

Supporting Information

The one-step preparation of green-emitted carbon dots based on the deactivator-reducing reagent synergistic effect and the study on their luminescence mechanism

Chunjin Wei ^{a,b}, Jun Li ^{a,b}, Xincai Xiao ^{a,b}, Tong Yue ^{a,b}, Dan Zhao ^{a,b} *

^a School of Pharmaceutical Sciences, South-Central University for Nationalities, Wuhan 430074, P. R. China

^b National Demonstration Center for Experimental Ethnopharmacology Education (South-Central University for Nationalities), Wuhan 430074, P. R. China

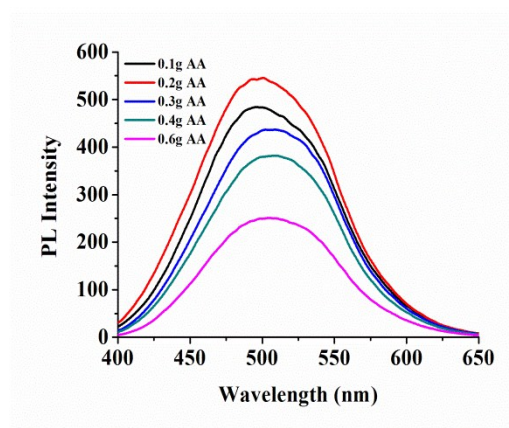


Fig. S1. Impacts of different amount of AA on the fluorescence intensity of CDs _(AA-PEI) .

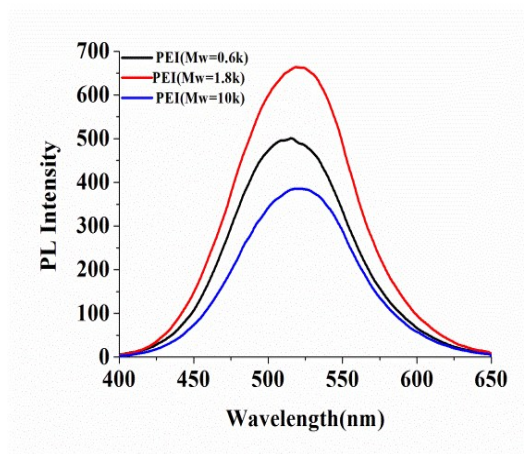


Fig. S2. Impacts of different molecular weight of PEI on the fluorescence intensity of CDs _(AA-PEI) .

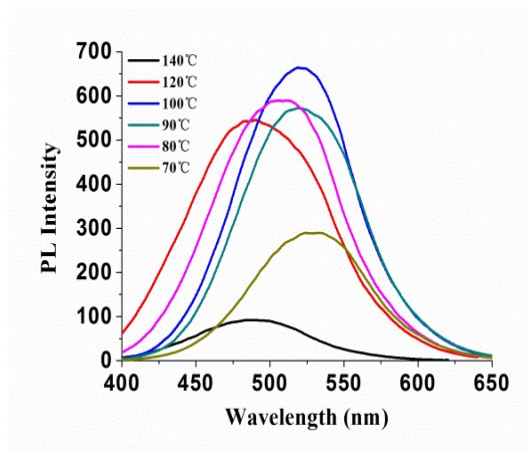


Fig. S3. Impacts of reaction temperature on the fluorescence intensity of $CDs_{(AA-PEI)}$.

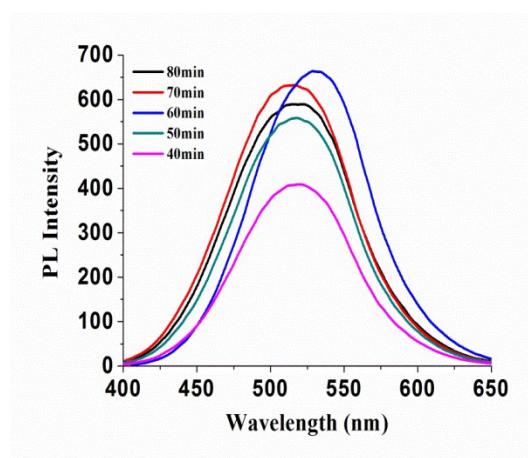


Fig. S4. Impacts of reaction time on the fluorescence intensity of $CDs_{(AA-PEI)}$.

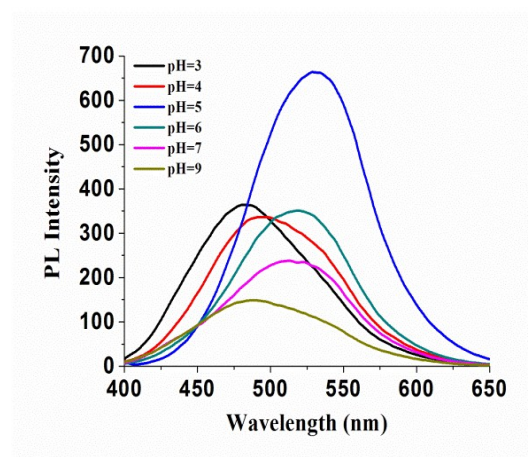


Fig. S5. Impacts of pH values on the fluorescence intensity of $CDs_{(AA-PEI)}$.

