Supporting Information

Preparation of biomass-based carbon dots with aggregation luminescence enhancement from hydrogenated rosin for biological imaging and detection of Fe^{3+}

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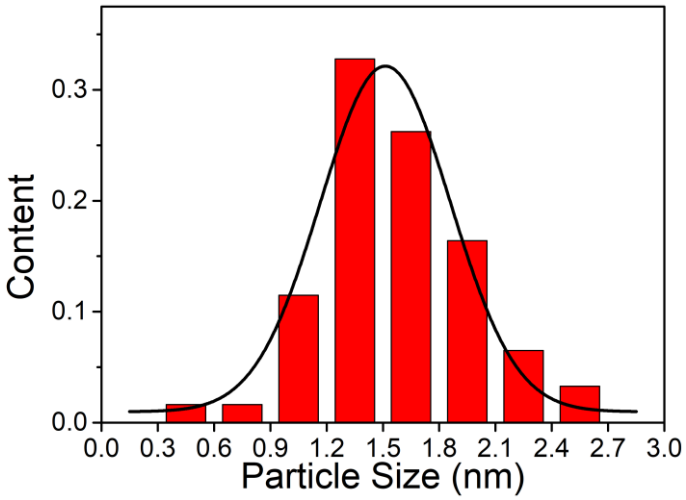

Figure S1. Size distribution histograms of hr-CDs.

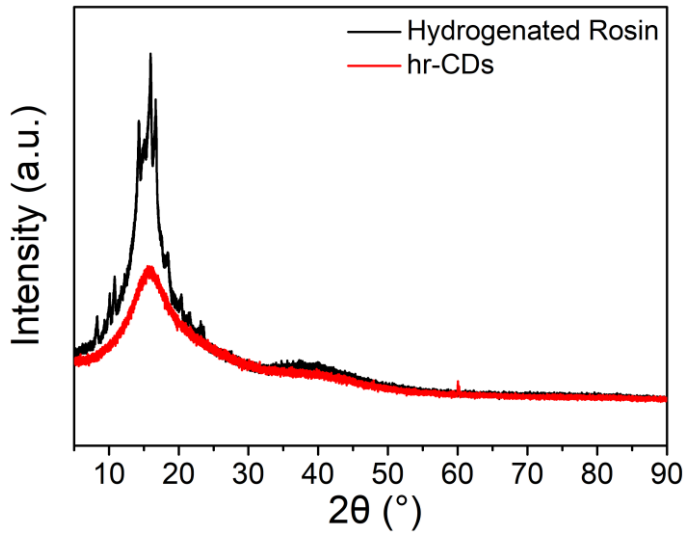

Figure S2. XRD of hr-CDs and hydrogenated rosin.

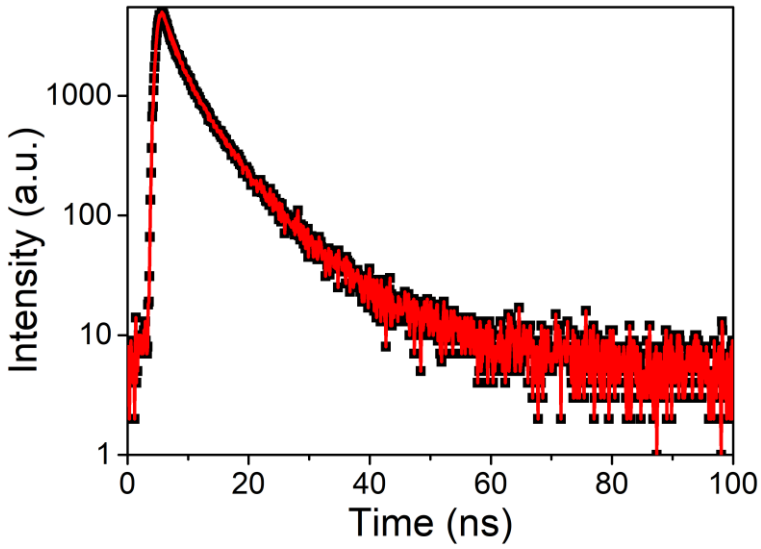

Figure S3. FL decay spectrum and fitted curves of hr-CDs solutions.

