

Supporting Information

High Lithium Ion Battery Performance Enhancement by Controlled Carbon Coating of TiO₂ Hierarchically Porous Hollow Spheres

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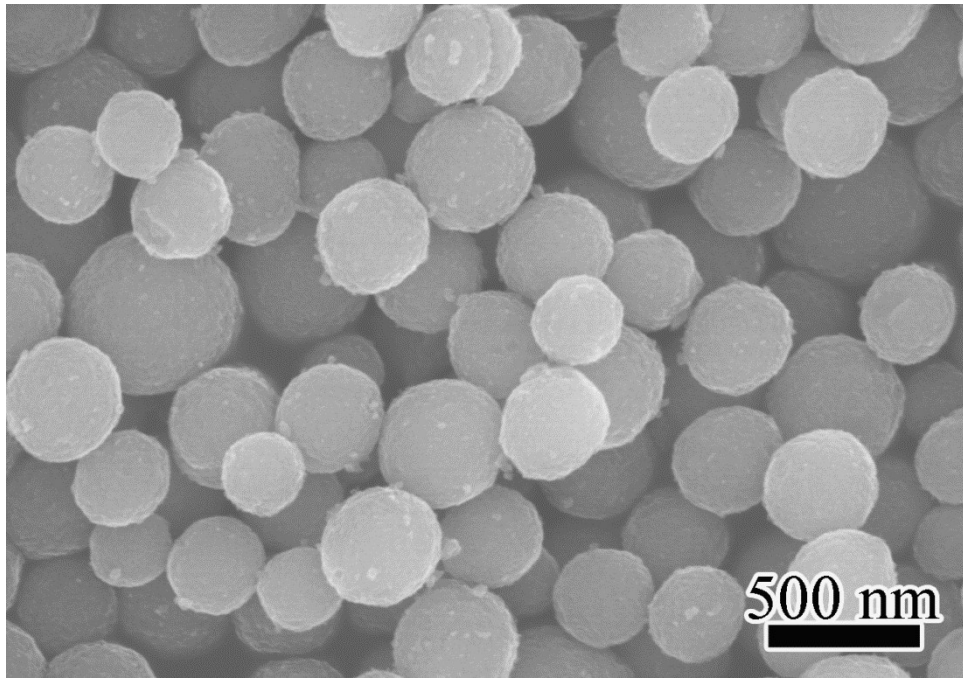


Fig. S1. The SEM image of the TiO₂ solid spheres (TSS).

