

Electronic Supplementary Information

Amino acid functionalized blue and phosphorous-doped green fluorescent carbon dots as bioimaging probe

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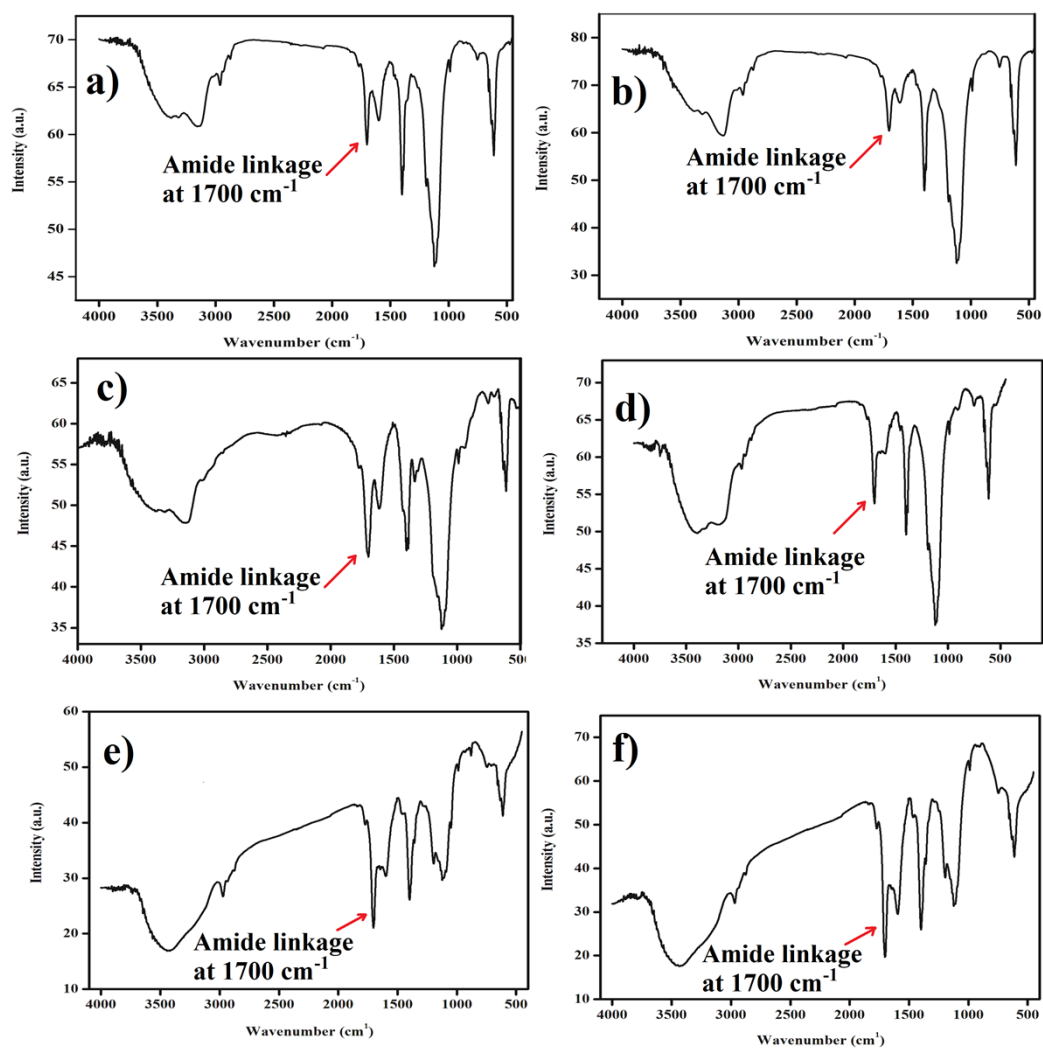


Fig. S1 IR spectrum of (a) CD_{iso} (b) PCD_{iso} (c) CD_{gly}, (d) PCD_{gly} (e) CD_{val} and (f) PCD_{val}

