Supplementary Information

Insights into the Role of Common Sulfur Precursors in Hydrothermally Synthesized N,S-Doped Carbon Dots: Fluorescence Modulation via Surface Oxidation Rather Than Sulfur Doping

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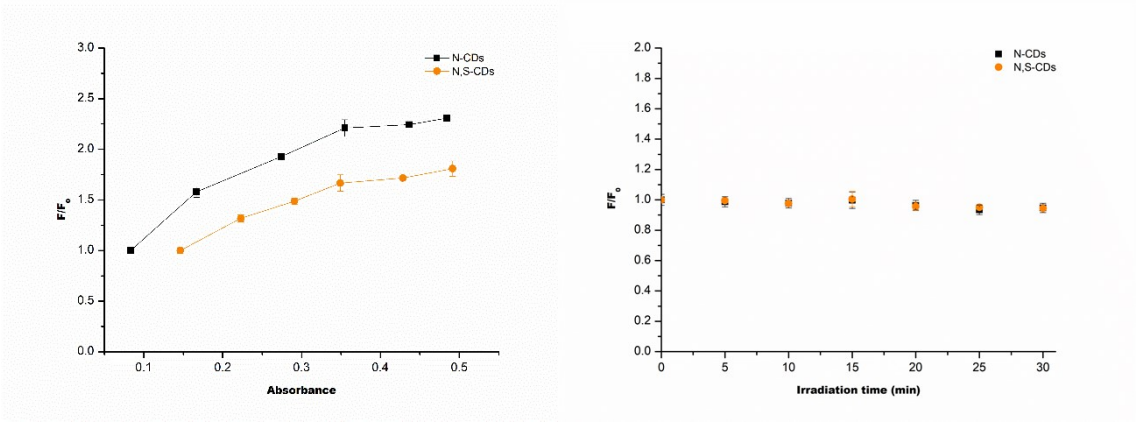

Figure S1. Emission intensity as a function of absorbance (A) and photostability assays (B) for both CDs.

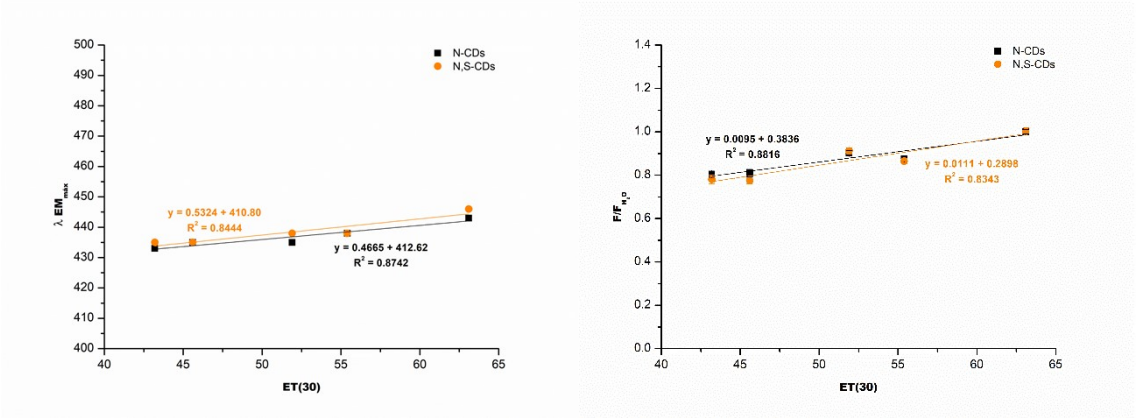

Figure S2. ET(30) considering maximum emission wavelength (A) and emission intensity (B) for both CDs.

