Supplementary materials

Carbon dots-quinoline derivative nanocomposite: facile synthesis and application as a "turn-off" fluorescent chemosensor for detection of Cu^{2+} ions in tap water

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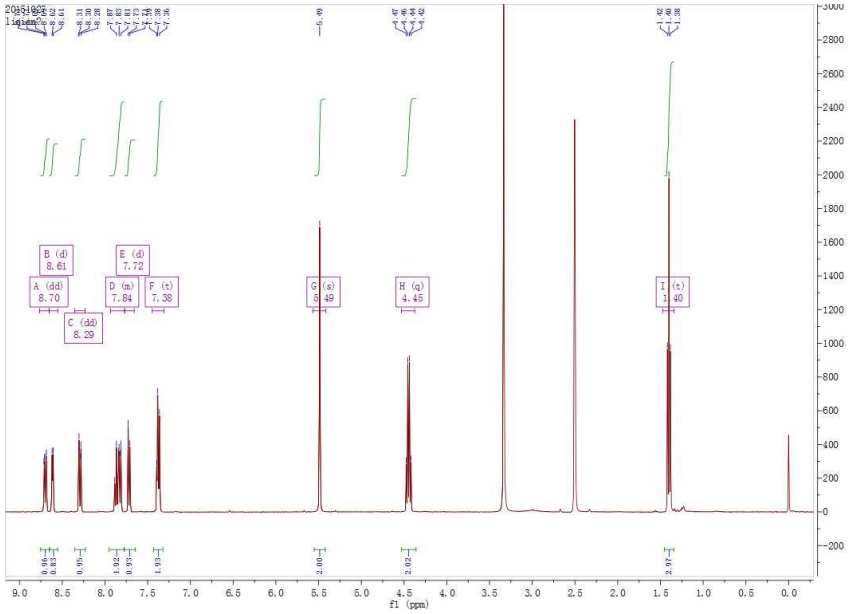

Figure S1. ^{1}H NMR spectra of compound **3** in DMSO-d_6.

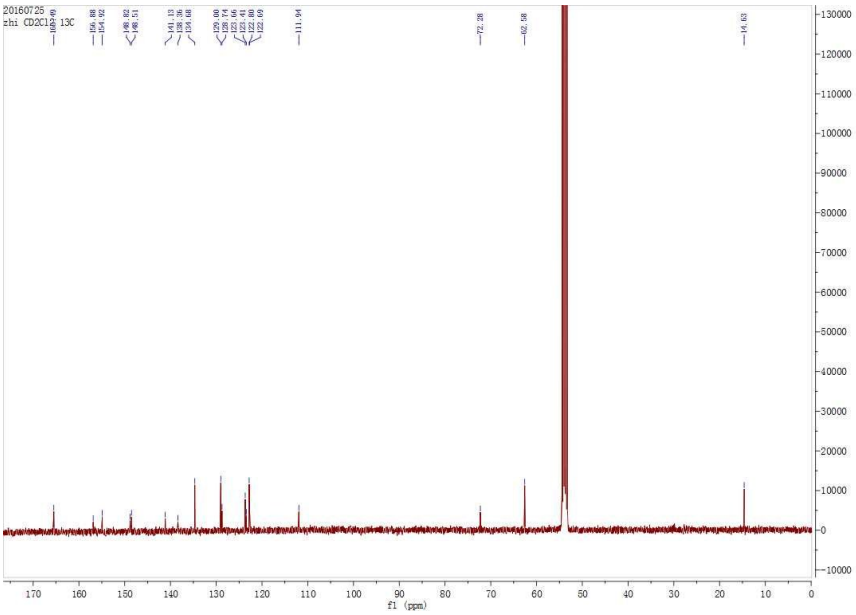

Figure S2. ^{13}C NMR spectra of compound **3** in CD_2Cl_2.

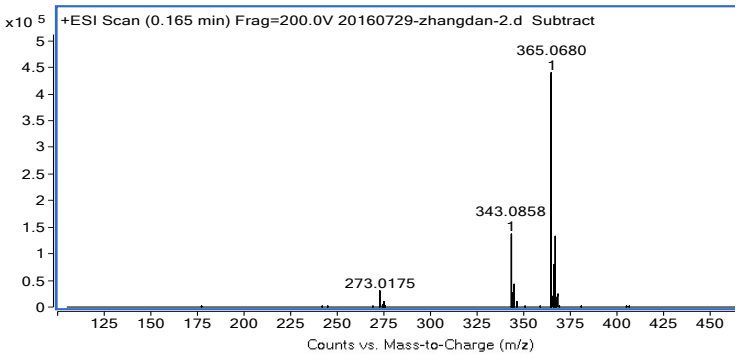

Figure S3. Mass spectra of compound **3**.