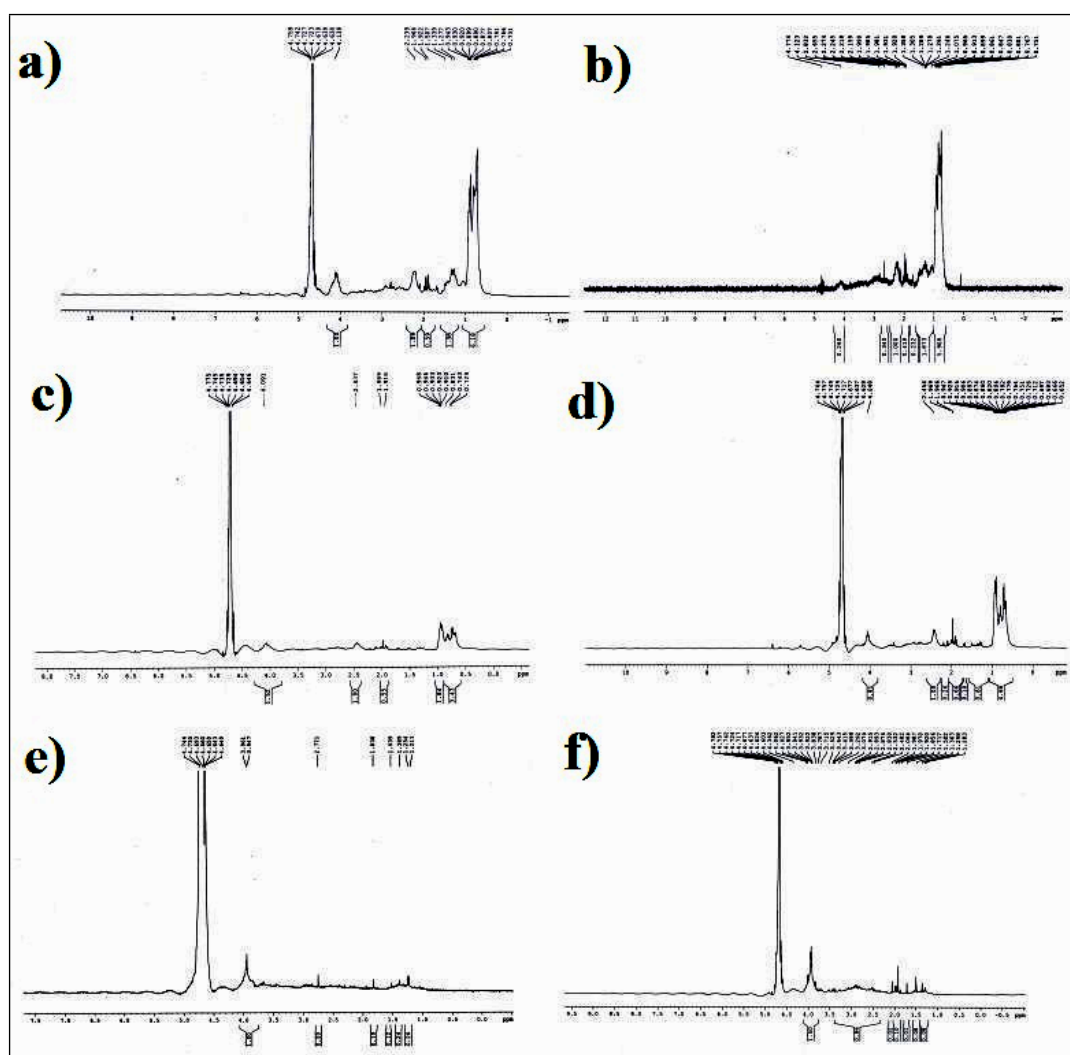


Fig. S2 NMR spectrum of (a) CD_{iso} , (b) PCD_{iso} , (c) CD_{val} , (d) PCD_{val} , (e) CD_{gly} , (f) PCD_{gly}