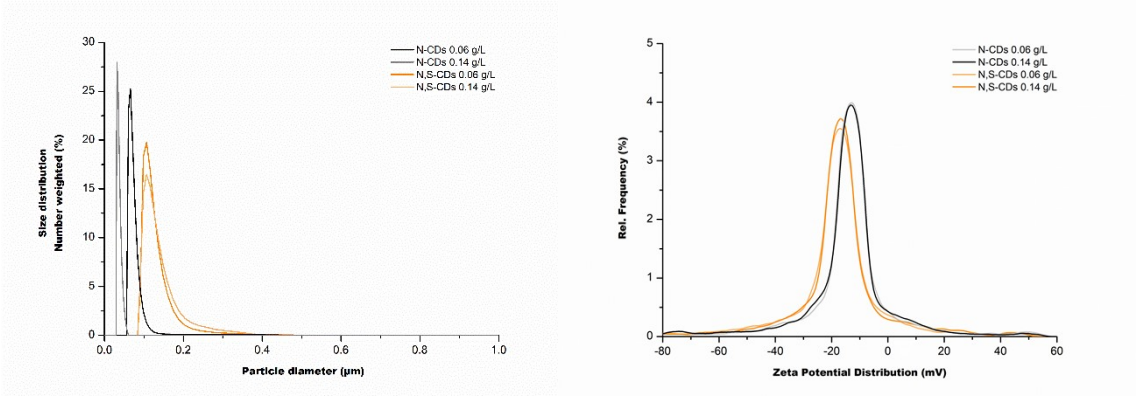

Figure S3. DLS considering a number weighted size distribution for both CDs at 0.06 g/L and 0.14 g/L (A), and ζ potential for both CDs at 0.06 g/L and 0.14 g/L (B).

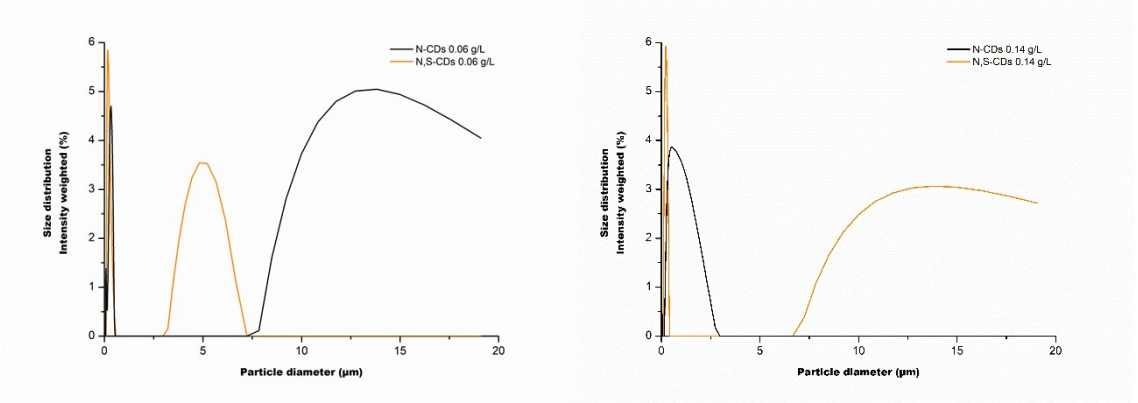

Figure S4. DLS considering an intensity weighted size distribution for both CDs at 0.06 g/L (A) and 0.14 g/L (B).

