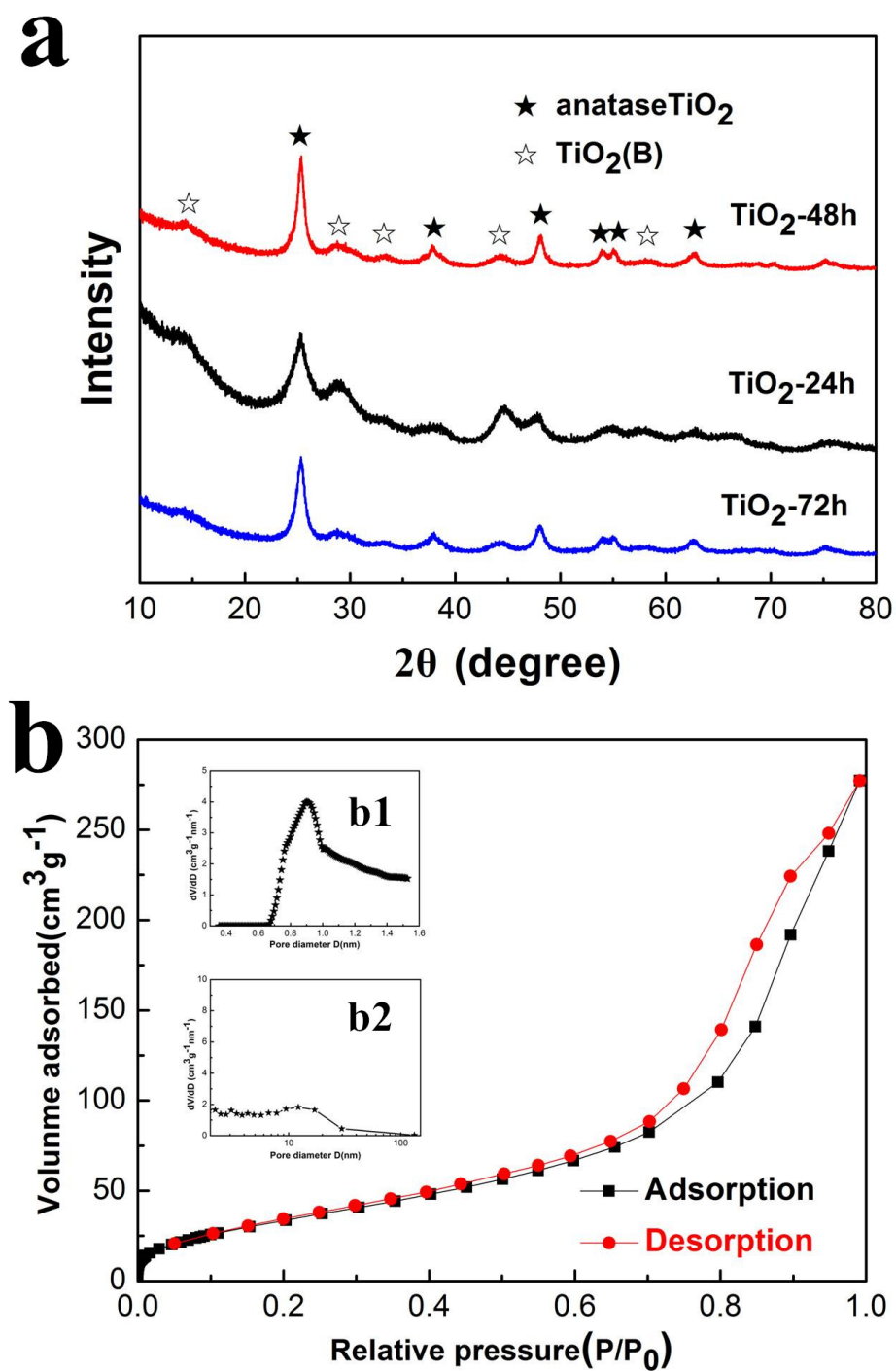


Figure S1. a) XRD patterns of TiO₂ samples synthesized with different time; b) N₂ adsorption-desorption isotherm of TiO₂ hollow nanocrystals.