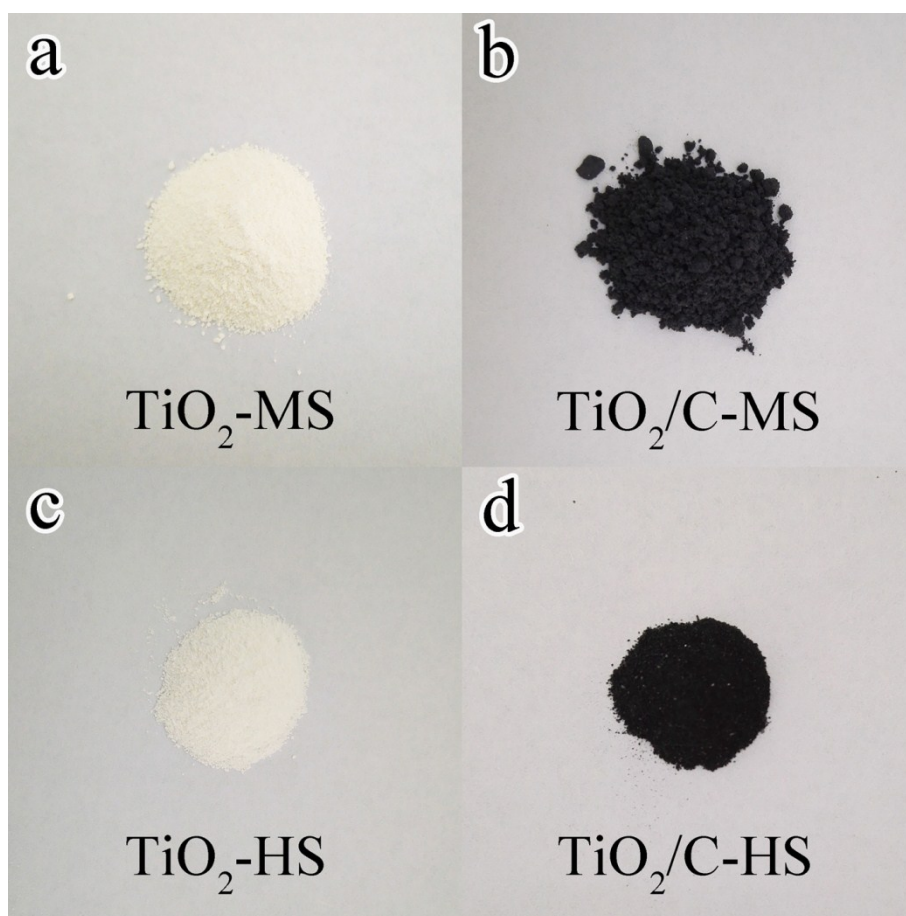


Fig. S2. The optical images of the $\text{TiO}_2\text{-MS}$, $\text{TiO}_2/\text{C-MS}$, $\text{TiO}_2\text{-HS}$ and $\text{TiO}_2/\text{C-HS}$ powders.

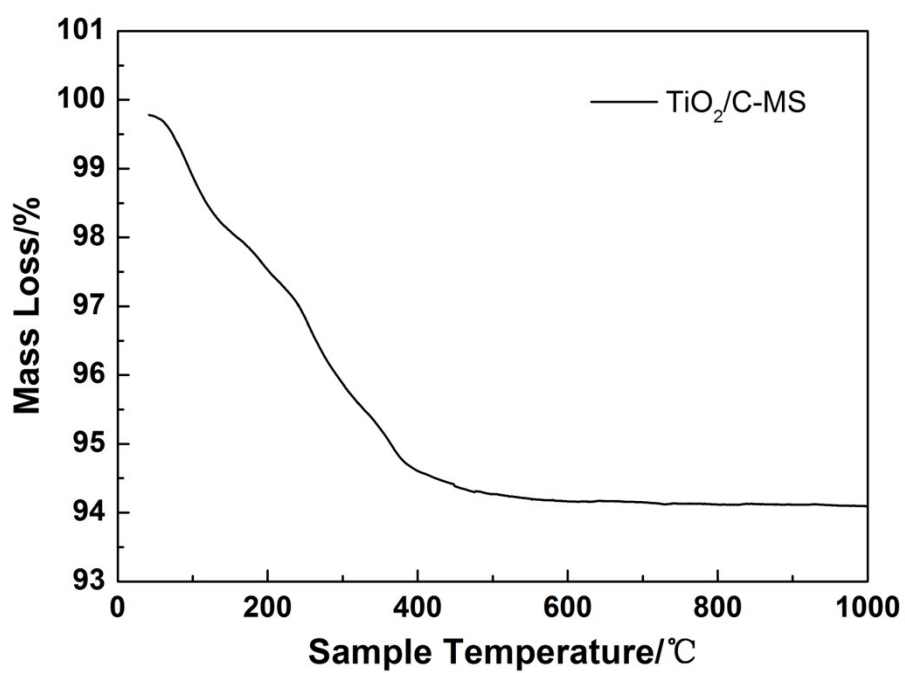


Fig. S3. TG curve of TiO₂/C-MS under an air flow at temperature ramp of 5 °C min⁻¹.