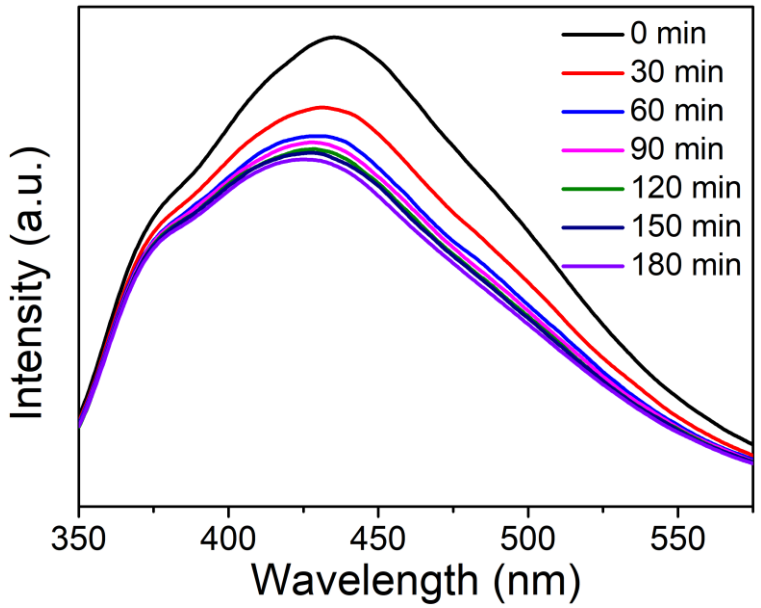

Figure S4. Fluorescence spectra and fluorescence intensity of aqueous solution of hr-CDs (10 μg/mL) after irradiation with UV lamp (200 mW/cm^2) for different periods of time.

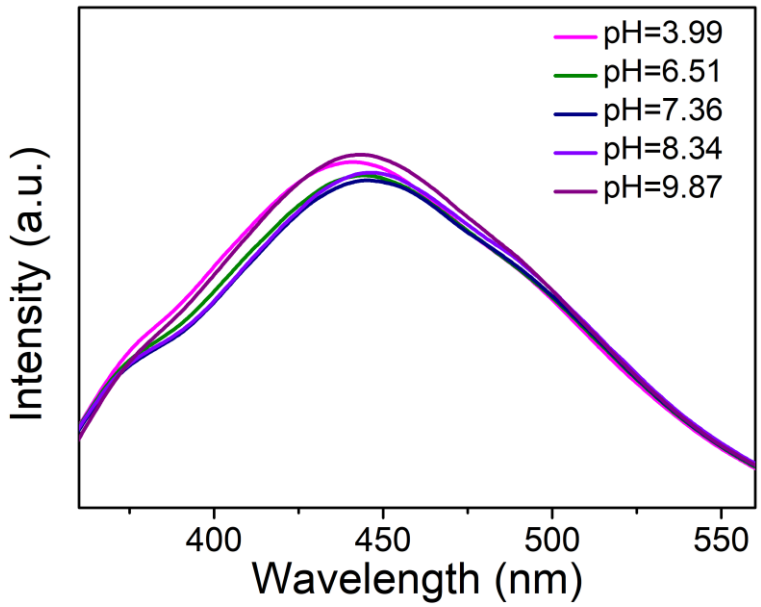

Figure S5. Fluorescence spectra of aqueous solutions of hr-CDs (10 μg/mL) at different pH.

