

## Supporting information

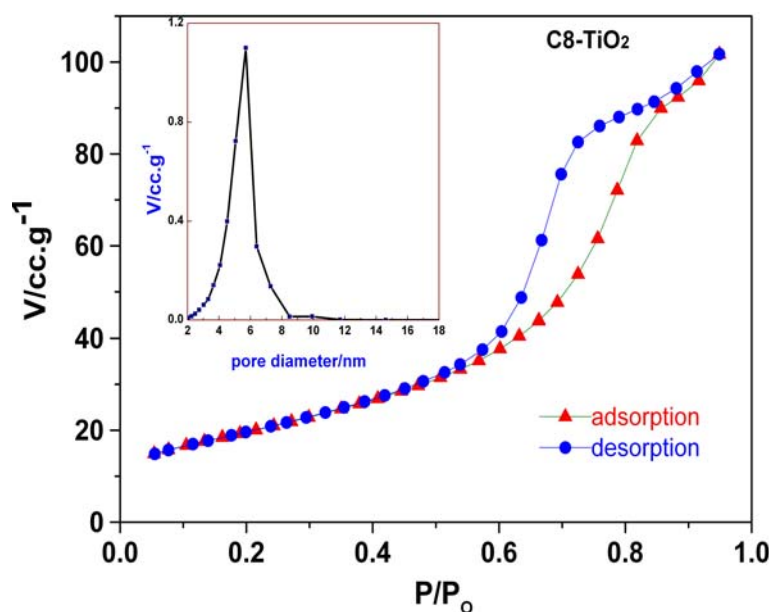


Fig. S1 N<sub>2</sub> adsorption/desorption isotherm of C8-TiO<sub>2</sub>.

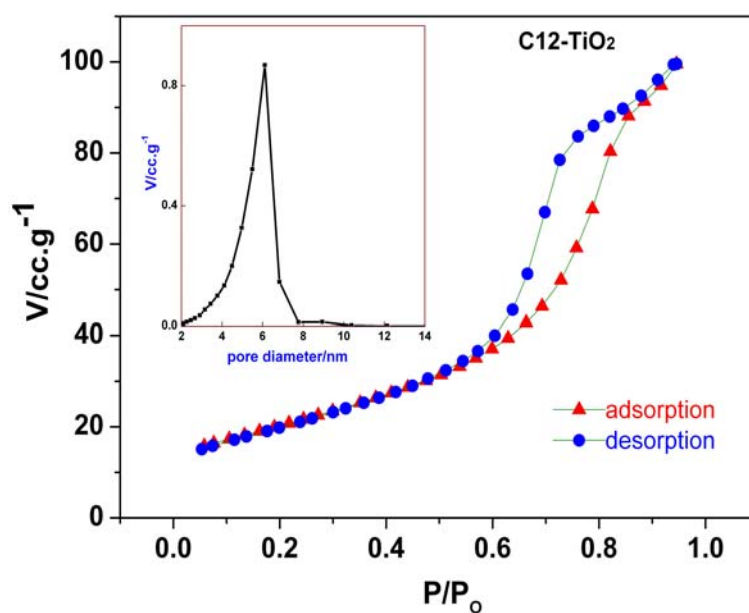


Fig. S2 N<sub>2</sub> adsorption/desorption isotherm of C12-TiO<sub>2</sub>.

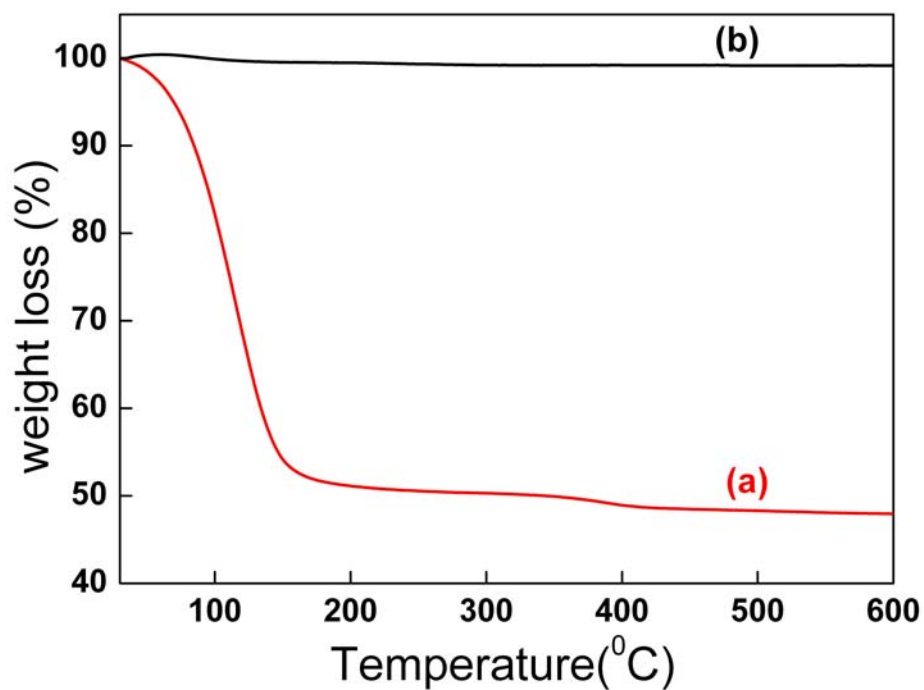


Fig. S3 TGA curves a) before heat treatment of the precursor in air, b) after calcination at 450  $^{\circ}\text{C}$ /6 h in air.