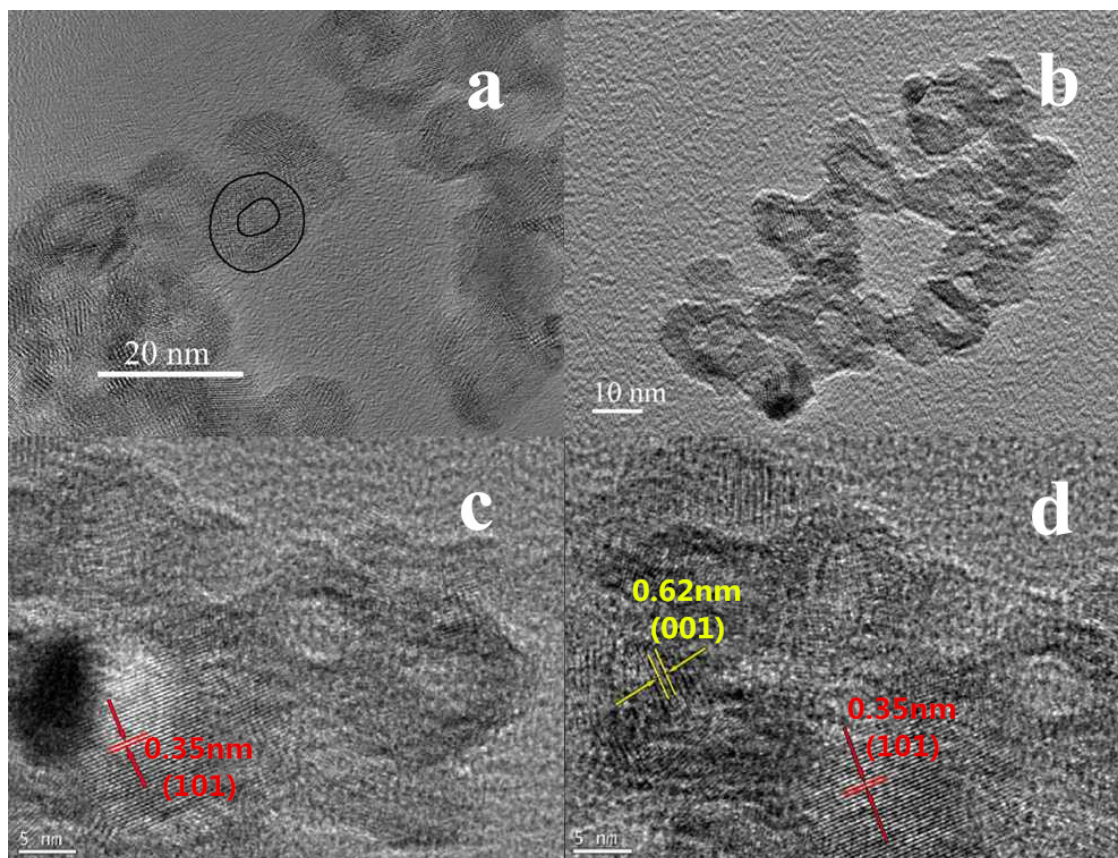


Figure S2. HRTEM images of TiO_2 -48h hollow nanocrystals.

