Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Materials

Highly dispersive PEI-modified CDs@ZIF-L dual-emitting fluorescent sensor for detecting metal ions

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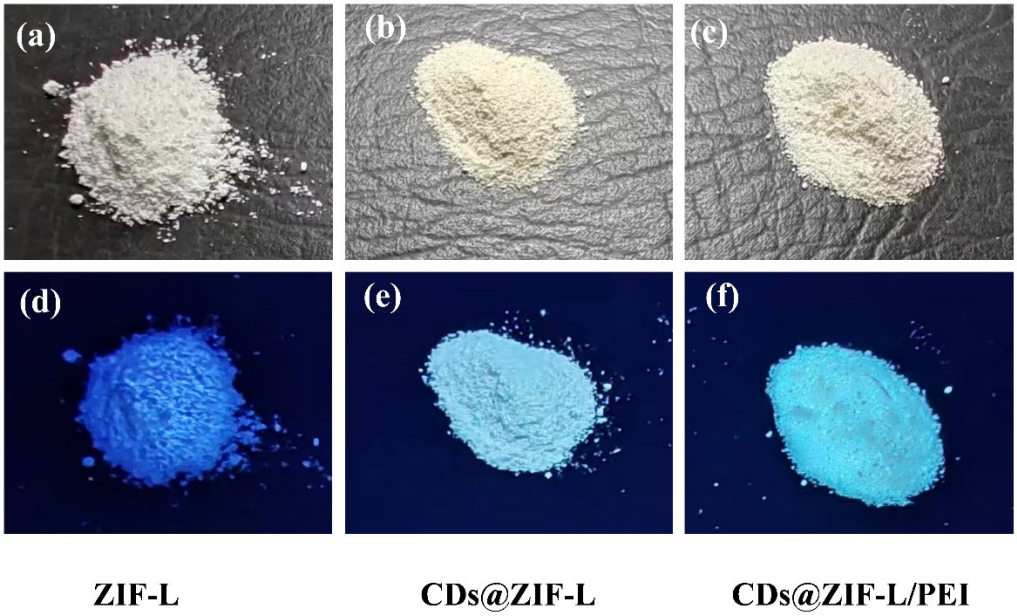

Fig. S1 Photographs under natural and UV lamp of solid samples (λ = 365 nm). (a)(d) ZIF-L; (b)(e) CDs@ZIF-L; (c)(f) CDs@ZIF-L/PEI

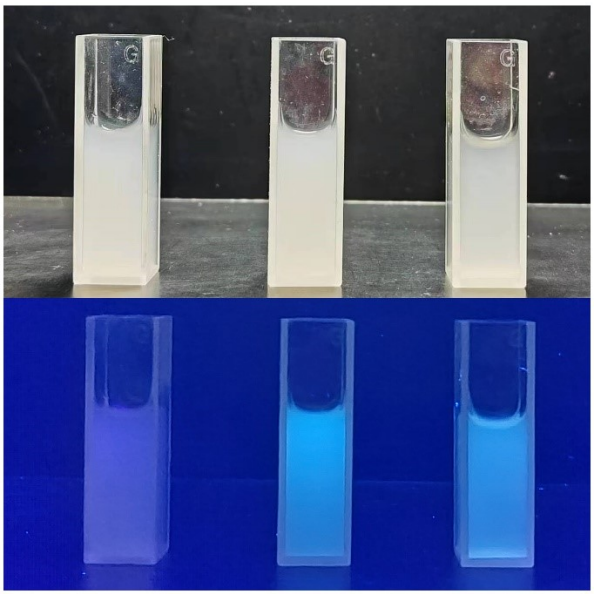

Fig. S2 Photographs under natural and UV lamp of dispersion samples (λ = 365 nm).