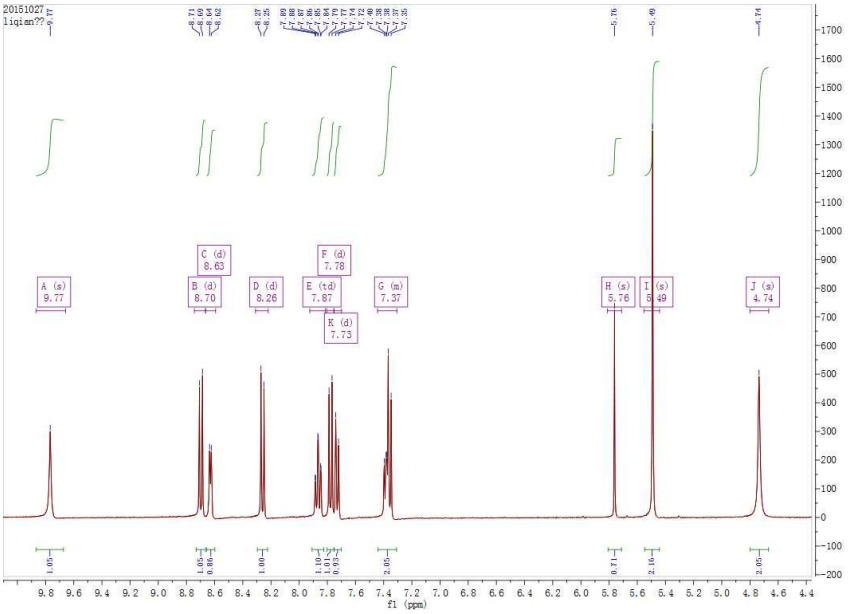

Figure S4. ^{1}H NMR spectra of **Q** in DMSO-d_6.

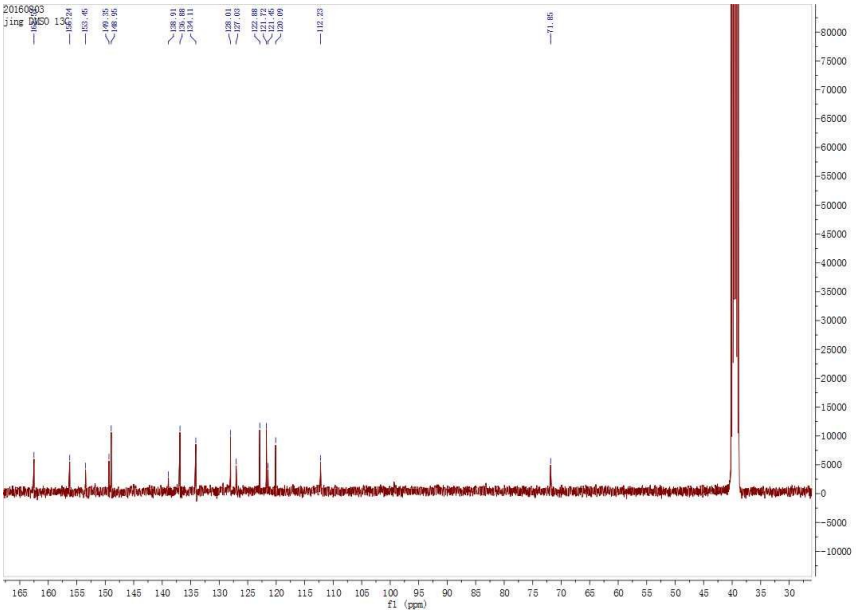

Figure S5. ^{13}C NMR spectra of **Q** in DMSO-d_6.

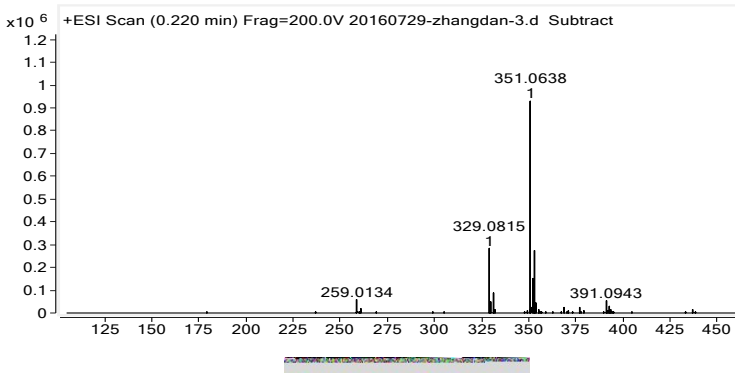

Figure S6. Mass spectra of compound **Q**.