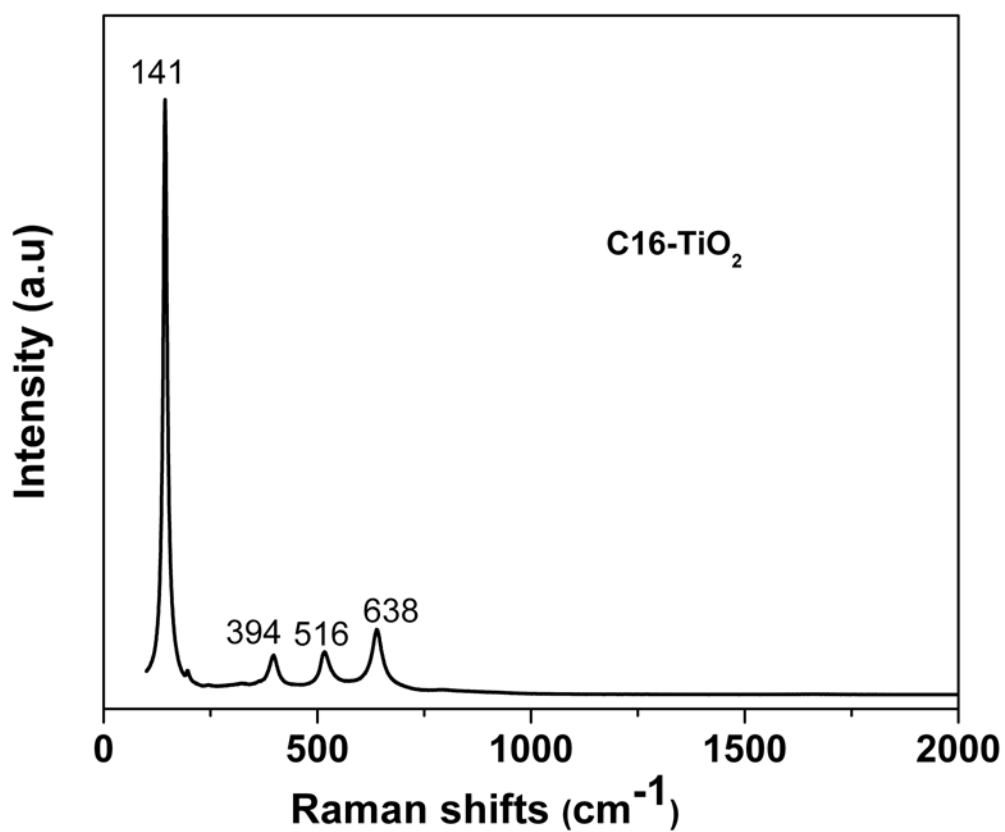
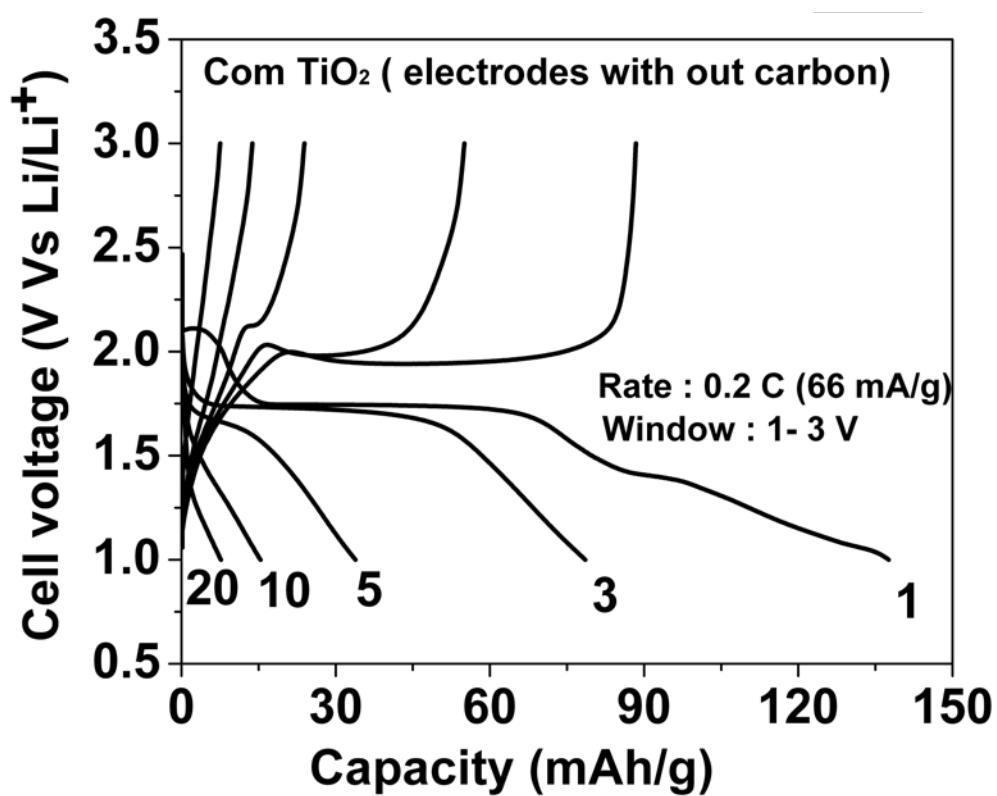


Fig. S4 Raman spectrum of meso C16-TiO<sub>2</sub>



**Fig. S5** Charge–discharge voltage profiles of Commercial-TiO<sub>2</sub> (electrodes without carbon)