Supporting Information

Integration of Carbon Dots on Nanoflower Structured ZnCdS as A Cocatalyst for Photocatalytic Degradation

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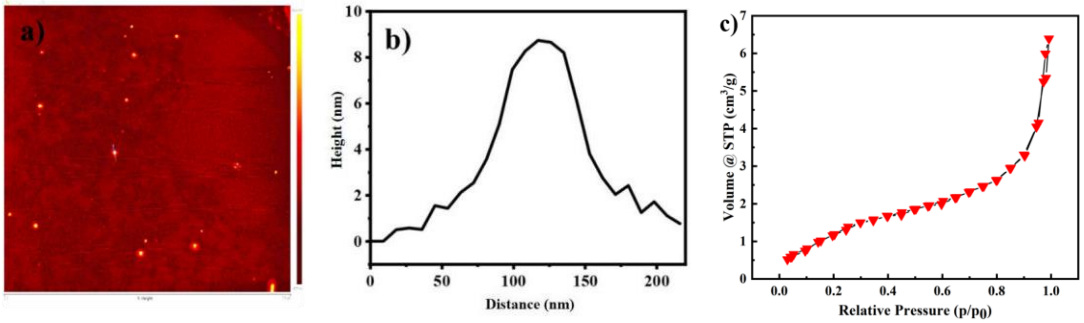

Figure S1. (a) AFM image of carbon-dots (CDs); (b) Particle size height map of carbon dots (CDs); (c) N_2 adsorption–desorption isotherms for the $Zn_{0.2}Cd_{0.8}S$ samples.

