

Supporting information

Nano/micrometer Porous Conductive Network Structure $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ Microspheres with Enhanced Sodium- Storage Capability Anode Material

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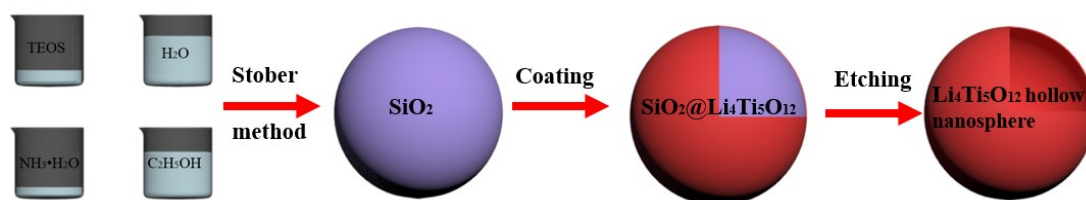


Figure S1. Schematic diagram of synthesis of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ hollow nanosphere

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Figure S2. SEM images of (a) SiO_2 and (b) $\text{SiO}_2@\text{Li}_4\text{Ti}_5\text{O}_{12}$ nanospheres

Figure S3. SEM images of (a) CNTs, (b) single $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microsphere, (c-d) $\text{Li}_4\text{Ti}_5\text{O}_{12}/\text{CNT}$ composite

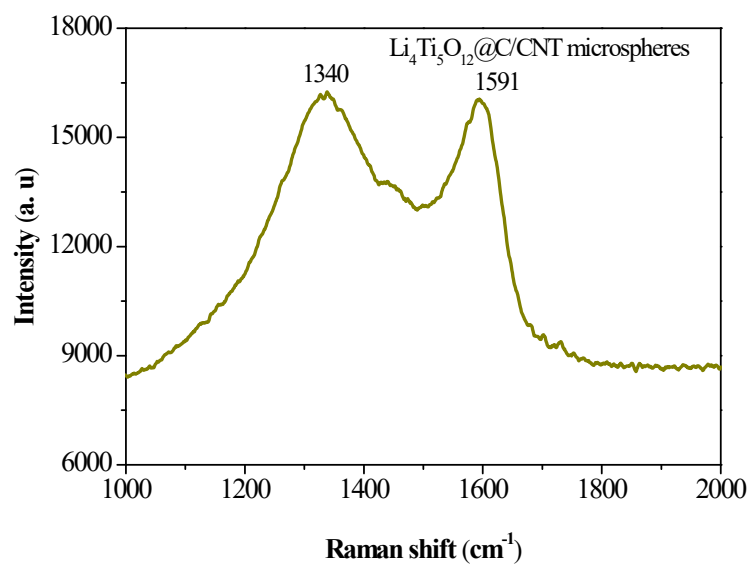


Figure S4. Raman curves of the $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microspheres

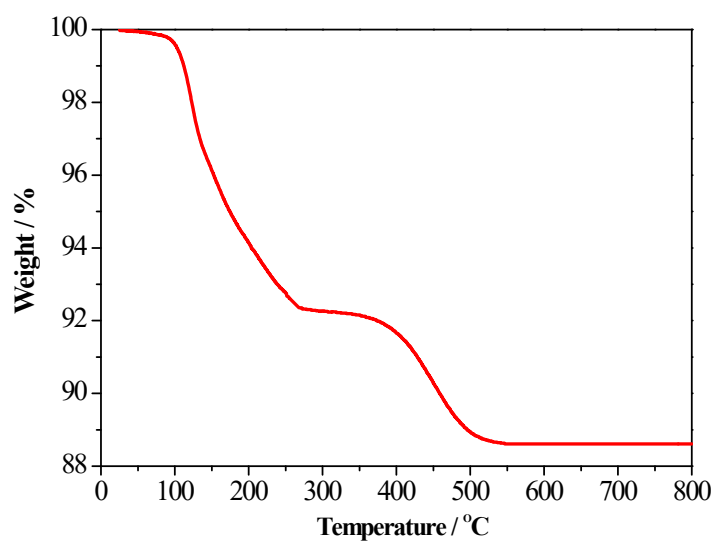


Figure S5. TG curve of $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microspheres

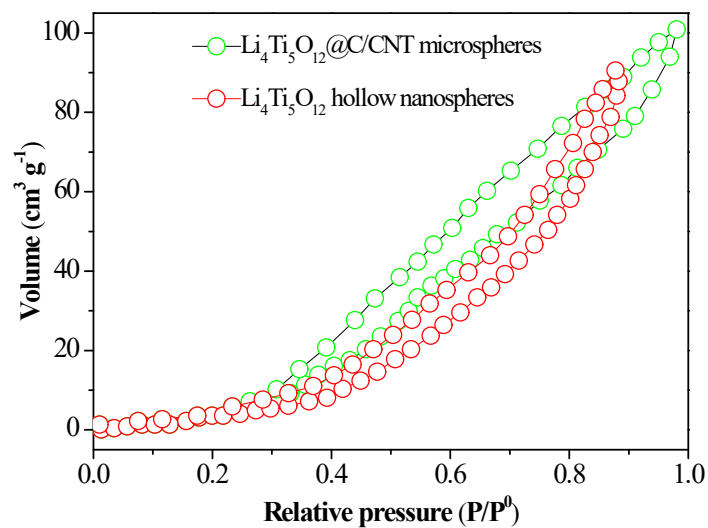


Figure S6. N_2 adsorption/desorption isotherms of $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microspheres and $\text{Li}_4\text{Ti}_5\text{O}_{12}$ hollow nanospheres

