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Supplementary Materials

Turn-on fluorescent sensor for highly sensitive mercury (II) detection based on carbon dots-labeled oligodeoxyribonucleotide and MnO_2 nanosheets

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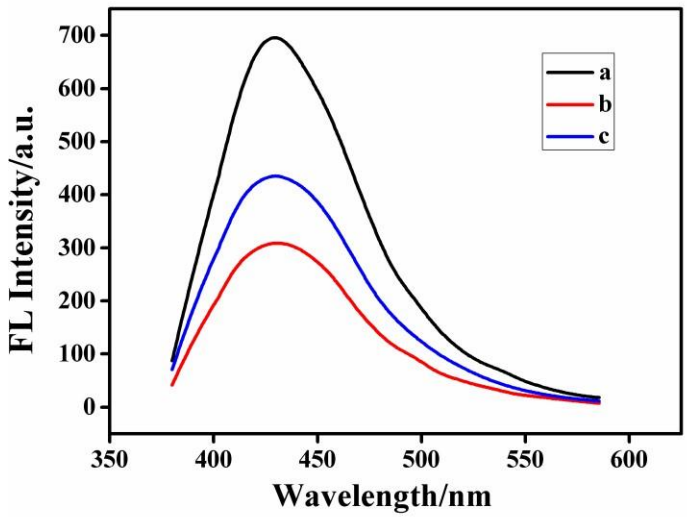

Fig. S1. The fluorescence emission spectra of CDs under various conditions: (a) ssDNA1-CDs + ssDNA2-CDs; (b) ssDNA1-CDs + ssDNA2-CDs + MnO_2; (c) ssDNA1-CDs + ssDNA2-CDs + MnO_2 + Hg^{2+}. Conditions: ssDNA1/ssDNA2-CDs, 0.17 μmol $\cdot L^{-1}$; MnO_2, 300 μg $\cdot mL^{-1}$; Hg^{2+}, 0.1 μmol $\cdot L^{-1}$; pH, 7.0.

Table S1 Comparison of the proposed method with other sensors.

Analytical methods	Linear range (nmol·L^{-1})	LOD (nmol·L^{-1})	References
Fluorescence	1.83-109.8	0.83	1
Electrochemistry	100-2000	100	2
Colorimetry	50-2500	50	3
Fluorescence	2-200	0.67	This method

References

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