

Supplementary Information

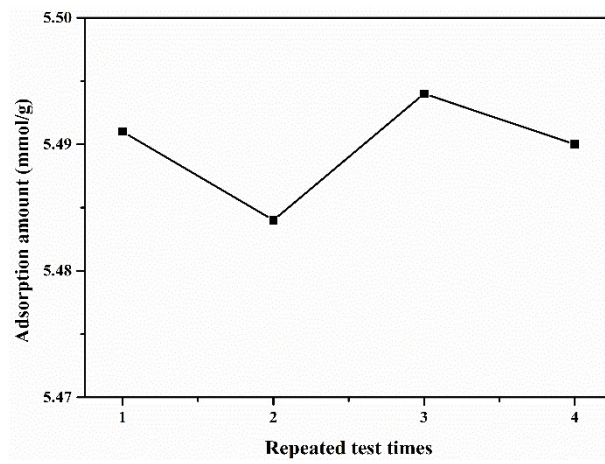


Fig. S1. Variation of acetone adsorption amounts on AC-N at different repeated times.

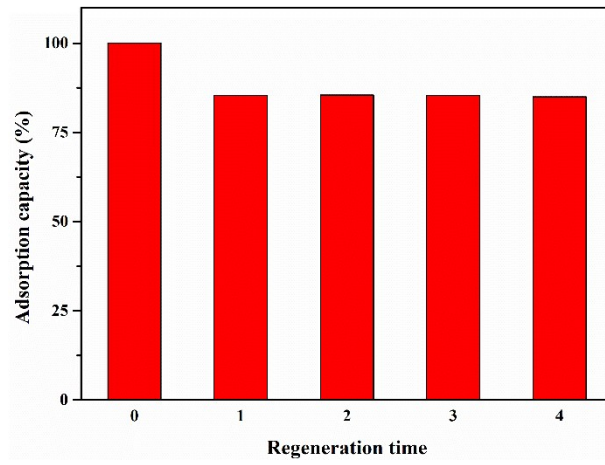


Fig. S2. Influence of regeneration times on the adsorption capacity of AC-N.

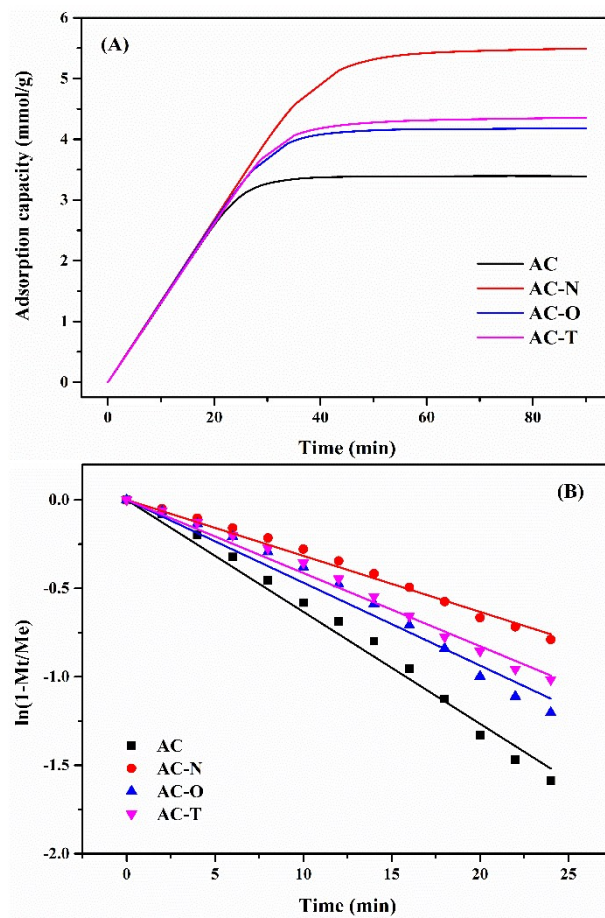


Fig. S3. Acetone adsorption kinetics studies on ACs with various treatments: (A) adsorption kinetics curves, and (B) linear fit of LDF model.

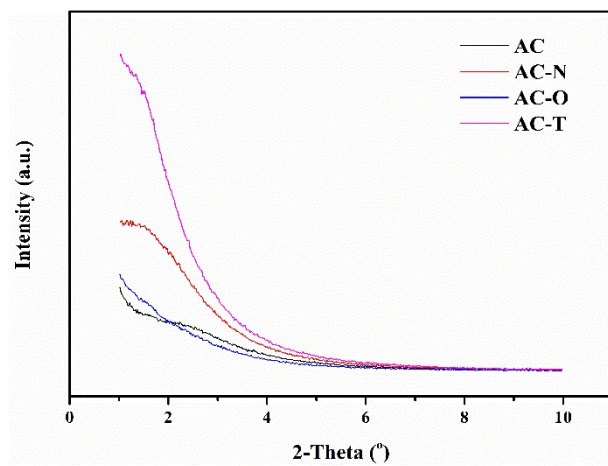


Fig. S4. Small-angle XRD patterns of ACs with various treatments.