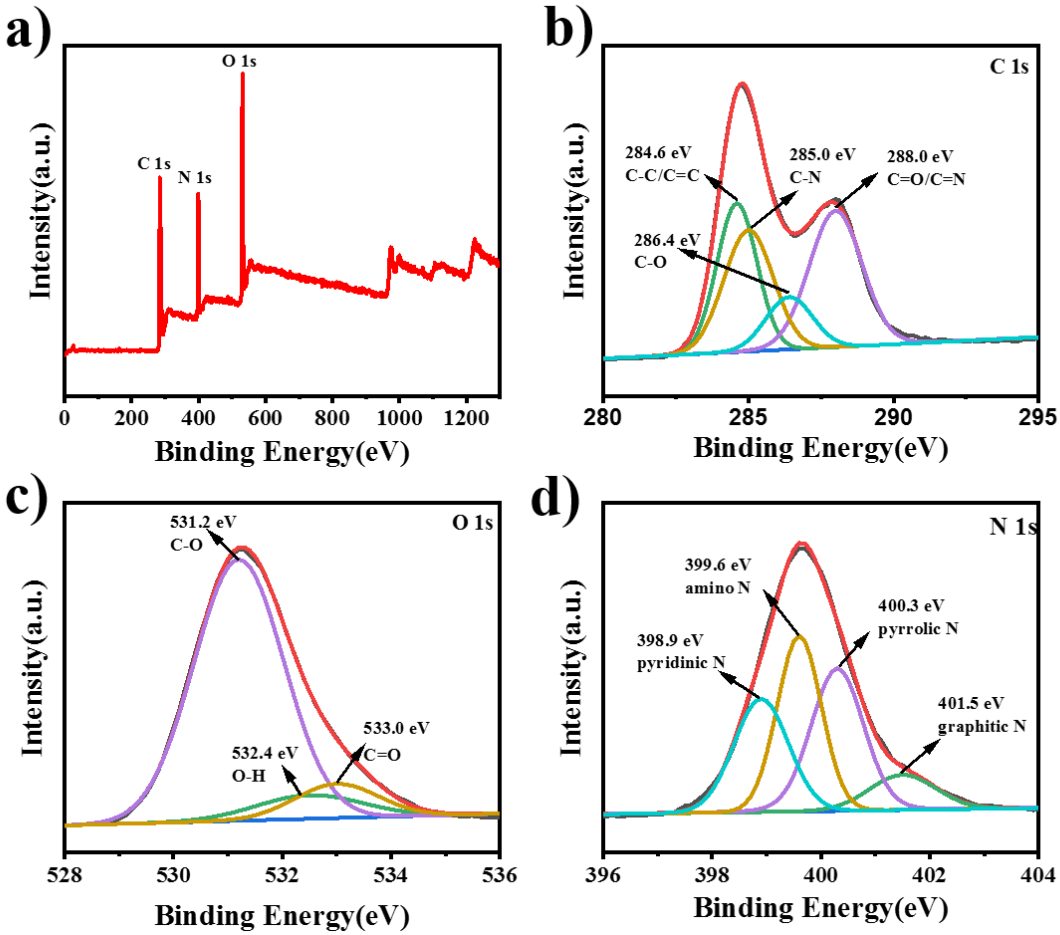

Figure S2. (a) Full scan XPS spectrum carbon dots (CDs); High-resolution XPS (b) C 1s; (c) O 1s; (d) N 1s spectrum of Carbon dots (CDs)

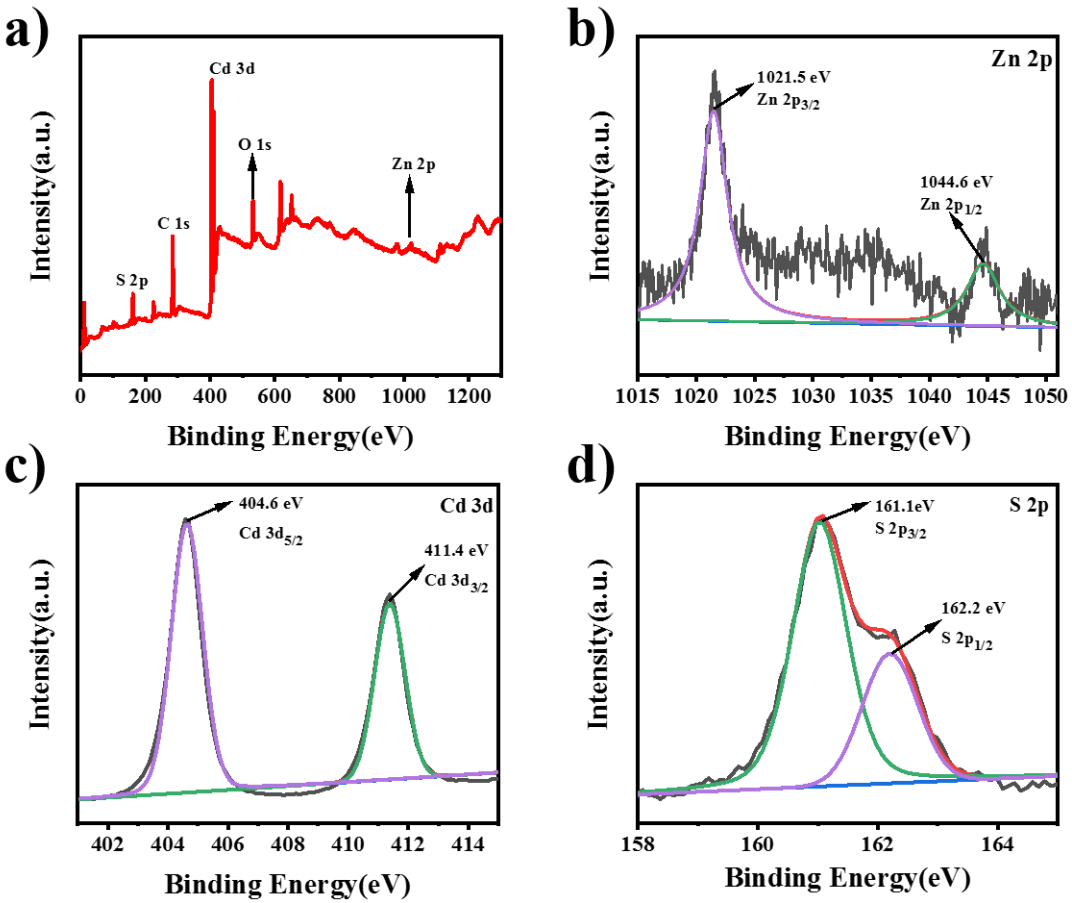

Figure S3. (a) Full scan XPS spectrum of $Zn_{0.2}Cd_{0.8}S$; High-resolution XPS spectrum of $Zn_{0.2}Cd_{0.8}S$: (b) Zn 2p; (c)Cd 3d; (d) S 2p.