From left to right: ZIF-L, CDs@ZIF-L, CDs@ZIF-L/PEI

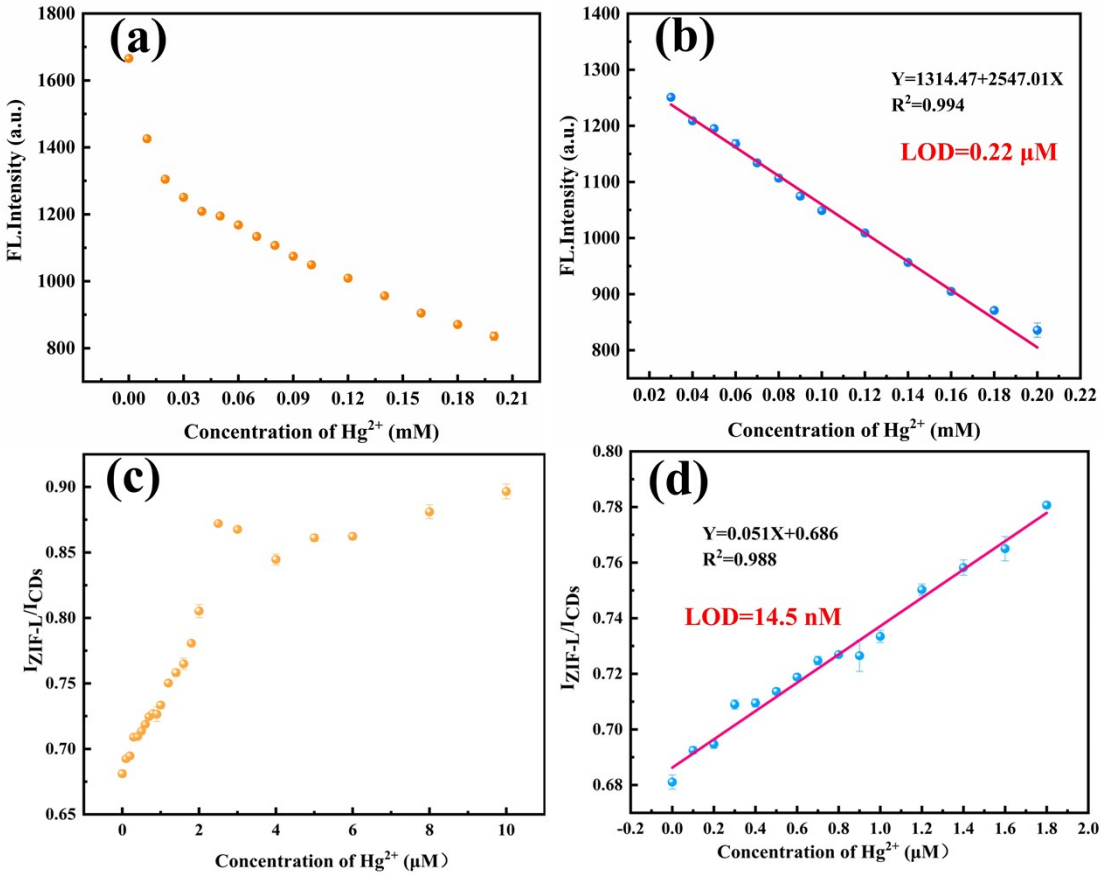

Fig. S3 (a)(b) The linear equation for the FL intensity quenching in various concentration of $Hg^{2+}$of CDs. (c)(d) The linear equation for the FL quenching ratio in various concentration of $Hg^{2+}$of CDs@ZIF-L/PEI.

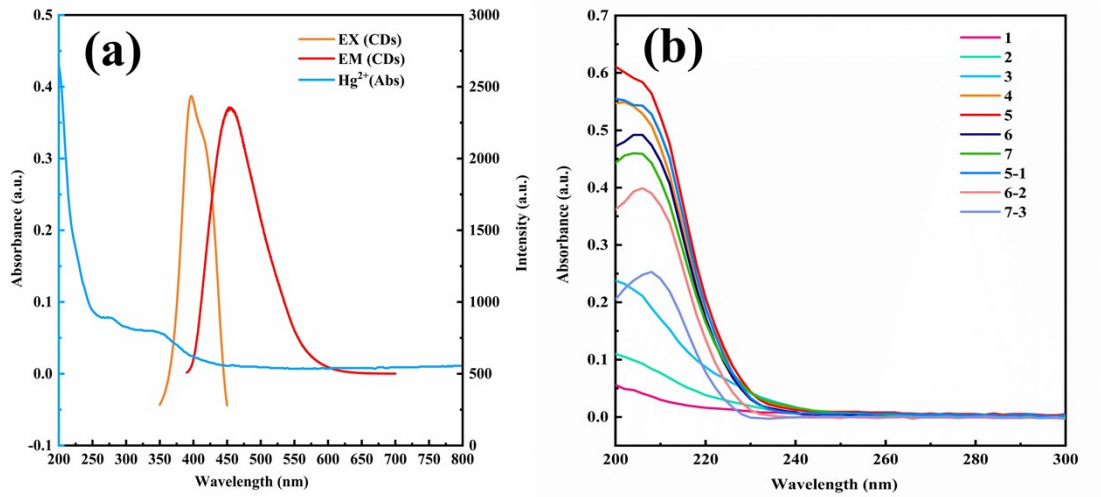

Fig. S4 (a) Overlap between the excitation, emission bands of CDs and the absorption band of the Hg^{2+}. (b)UV-vis absorption spectra of Hg^{2+} (1–3: 0.01, 0.02, and 0.04 mM Hg^{2+}); (4) CDs@ZIF-L/PEI(1.0mg/ml); CDs@ZIF-L/PEI in the presence of different concentrations of Hg^{2+} (5-7: 0.01, 0.02, and 0.04 mM Hg^{2+})