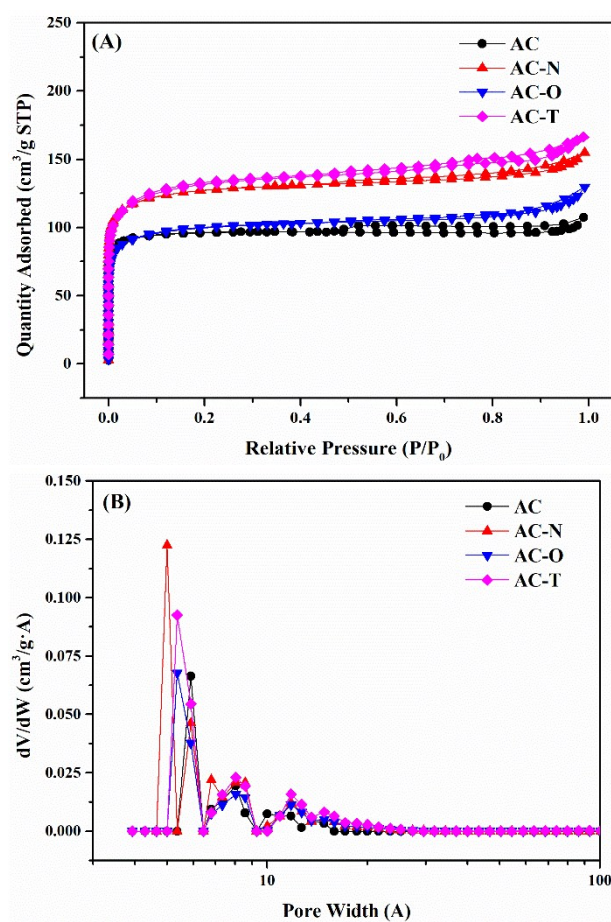


Fig. S5. N_2 adsorption-desorption isotherms at 77 K (A) and pore size distribution calculated by DFT (B).

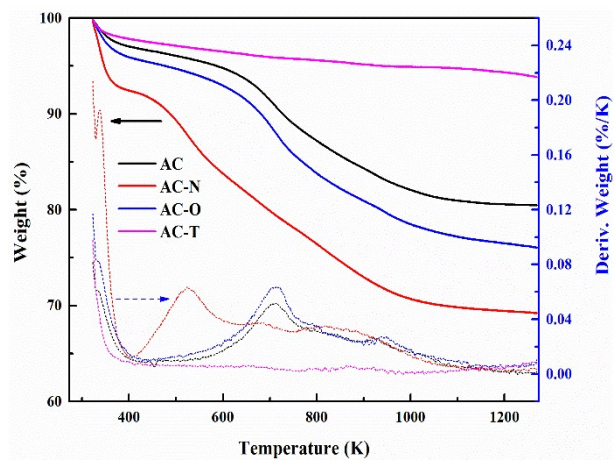


Fig. S6. TG-DTA curves of ACs with different treatments.

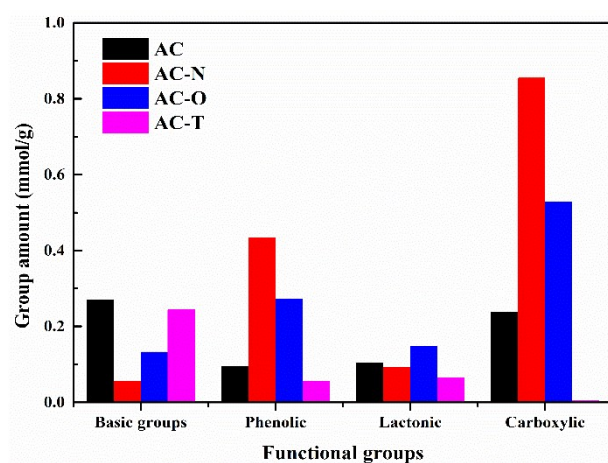


Fig. S7. Surface functional groups of ACs with different treatments.

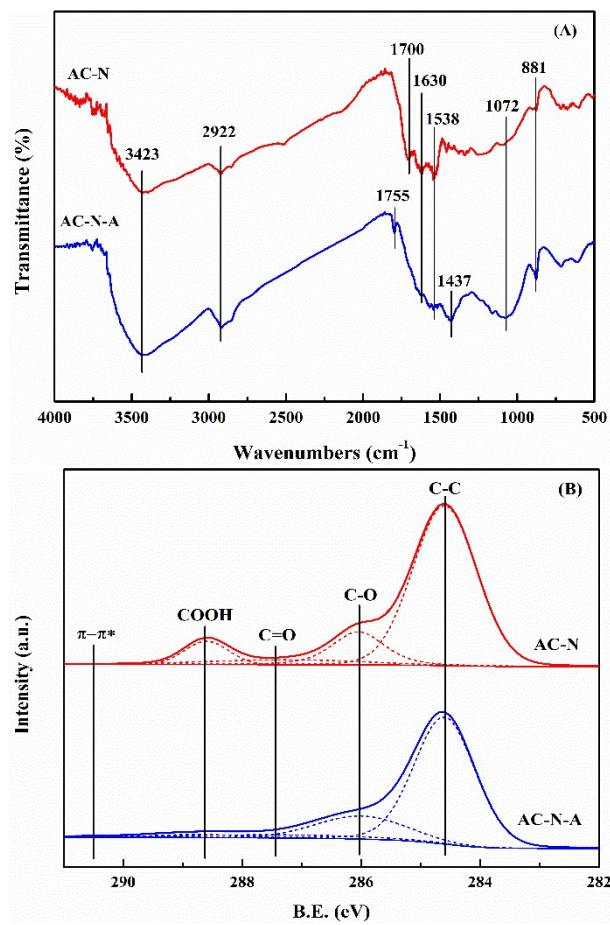


Fig. S8. (A) FTIR spectra and (B) C1s XPS spectra of AC-N before and after acetone adsorption.