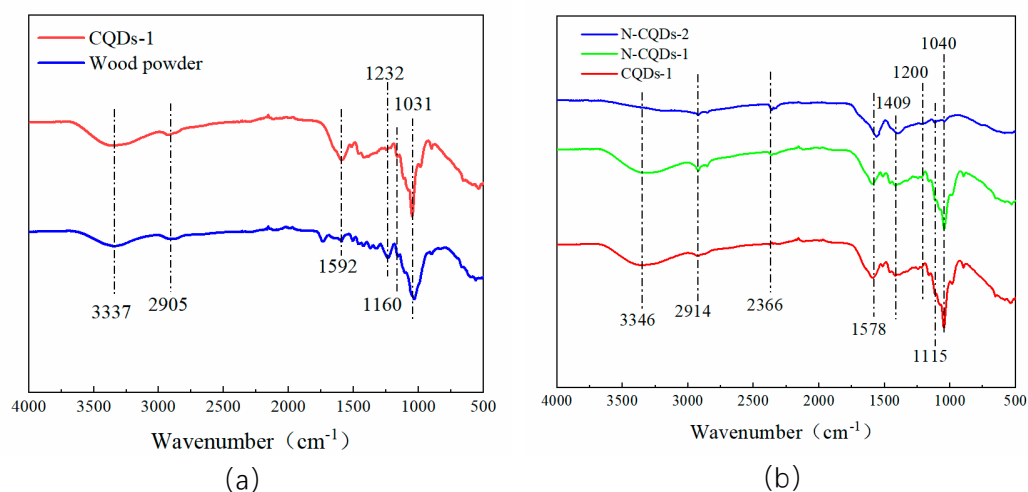
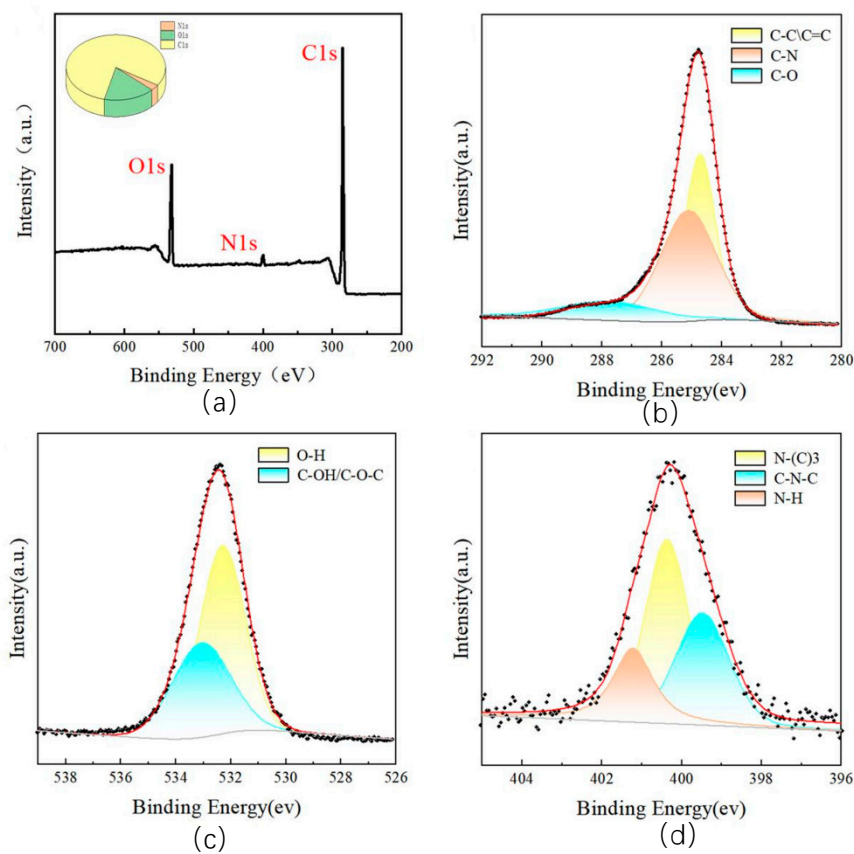


**Figure S1.** (a) Emission spectra of CQDs-1 (both excited at the optimal excitation wave of 360 nm); (b) Emission spectra of N-CQDs-1 and N-CQDs-2 (excited at the optimal excitation wave of 330 nm and 319 nm, respectively); (c) Emission spectra of N-CQDs-1 (excitation wavelengths of 300 nm-400 nm); (d) Emission spectra of N-CQDs-2 (excitation wavelengths of 300 nm-400 nm).



**Figure S2.** (a) FTIR of CQDs; (b) FTIR of N-CQDs.



**Figure S3.** (a) XPS spectra of N-CQDs; (b) C1s spectra of N-CQDs; (c) O1s spectra of N-CQDs; (d) N1s spectra of N-CQDs.