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Electronic Supplementary Material

**Fig. S1.** (a) XPS spectra of CDs-TY. High-resolution spectrum of (b) C 1s, (c) N 1s, and (d) O 1s of the CDs-TY.



**Fig. S2.** (a) Normalized fluorescence intensity of CDs-TY in different NaCl concentrations ranging from 0 to 1 M. (b) Normalized fluorescence intensity of CDs-TY under UV (365 nm) irradiation for 2 h. (c) The fluorescence intensity of CDs-TY varying with the sample pH value from 2 to 8.



**Fig. S3.** Effect of (a) sample pH value and (b) reaction time on the detection of *p*-NP and Ni<sup>2+</sup> with CDs-TY.



**Fig. S4.** HeLa cell viability from MTT assays with different CDs-TY concentration after 24 h incubation