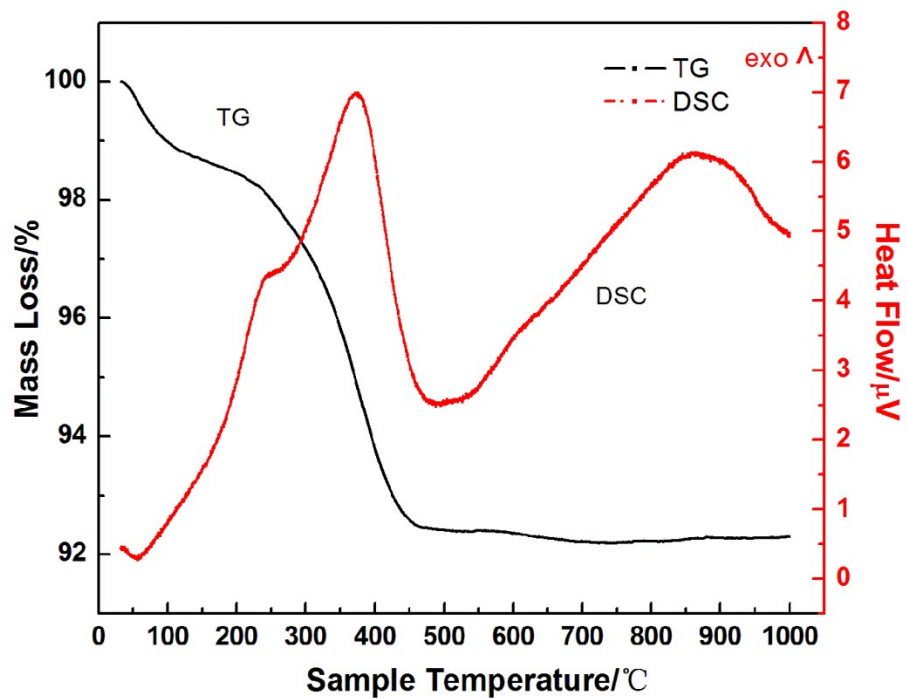


Fig. S4. TG and DSC curves of $\text{TiO}_2/\text{C-HS}$ under an air flow at temperature ramp of $5\text{ }^\circ\text{C min}^{-1}$.

