



Supplementary Materials

Improvement of Carbonyl Groups and Surface Defects in Carbon Nanotubes to Activate Peroxydisulfate for Tetracycline Degradation

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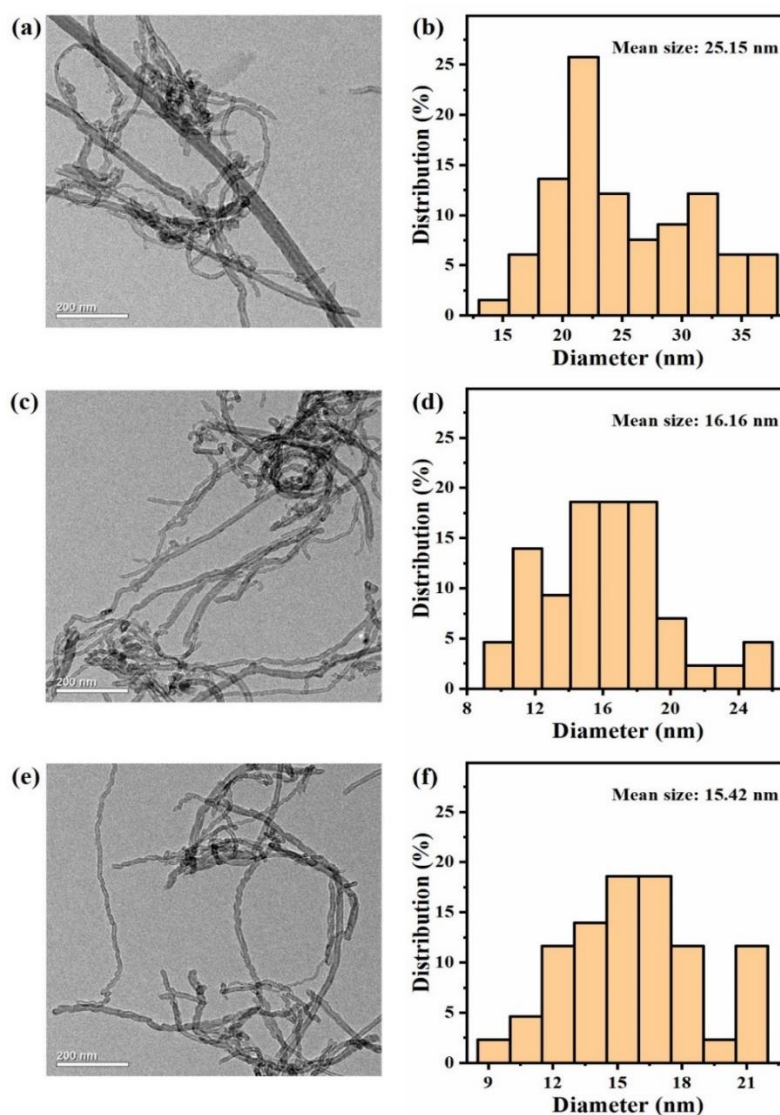


Figure S1. TEM images and corresponding diameter distributions of raw CNTs (a,b), CNT-O (c,d) and CNT-O-H (e,f).

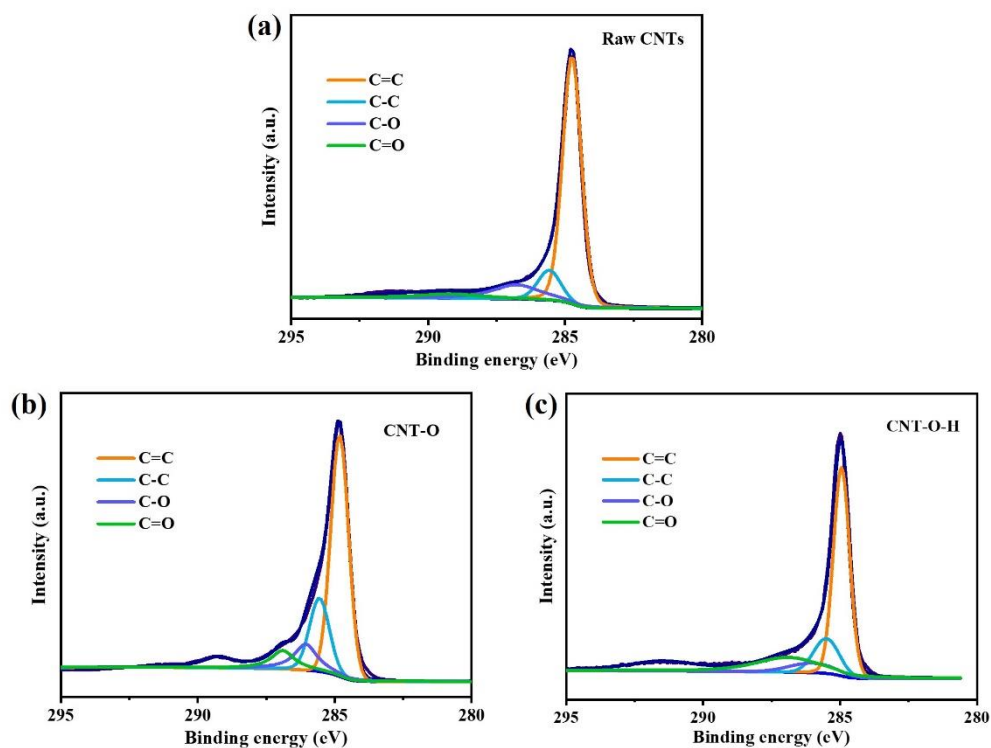


Figure S2. C 1 s spectra of raw CNTs (a), CNT-O (b) and CNT-O-H (c).

