

Supporting Information

High-Surface-Area Mesoporous TiO₂ Microspheres via One-Step Nanoparticle Self-Assembly for Enhanced Lithium-Ion Storage

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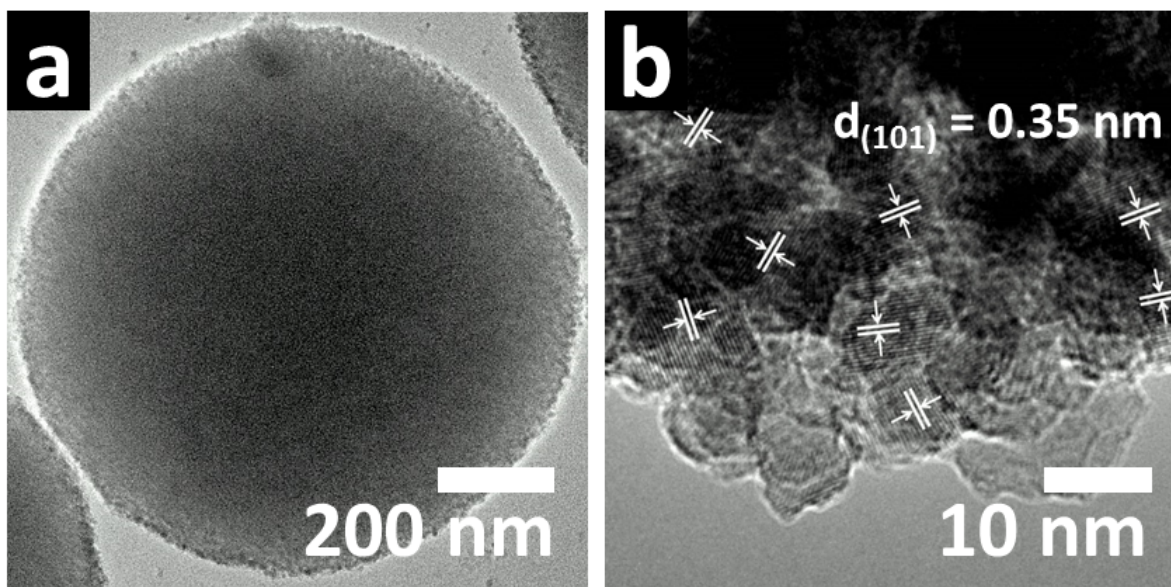


Fig. S1 (a) TEM and (b) HRTEM images of as-prepared TiO₂ microspheres.

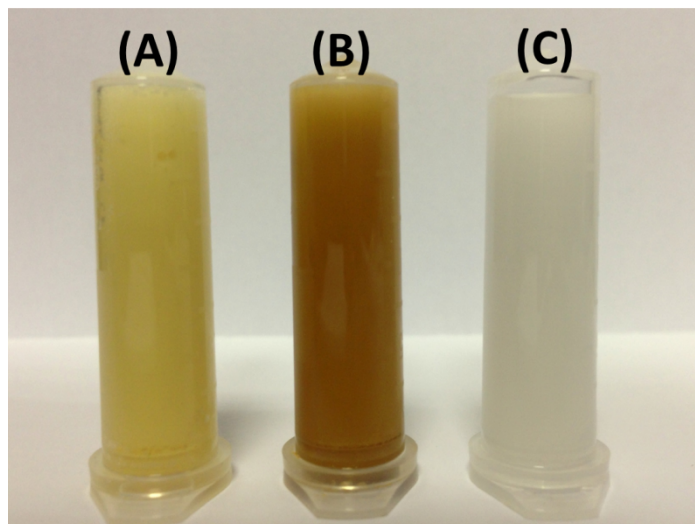


Fig. S2 Digital photograph of (A) as-prepared TiO₂ microspheres, (B) 200 °C calcined TiO₂ microspheres, and (C) 400 °C calcined TiO₂ microspheres, dispersed in water.

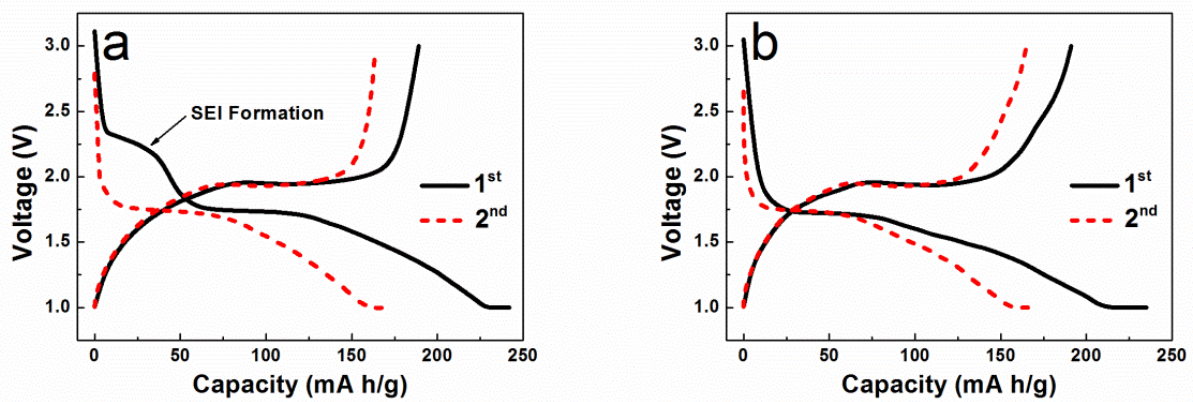


Fig. S3 1st and 2nd charge-discharge curves of (a) 200 °C calcined TiO₂ microspheres and (b) 400 °C calcined TiO₂ microspheres.