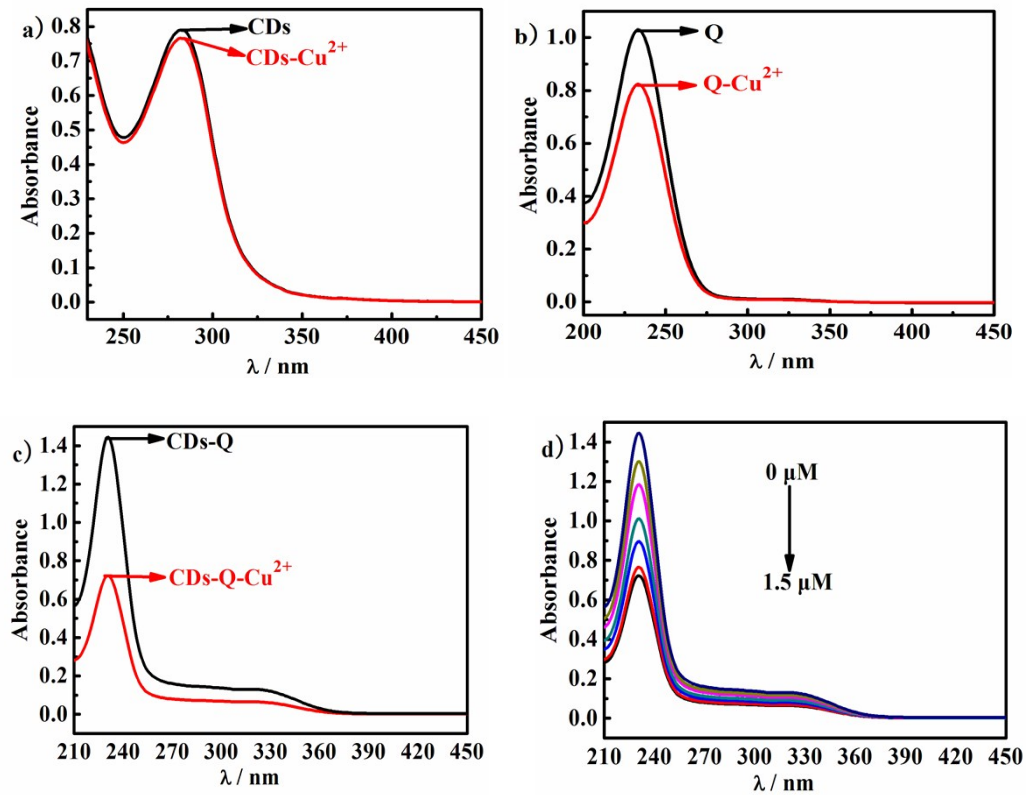

Figure S7 UV-vis absorption spectra of 2.00 mL 0.80 mg L^{-1} CDs (a), Q (b) and CDs-Q (c) react with 1.2 μM Cu^{2+}. (d)UV-vis absorption spectra of the CDs-Q with different concentration of Cu^{2+} (0 μM, 0.1 μM, 0.3 μM, 0.6 μM, 0.9 μM, 1.2 μM and 1.5 μM)

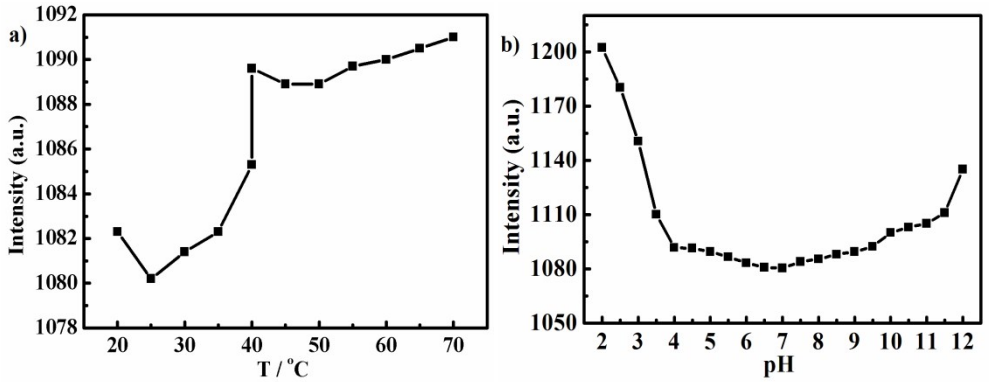

Figure S8 Influence of temperature (a) and pH (b) on the fluorescence intensity of the system at 464nm. (Conditions: 2.00 mL 0.80 mg mL^{-1} CDs-Q, $C_{Cu^{2+}} = 5x10^{-7}$ M).