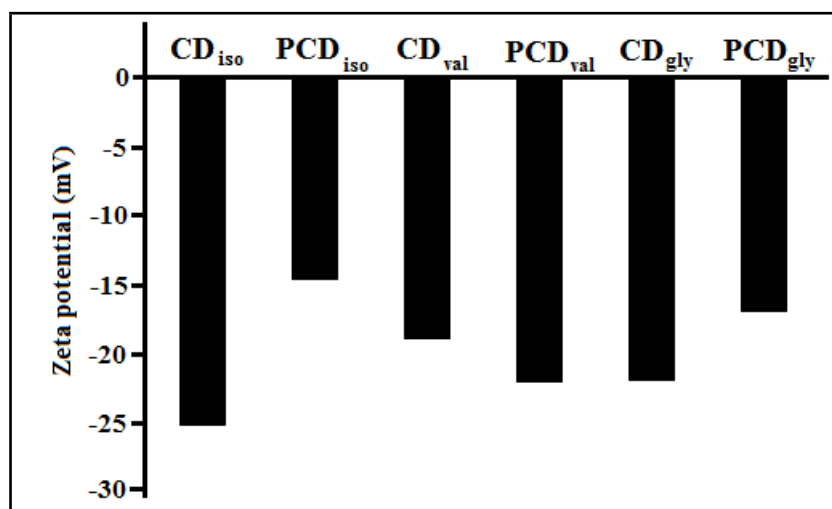


Fig. S3 Zeta potential values of CDs and PCDs.