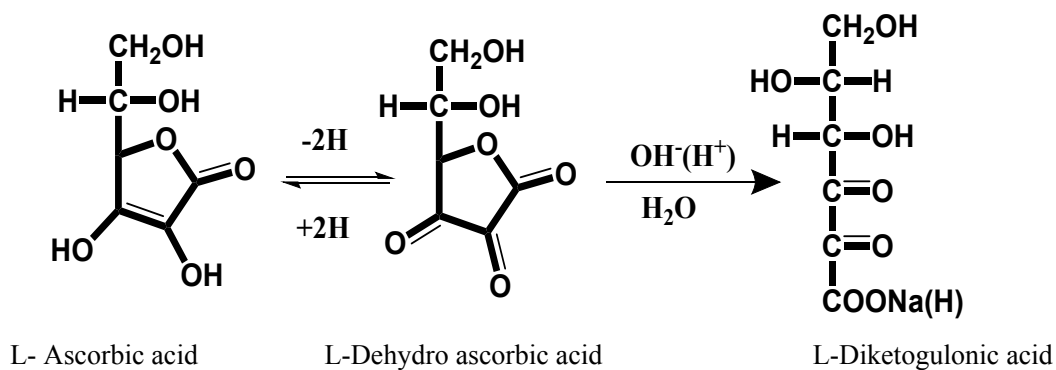


Fig. S6. The oxidation process of ascorbic acid.

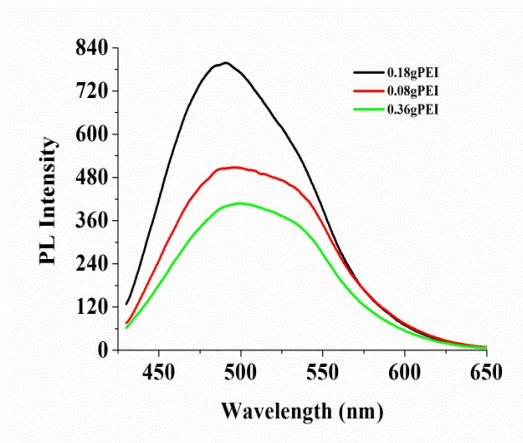


Fig. S7. Impacts of different amount of PEI on the fluorescence intensity of CDs (AA-PEI-CA) .

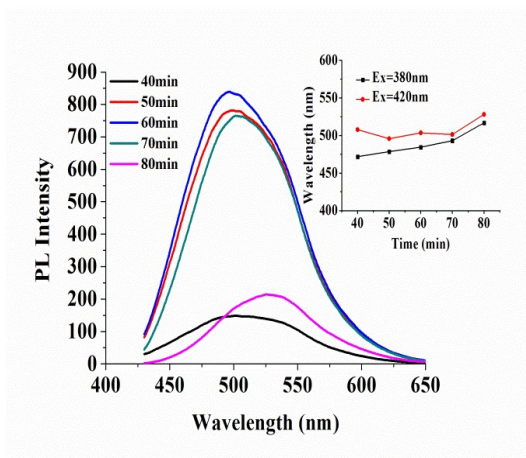


Fig. S8. Impacts of reaction time on the fluorescence intensity of CDs (AA-PEI-CA) .

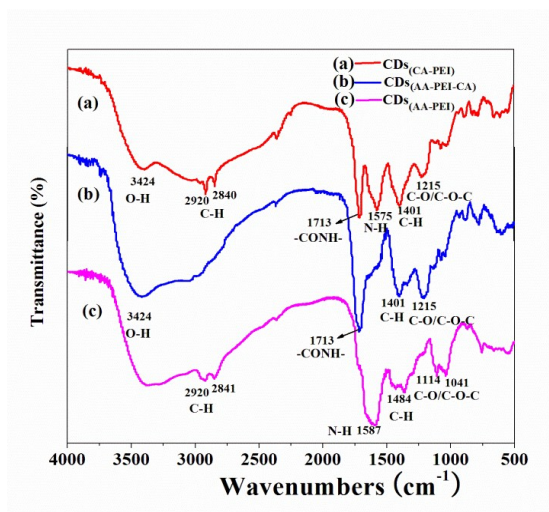


Fig. S9. IR spectra of CD_s(AA-PEI-CA), CD_s(AA-PEI) and CD_s(PEI-CA).

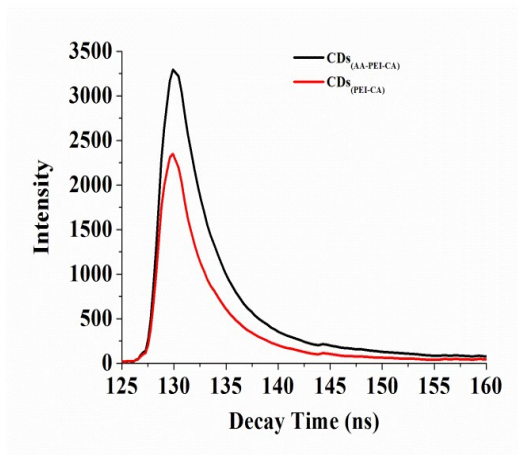


Fig. S10. Fluorescence decay curves of CD_s(AA-PEI-CA) and CD_s(AA-PEI).