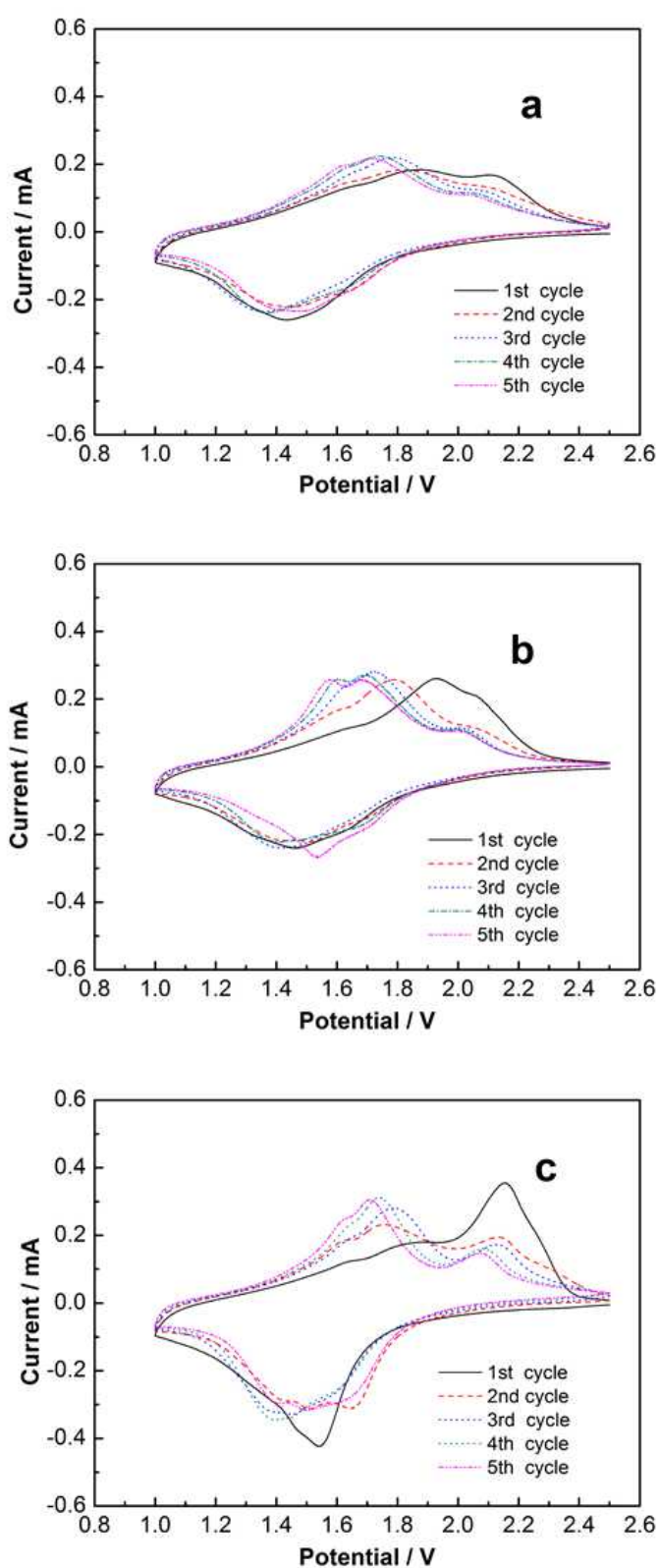


Figure S3. Cyclic voltammograms (CVs) of the (a) TiO₂-24h and (b) TiO₂-48h (c) TiO₂-72h at a scan rate of 0.1 mV/s.