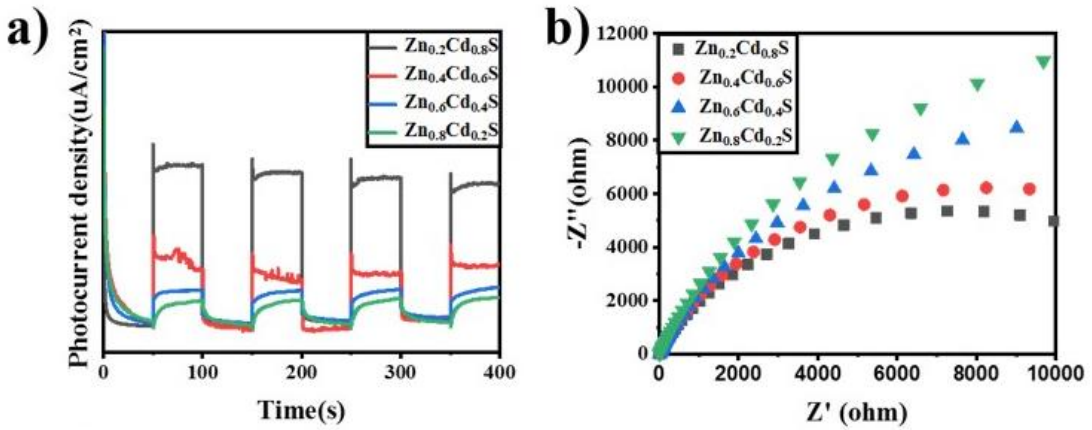

Figure S4. (a) The instantaneous photocurrent diagram of $Zn_xCd_{1-x}S$ (x=0.2, 0.4, 0.6, 0.8); (b) Electrochemical impedance plots of $Zn_xCd_{1-x}S$ (x=0.2, 0.4, 0.6, 0.8);

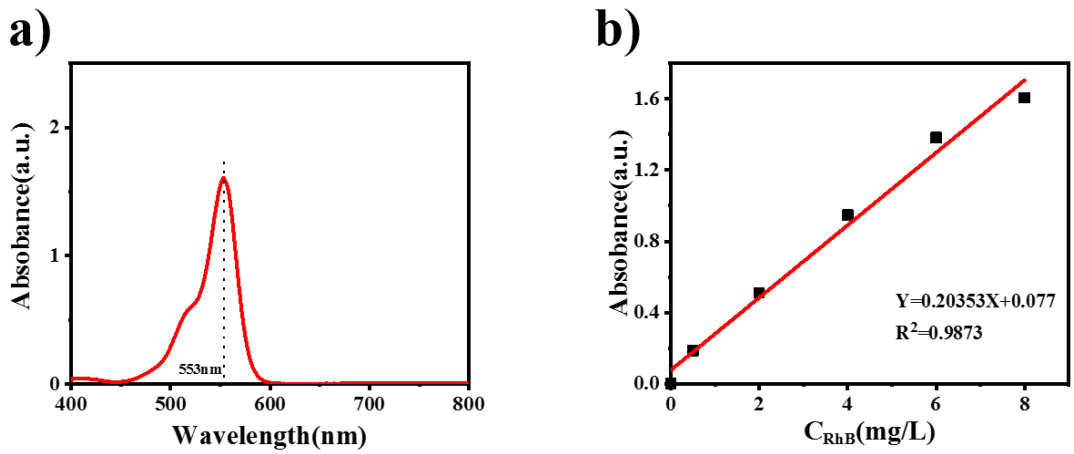

Figure S5. (a) Absorbance curve of rhodamine B solution; (b) Standard absorption curve of RhB solution