Supporting information for

Synthesis of green fluorescent carbon dots and their application in mercury ion detection

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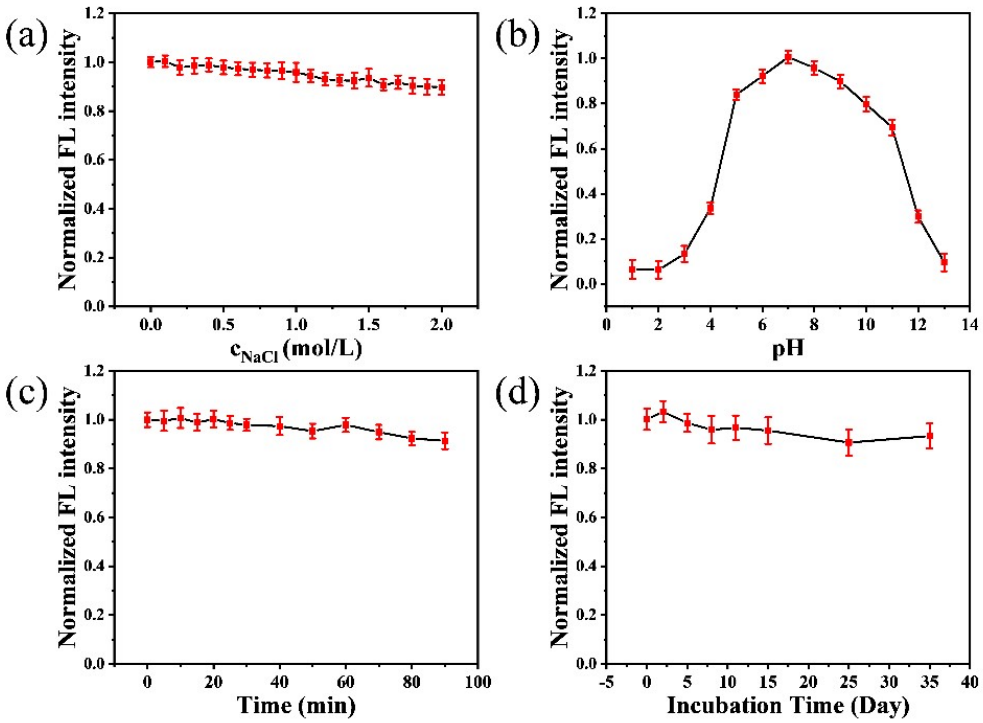

Fig. S1 The effects of GCDs at (a) different concentrations of NaCl, (b) different pH values, (c) continuous irradiation of 365 nm with a UV lamp, (d) different storage time

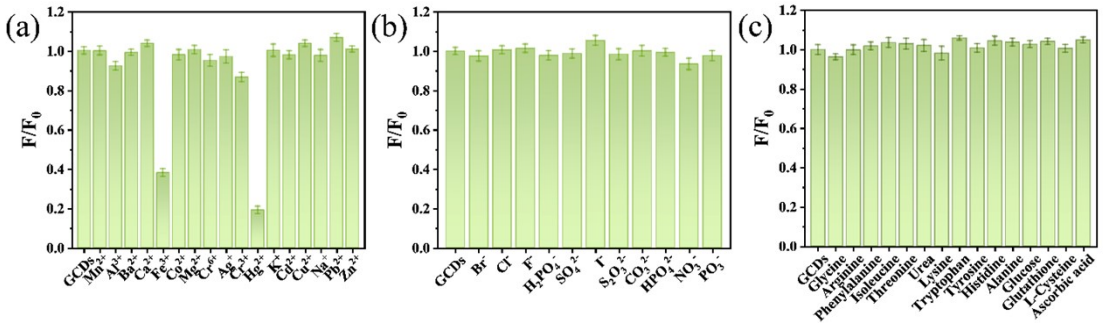

Fig. S2 Selectivity experiments of the GCDs on metal ions (a), anions (b) and small molecules (c)