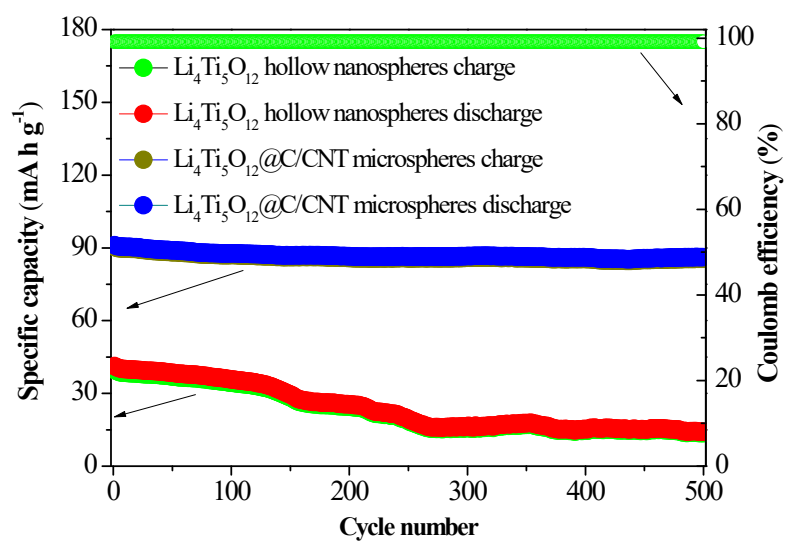


Figure S7. The cyclic performance curves of the $\text{Li}_4\text{Ti}_5\text{O}_{12}$ @C/CNT microspheres and $\text{Li}_4\text{Ti}_5\text{O}_{12}$ hollow nanospheres for 500 cycles at 500 mA g⁻¹

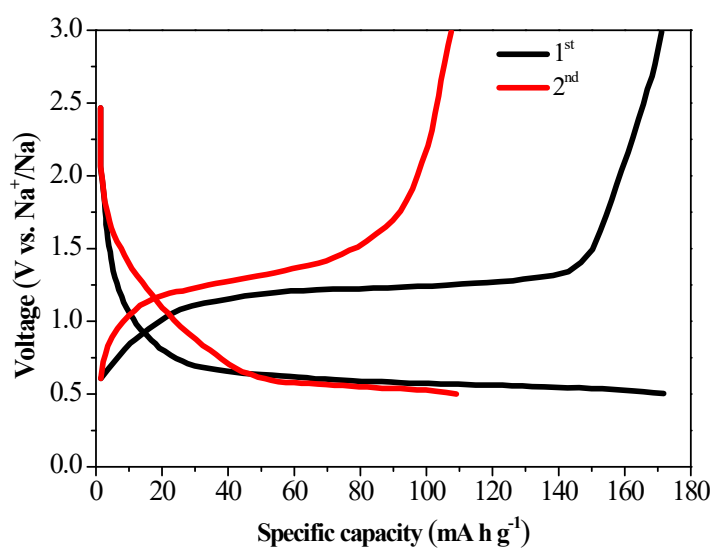


Figure S8. The charge and discharge profiles of the $\text{Li}_4\text{Ti}_5\text{O}_{12}$ hollow

nanospheres

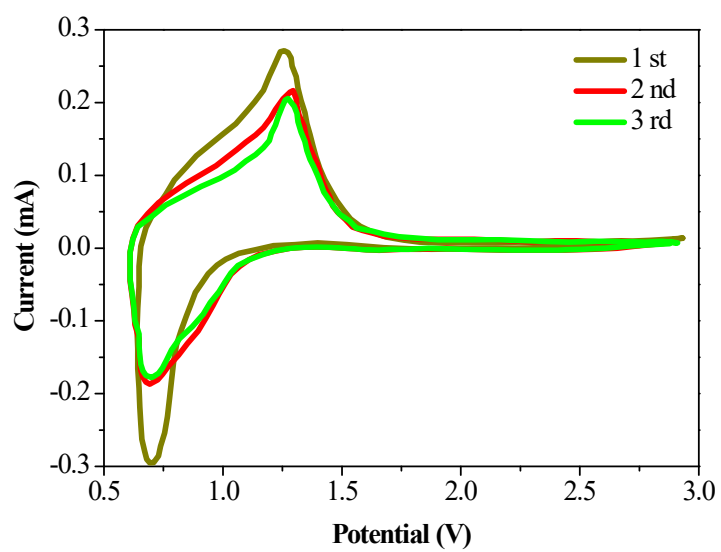


Figure S9. CV curves of the $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microspheres at 0.1 mV s^{-1}

Figure S10. SEM images of the $\text{Li}_4\text{Ti}_5\text{O}_{12}@\text{C}/\text{CNT}$ microspheres after 500 cycles at 500 mA g^{-1}