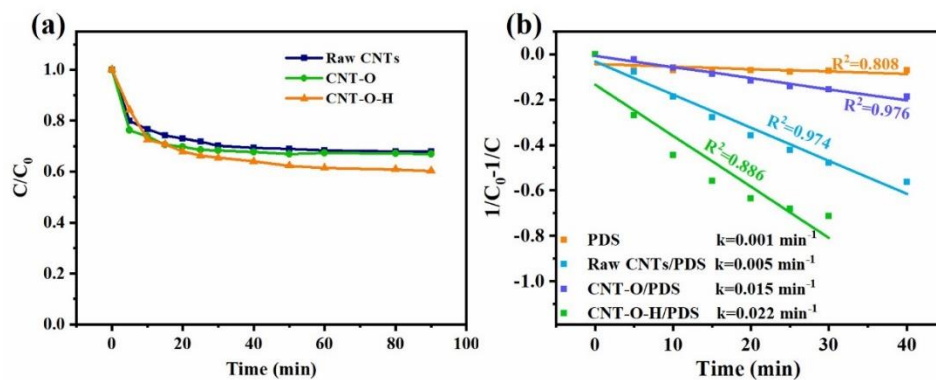


Figure S3. TC adsorption over CNTs, CNT-O and CNT-O-H (a) and pseudo-second-order kinetic fitting curves of TC degradation in different systems (b).

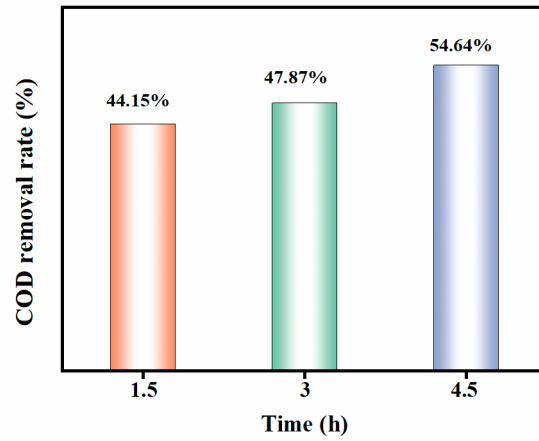


Figure S4. COD removal rates of CNT-O-H/PDS system at different time.

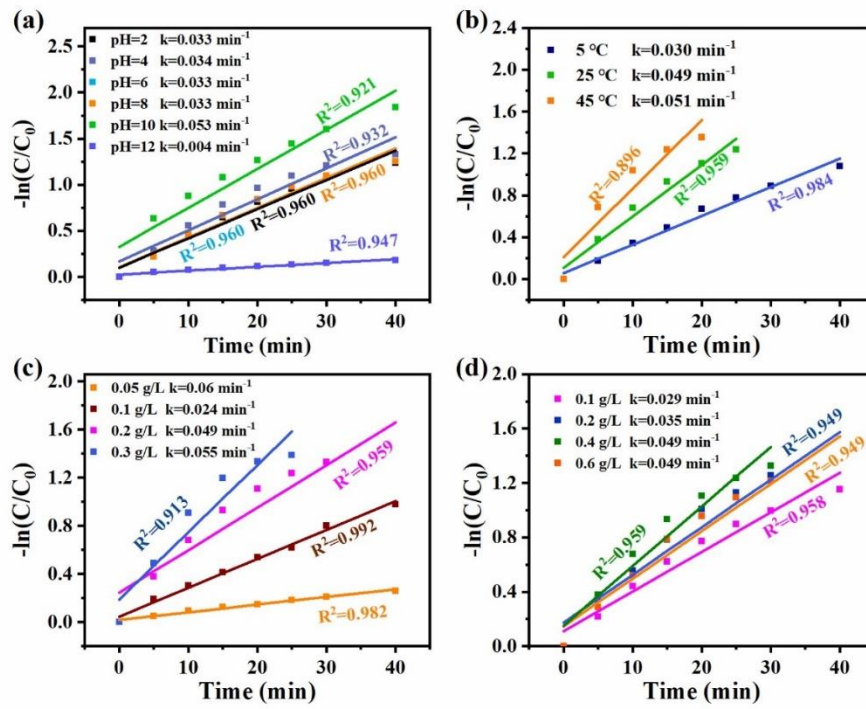


Figure S5. First-order kinetic curves of TC degradation under different initial pH (a), temperature (b), CNT-O-H dosage (c) and PDS dosage (d).

