Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting information

Synthesis of multi-function green fluorescence carbon dots and its application as fluorescence probe for Hg^{2+} detection and zebrafish imaging

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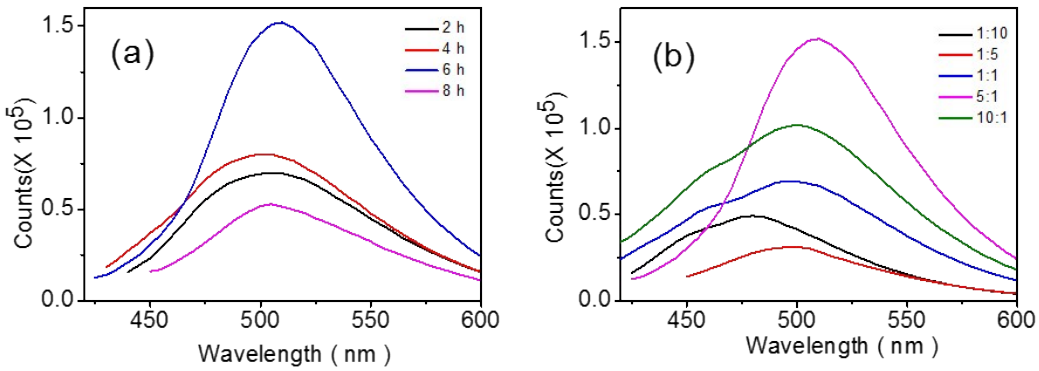

Fig.S1 (a) At 160 ℃, the spectra for different reaction times at excitation of 410 nm with the ratio of 5:1 (aniline and ethylenediamine)；(b) At 160 ℃, 6h , the spectra for different ratio (aniline and ethylenediamine) at excitation of 410 nm.

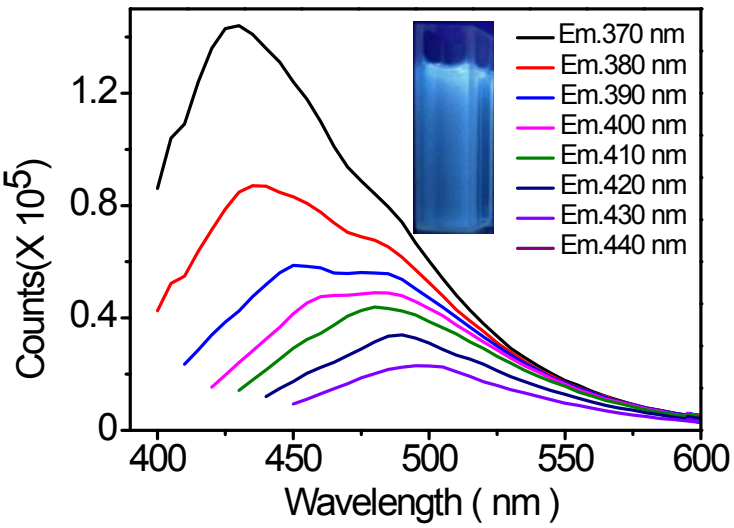

Fig.S2 Photoluminescence spectrum of N -CDs when the ratio of aniline and ethylenediamine is 1:10.

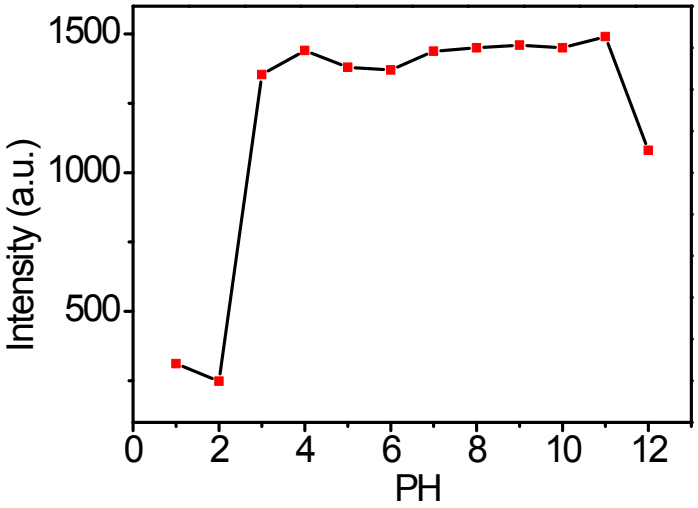

Fig.S3 The fluorescence intensity of N-CDs in different pH values.

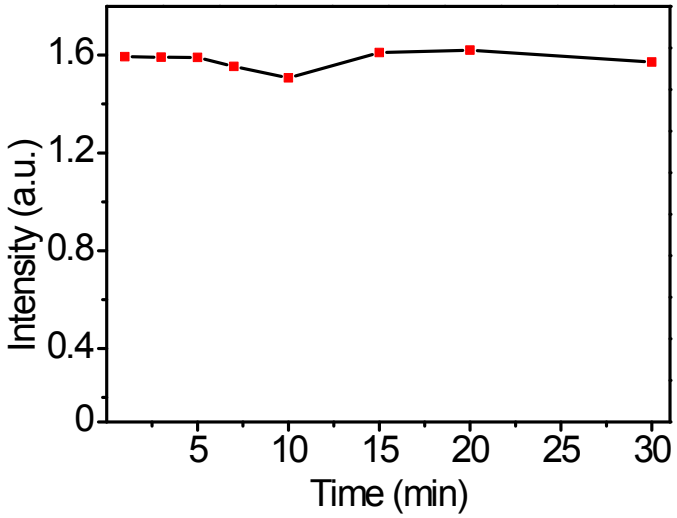

Fig.S4 Time-dependent fluorescence changes of N-CDs in the presence of H_2O_2 solution (50 mM).