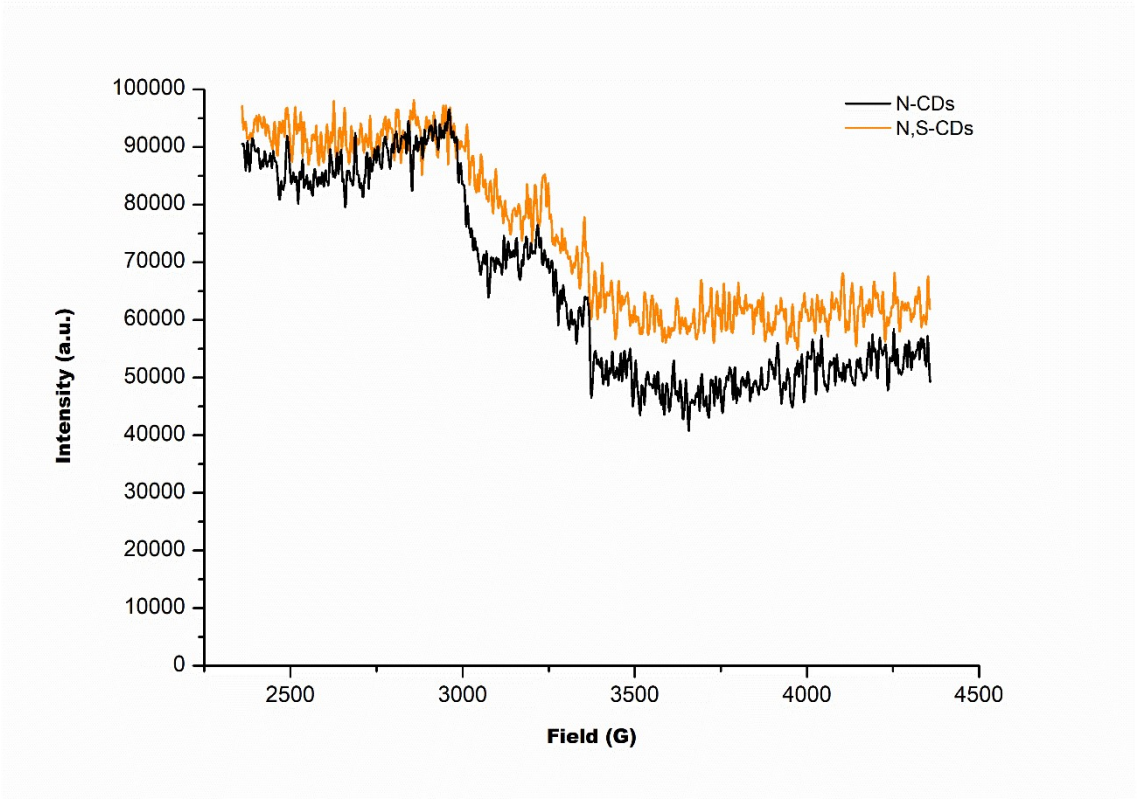

Figure S5. EPR spetra for both CDs.

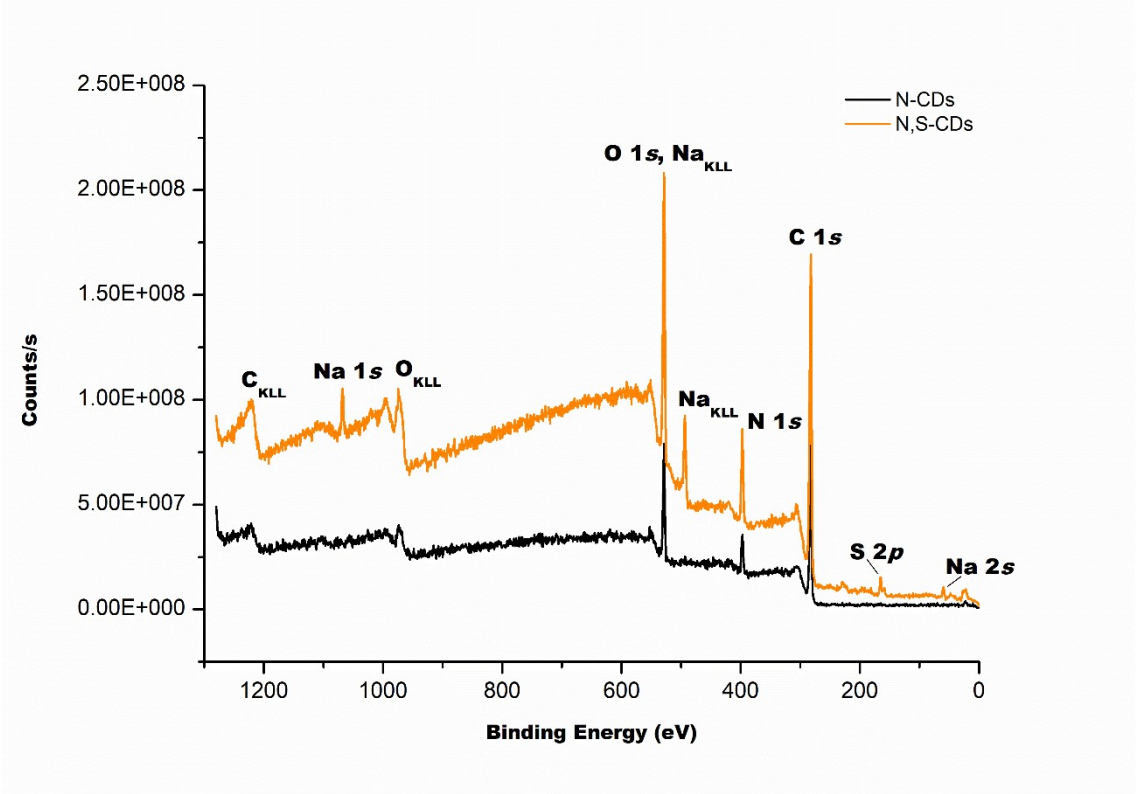

Figure S6. XPS survey for both CDs.