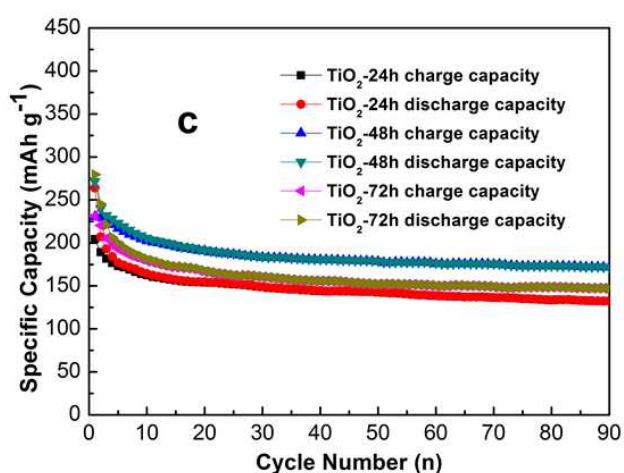
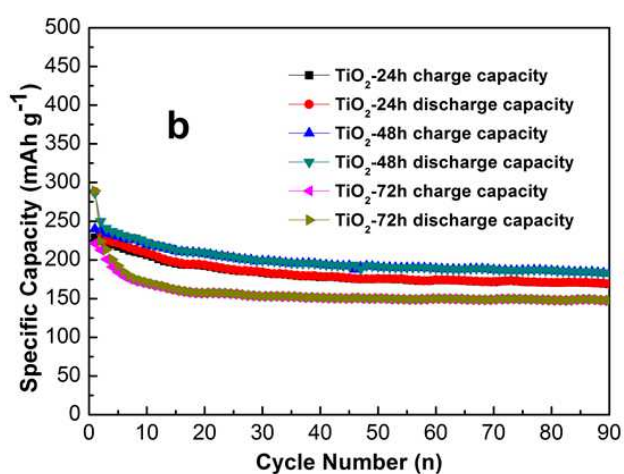
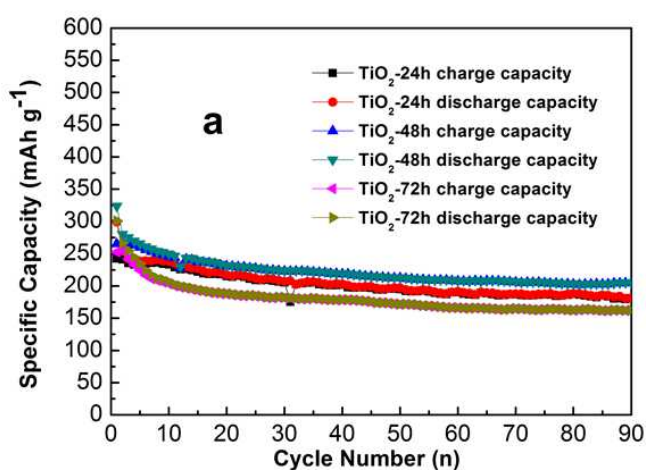


Figure S4. TiO₂-48h and TiO₂-24h and TiO₂-72h hollow spheres cycling performance of electrode at constant ratio of (a) 0.5 C and (b) 1 C and (c) 2 C.

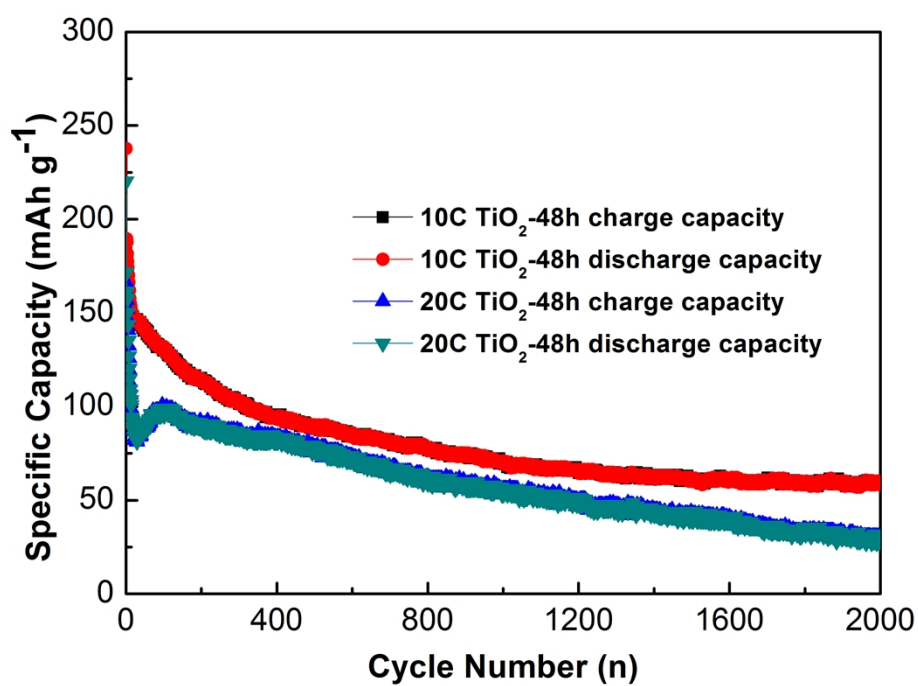


Figure S5. TiO₂-48h hollow spheres cycling performance of electrode at constant ratio of 10 C and 20 C for 2000 cycles.