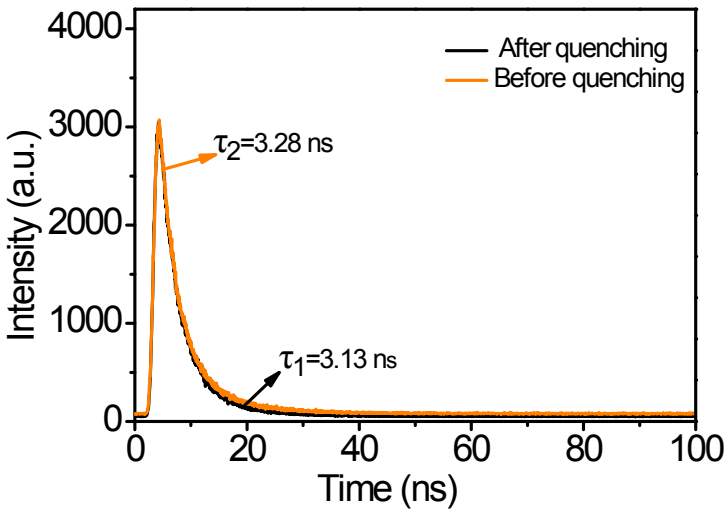

Fig.S5 The florescence decays of N-CDs before and after quenching by Hg^{2+} ions.

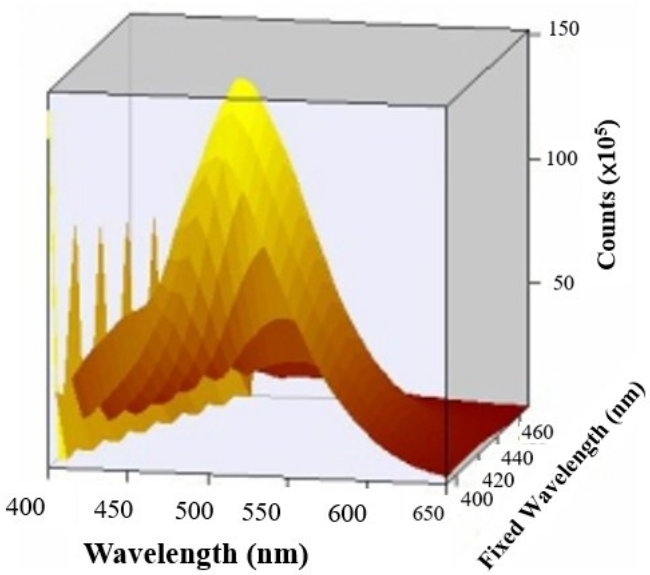

Fig. S6 The 3D map plot of the excitation spectrum and emission spectra to the N-CDs.

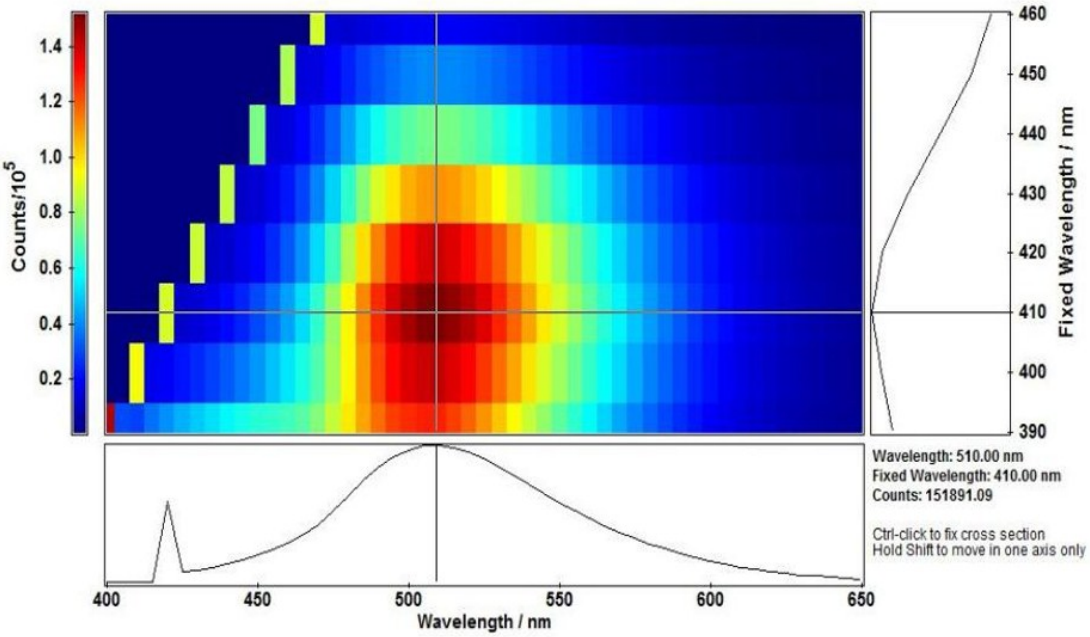

Fig.S7 Contour plot of photoluminescence spectrum of N-CDs.

Table 1 The content of N, O, C elements in the as-prepared carbon dots.

Name	Atomic %
N1s	25.99
O1s	23.07
C1s	50.94