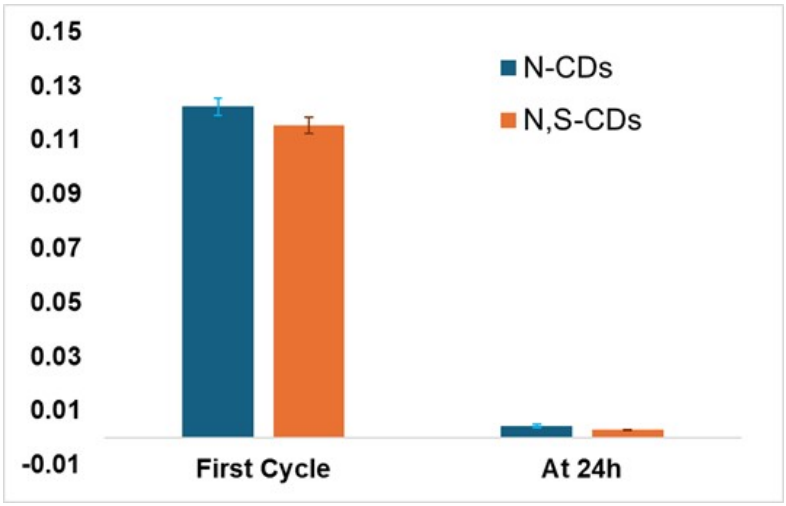

Figure S7. Absorbance of the dialysis external solution at the first cycle of water replacement and at the end of the 24 h dialysis processes for the purification of N-CDs and N,S-CDs, measured at 350 nm (the excitation wavelength of the CDs).

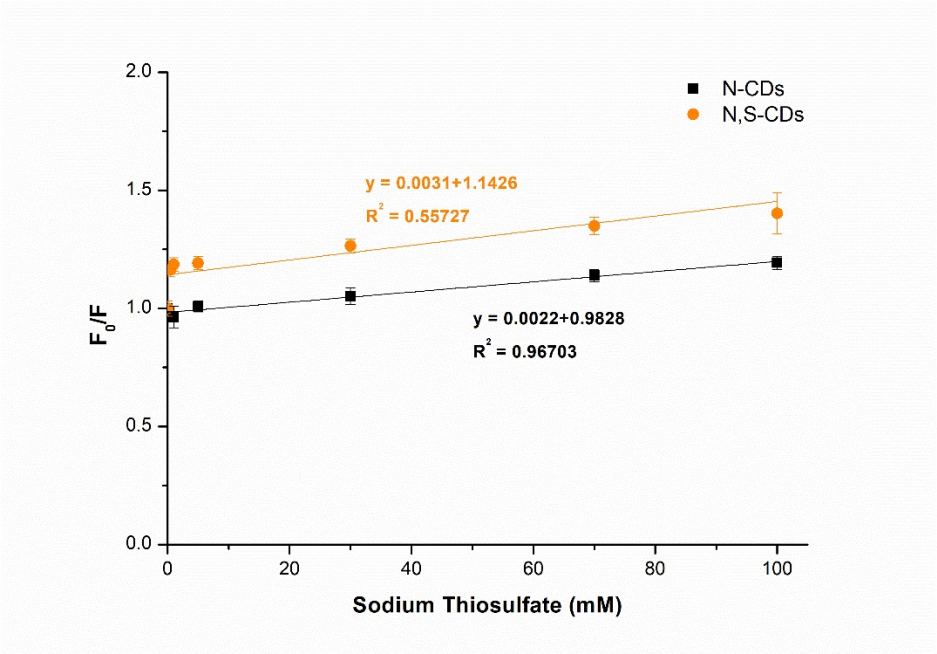

Figure S8. Stern-Volmer plots for the investigation of sodium thiosulfate as potential quencher for N-CDs and N,S-CDs.

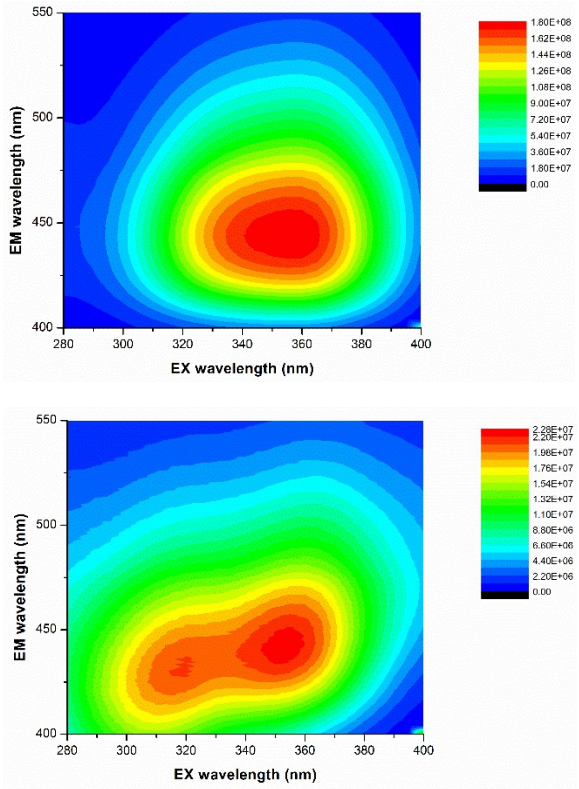

Figure S9. EECPs for N,S-CDs$_{half}$ (top) and N,S-CDs$_{thiourea}$ (bottom), in water.