

Fig.S1 (a) SEM and (b) TEM images, (c) XRD patterns and (d) TGA curves of anantase TiO₂/CNFs.



Fig. S2 HRTEM image of LC-150.



Fig. S3 Diameter distributions of nanoparticles of (a): LTC-130, b: LC-150, c: LC-170 and d: LC-190.



Fig. S4 Raman spectra of LC-130, LC-150, LC-170 and LC-190.



Fig. S5 Cyclic voltammograms curves of $TiO_2/CNFs$ at a scan rate of 0.2 mV s⁻¹ from 1V to 3V.