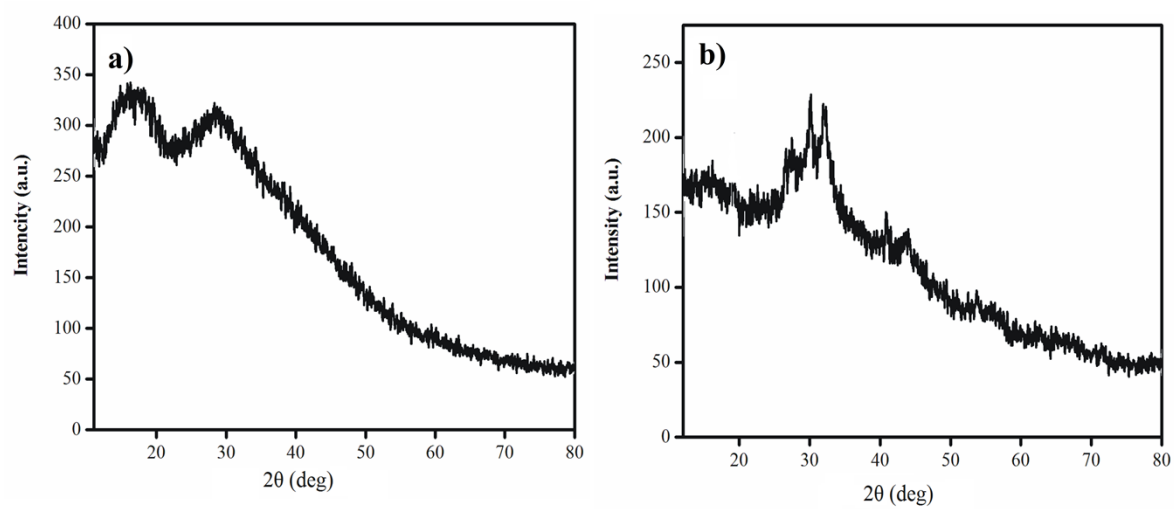


Fig. S4 XRD pattern of (a) CD_{val} and (b) PCD_{val}

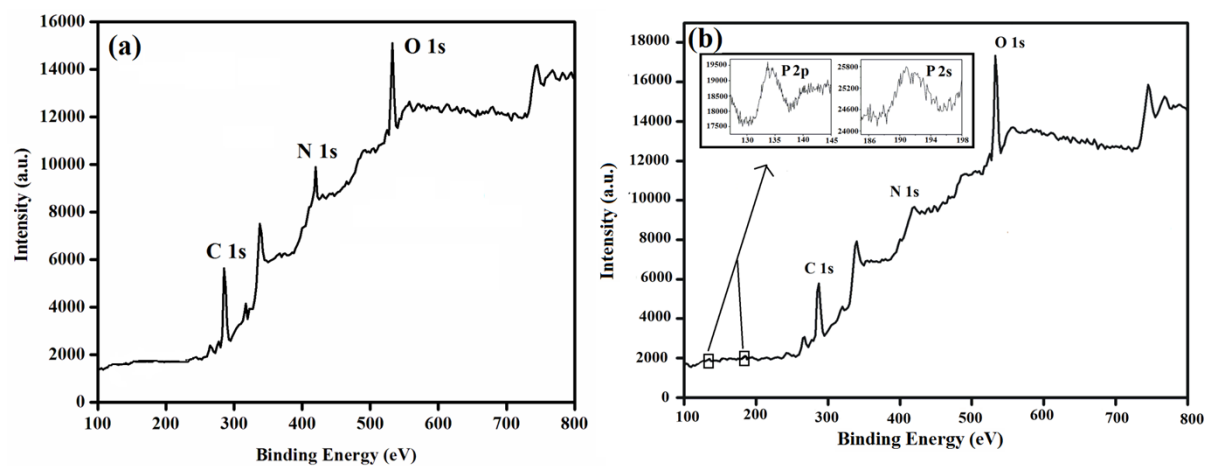


Fig. S5 XPS pattern of (a) CD_{val} and (b) PCD_{val}

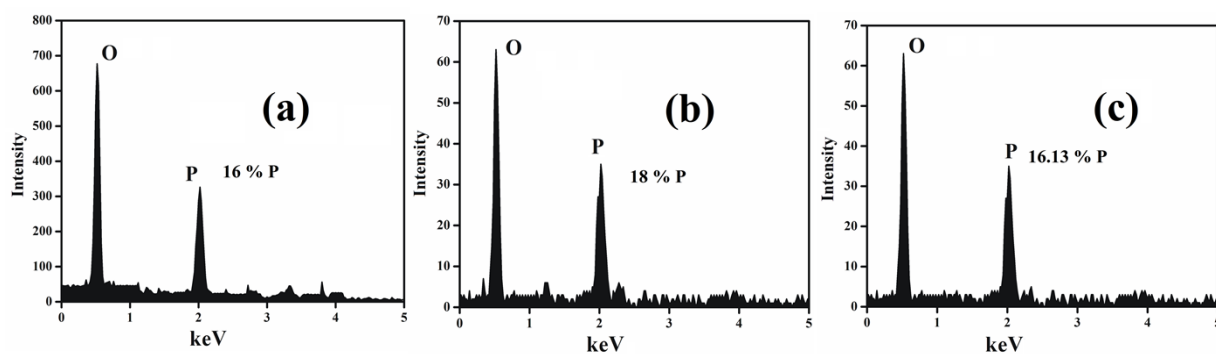


Fig. S6 EDX analysis of phosphorous doped carbon dots ((a) PCD_{iso}, (b) PCD_{gly}, (c) PCD_{val}). Sample was crusted on carbon coated Cu grid for the experiment. Thus, C content was not included in EDX analysis.