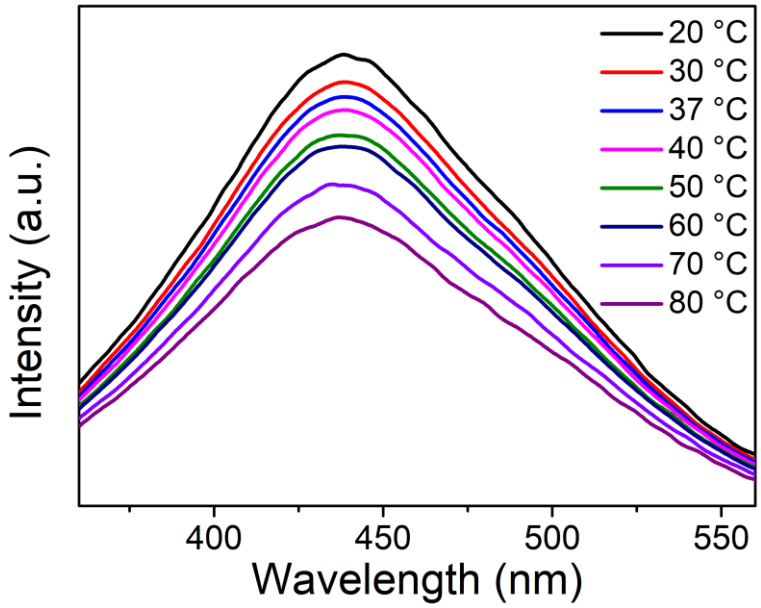

Figure S6. Fluorescence spectra of aqueous solutions of hr-CDs (20 μg/mL) at different temperatures.

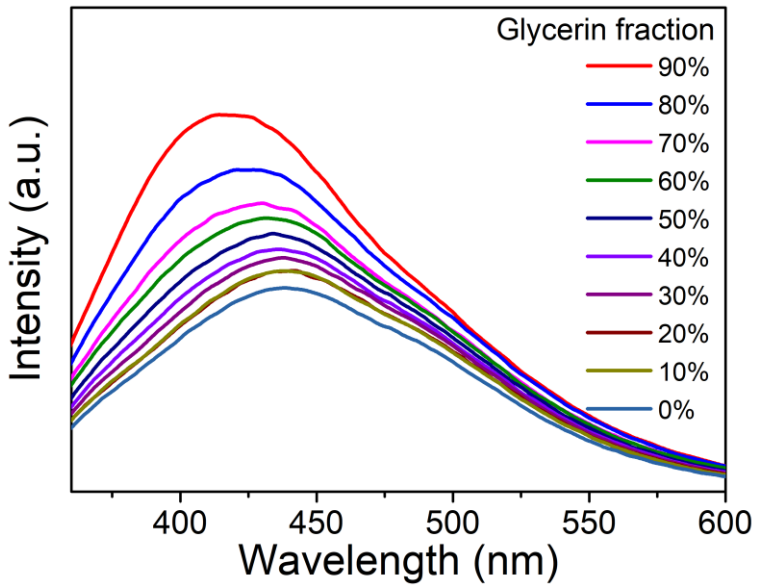

Figure S7. Fluorescence spectra of solutions of hr-CDs (20 μg/mL) in different mixtures of water and glycerol.

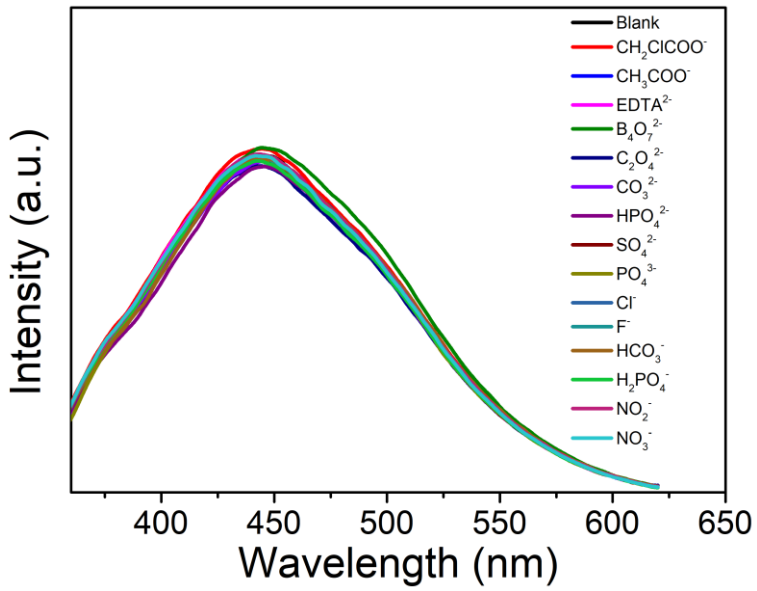

Figure S8. Fluorescence spectra of aqueous solution of hr-CDs (20 μg/mL) on addition of different anionic.