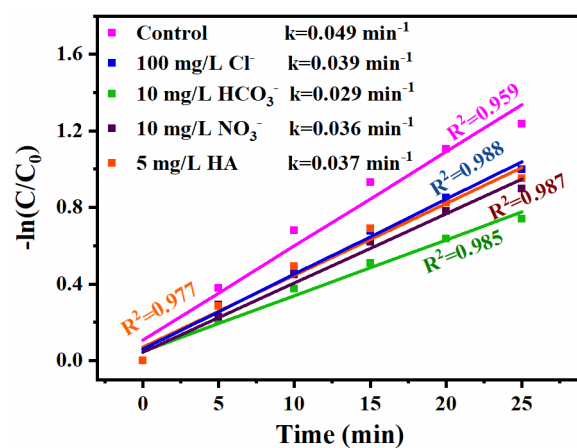


Figure S6. First-order kinetic curves of TC degradation with matrix species.

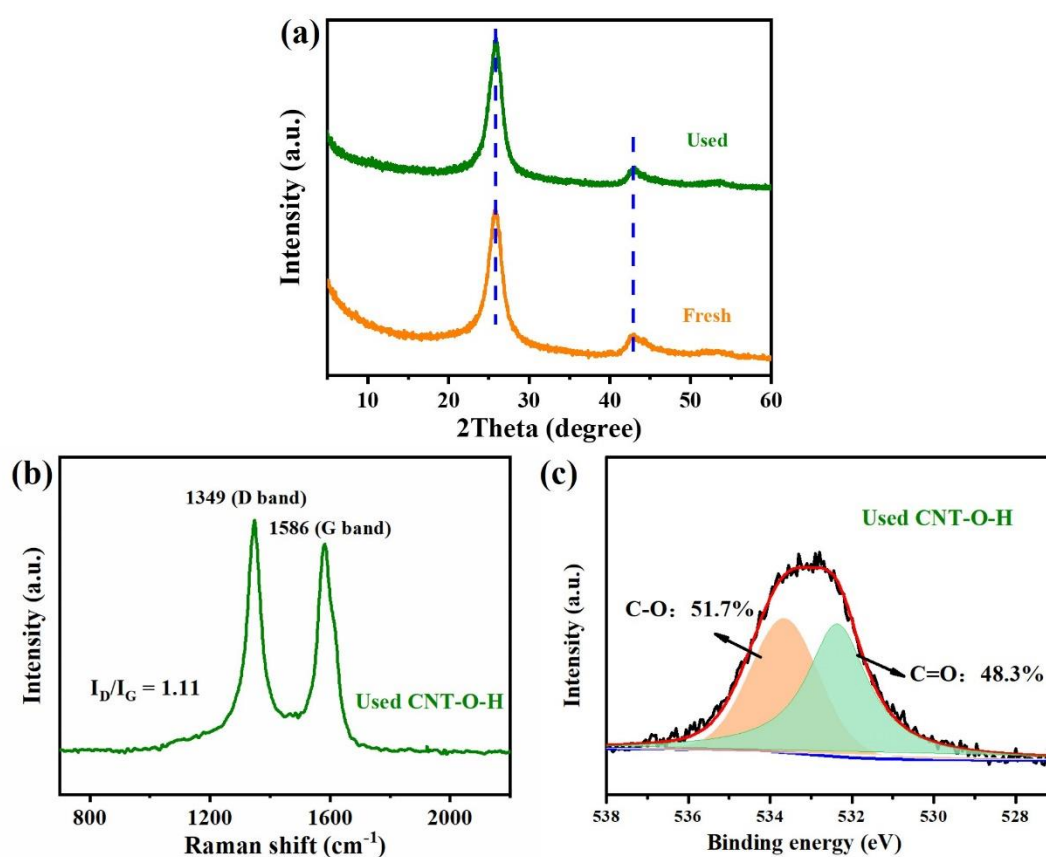


Figure S7. XRD pattern (a), Raman spectrum (b) and O 1s spectrum (c) of used CNT-O-H.

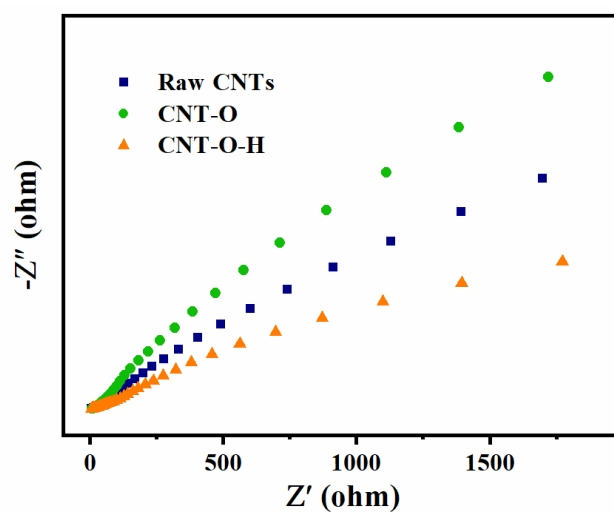


Figure S8. Impedances of raw CNTs, CNT-O and CNT-O-H.