Fig. S4 Digital photograph of TiO₂ microspheres synthesized from one-pot synthesis. In one typical synthesis process, 2 ml of titanium isopropoxide could produce 502.8 mg of TiO₂ microspheres (after calcination at 400 °C for 2 hours), and the product yield is as high as ~ 96.1%.

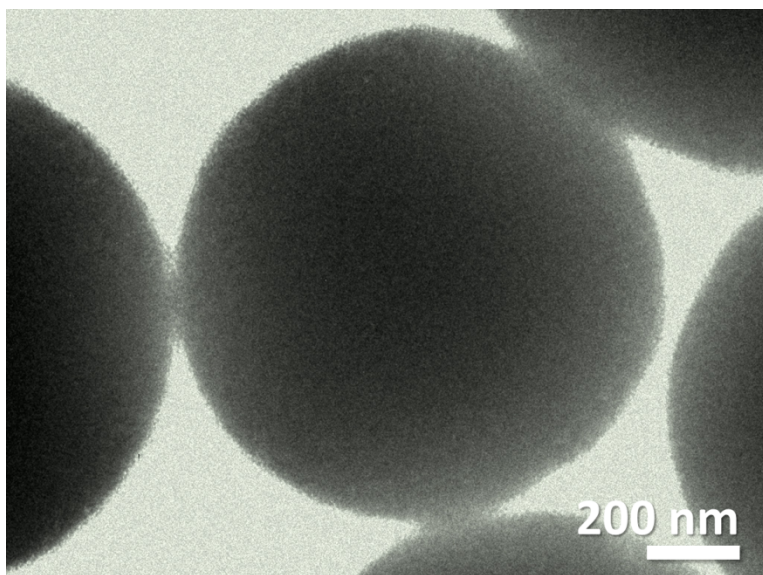


Fig. S5 TEM image of 400 °C calcined TiO₂ microspheres after 100 charge-discharge cycles.

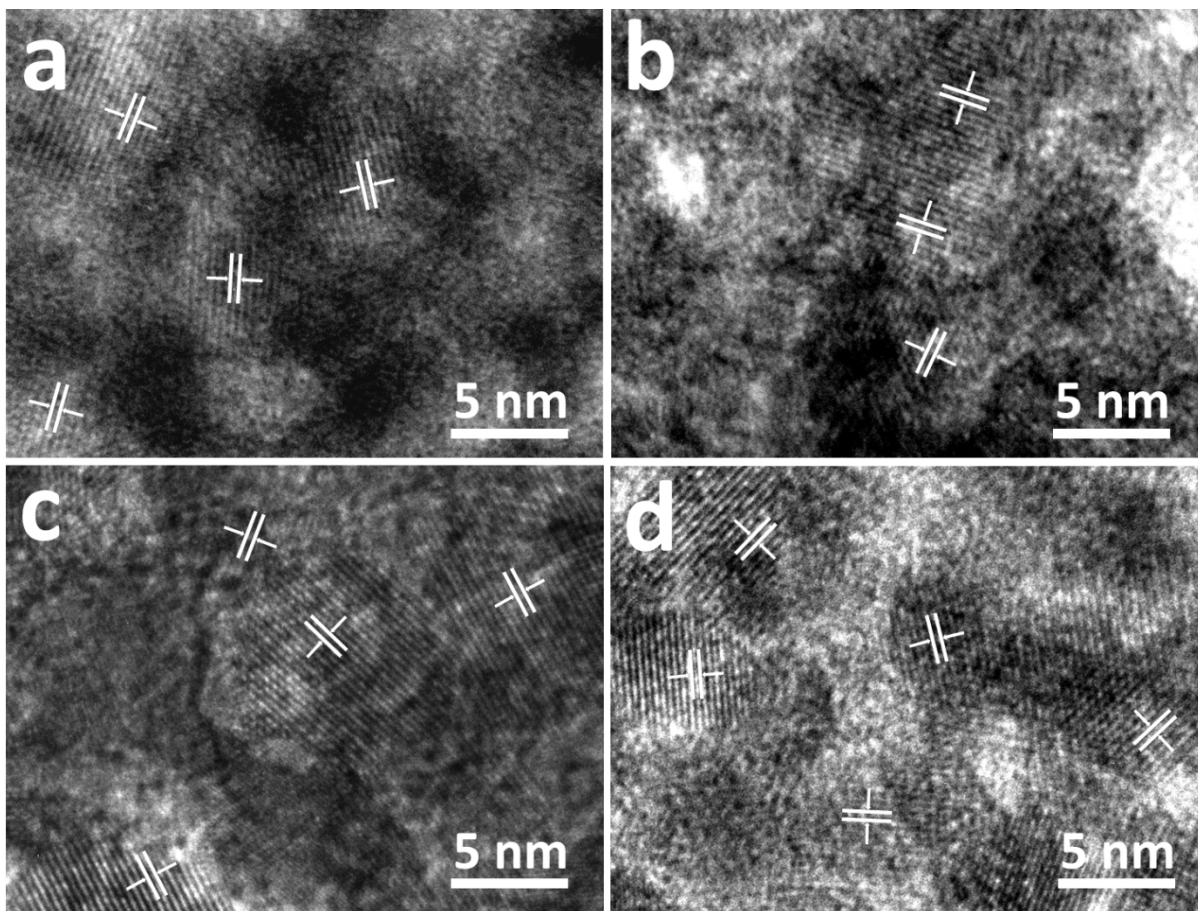


Fig. S6 HRTEM images of 200 °C calcined TiO₂ microspheres after cycling for (a) 1 cycle and (b) 100 cycles, and 400 °C calcined TiO₂ microspheres after cycling for (c) 1 cycle and (d) 100 cycles. The interplanar distances are all 0.35 nm corresponding to the spacing between the (101) planes of tetragonal anatase.