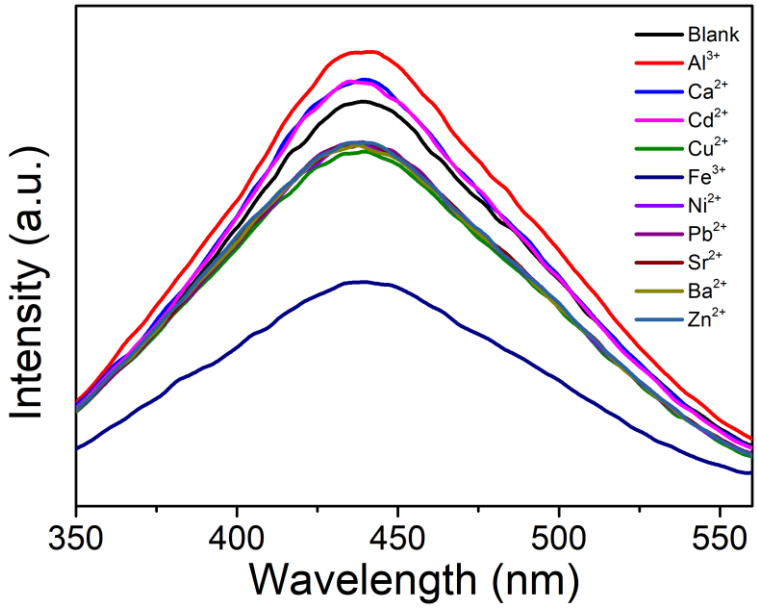

Figure S9. Fluorescence spectra of aqueous solution of hr-CDs (20 μg/mL) on addition of different cationic.

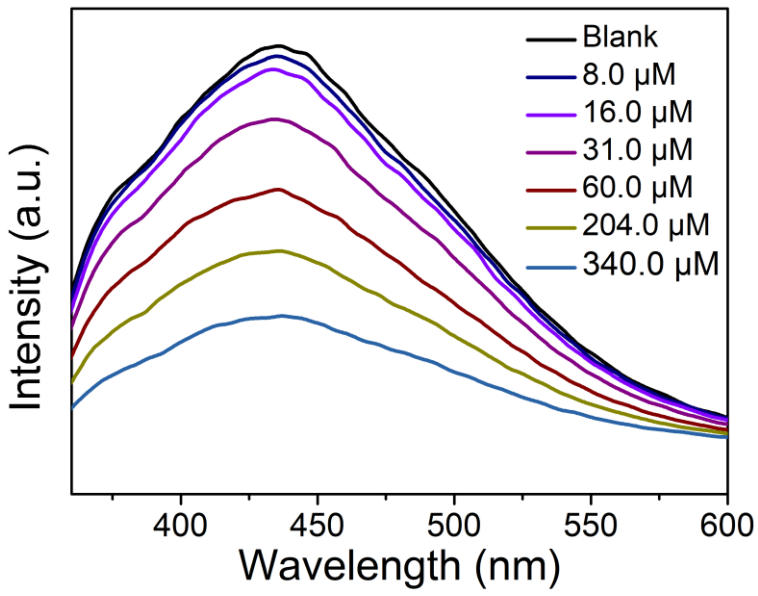

Figure S10. Fluorescence spectra of aqueous solution of hr-CDs (20 μg/mL) in the presence of different concentrations of Fe^{3+}.

Table S1. Certificated of Analysis to Hydrogenated Rosin

No.	Items		Specification	Analysis Result	Conclusion
1	Coler Lovibond	Yellow Red	≤12.0 ≤1.4	6 0.7	passed
2	Coler Lovibond(R&B), ℃		≥72.0	82.1	passed
3	Acid Value, mgKOH/g		≥162.0	170.7	passed
4	Abietic Acid. %		≤2.00	1.00	passed
5	Dehydroabietic Acid. %		≤10.0	7.1	passed
6	Tetralhydroabietic Acid. %		≥30.0	39.8	passed
Conclusion			passed		

The table was provided by the supplier.