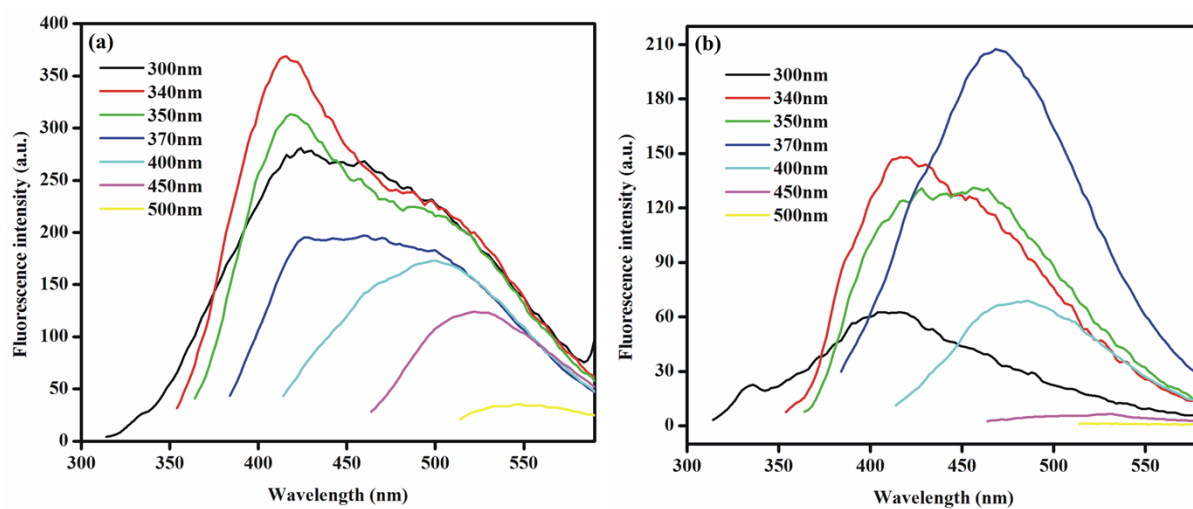


Fig. S7 Excitation dependence emission of (a) CD_{gly} and (b) PCD_{gly}. Excitation wavelength was varied from 300 nm to 500 nm.

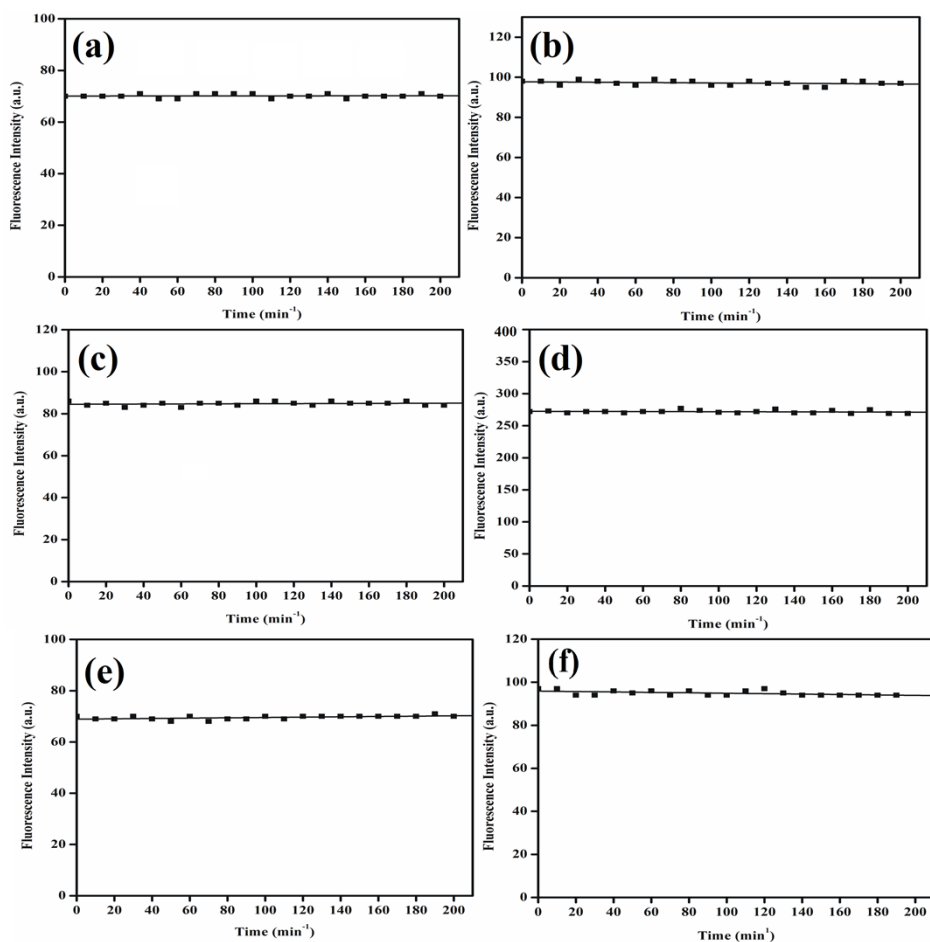


Fig. S8 Photostability of (a) CD_{iso} (b) PCD_{iso} (c) CD_{gly} (d) PCD_{gly} (e) CD_{val} and (f) PCD_{val} solutions under UV (wavelength 365 nm, power 12 W) light irradiation upto 200 minutes. CDs and PCDs solution were excited at 340 nm and 370 nm, respectively.