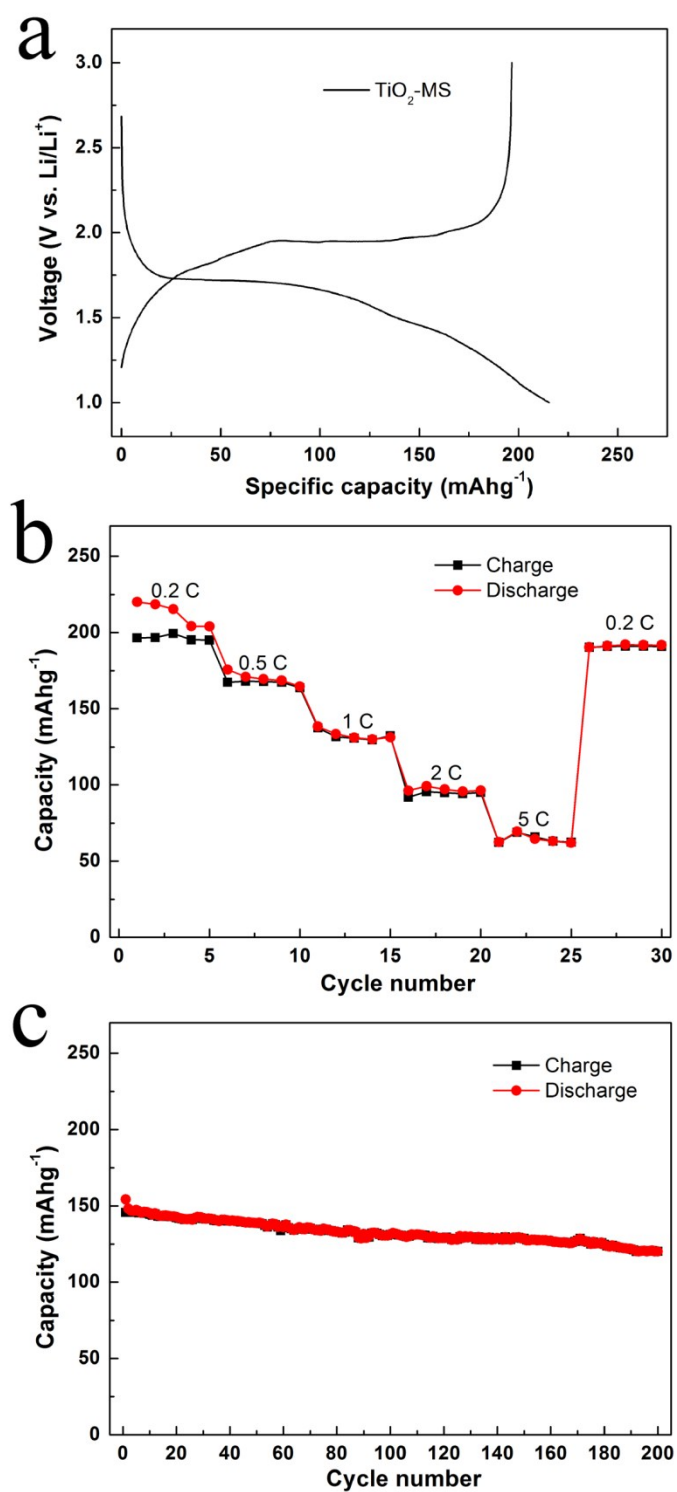


Fig.S5. (a) Charge and discharge curves of $\text{TiO}_2\text{-MS}$ at a current of 0.2 C for the first cycle, (b) rate performance of $\text{TiO}_2\text{-MS}$, (c) cycle performance of $\text{TiO}_2\text{-MS}$ at a current density of 1 C.

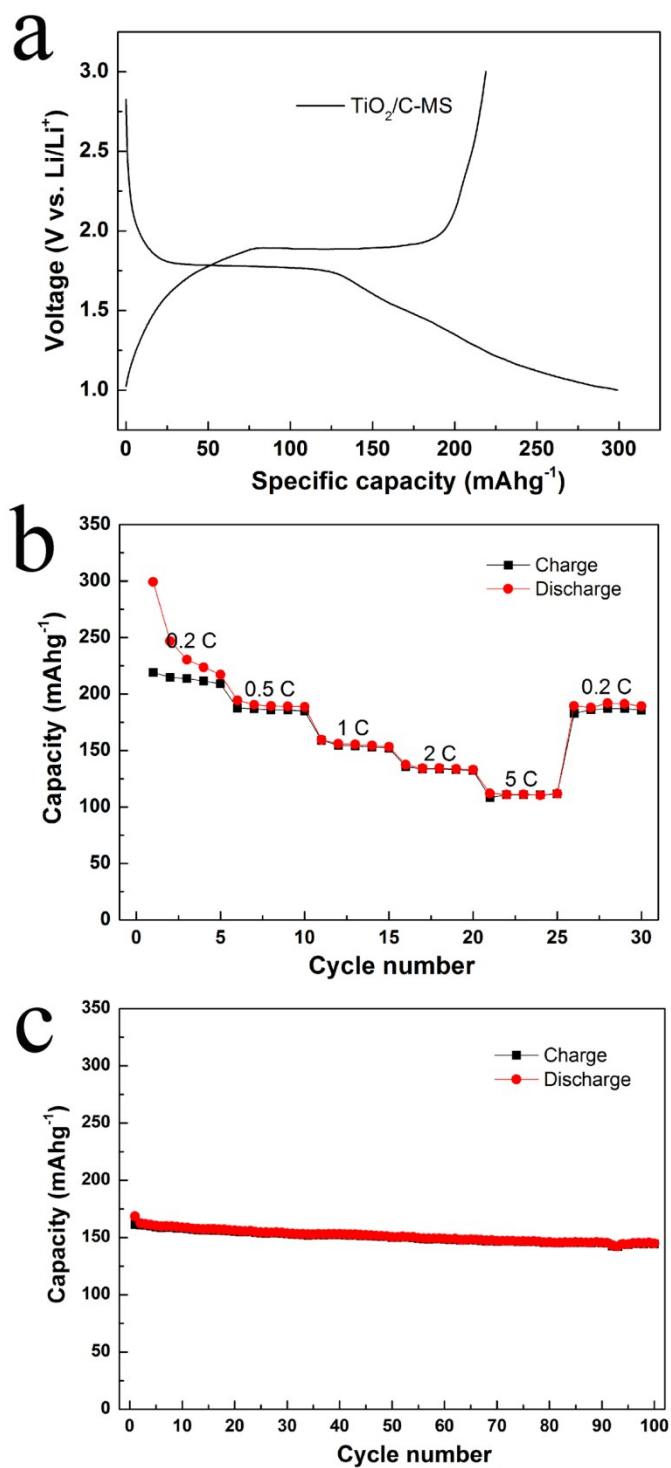


Fig.S6. (a) Charge and discharge curves of $\text{TiO}_2/\text{C-MS}$ at a current of 0.2 C for the first cycle, (b) rate performance of $\text{TiO}_2/\text{C-MS}$, (c) cycle performance of $\text{TiO}_2/\text{C-MS}$ at a current density of 1 C.