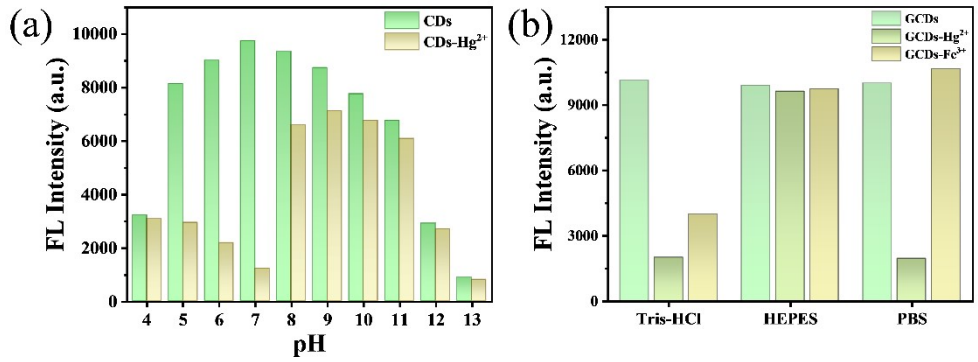

Fig. S3 The effects of (a) different pH, (b) different buffer solutions on the detection of Hg^{2+} by GCDs

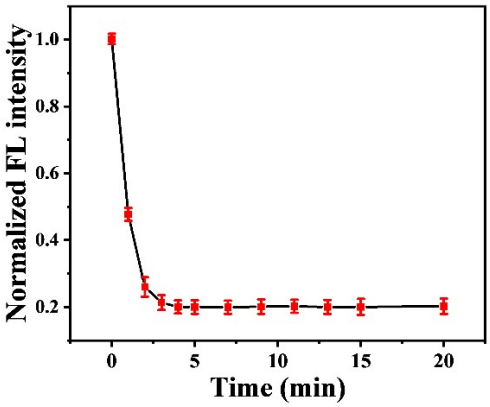

Fig. S4 The effects of incubation time on GCDs detection of Hg^{2+}

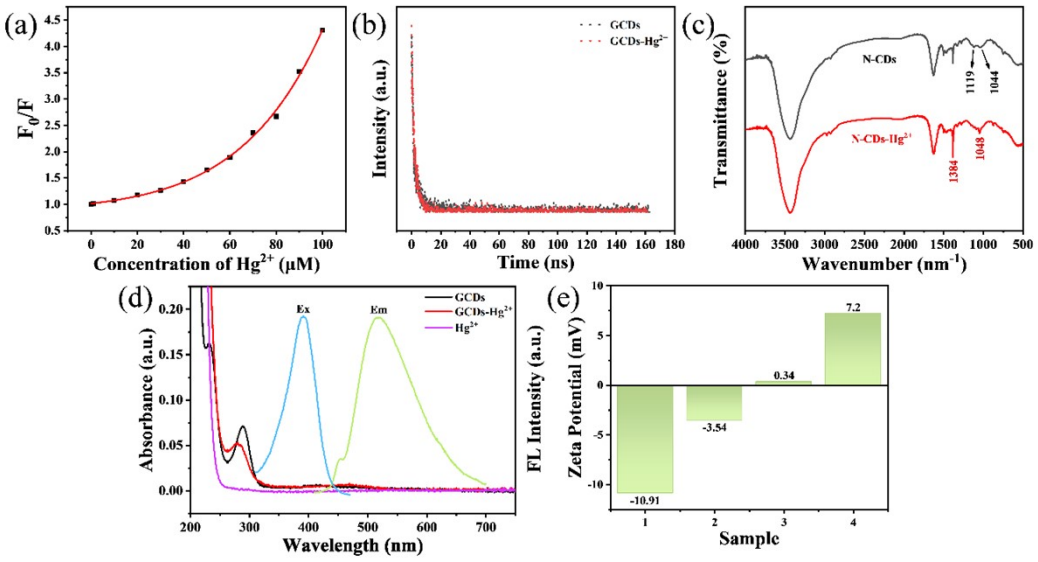

Fig. S5 (a) Stern-Volmer plot of the GCDs after the addition of Hg^{2+}, (b) the fluorescence lifetime of GCDs, (c) FT-IR spectra of GCDs and GCDs added with Hg^{2+}, (d) UV absorption spectrum of GCDs and GCDs added with Hg^{2+}, (e) Zeta potential of 4 samples that the GCDs solution of adding 0, 20, 50, 80 μM Hg^{2+}, respectively