

Supplementary Materials: Selective determination of dopamine in pharmaceuticals and human urine using carbon quantum dots as a fluorescent probe

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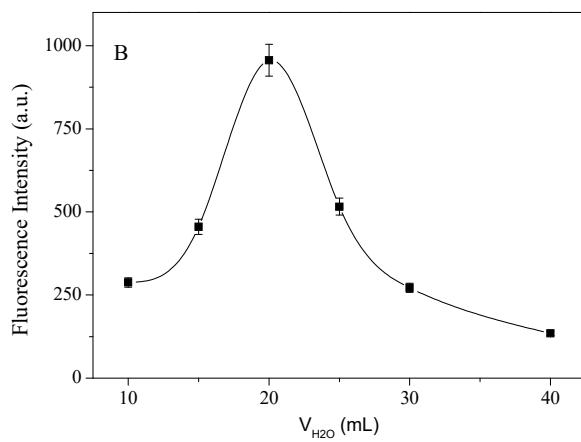
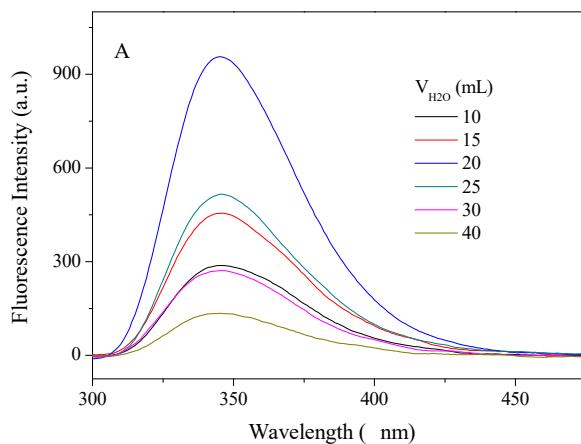


Figure S1. Fluorescence spectrum (A) and fluorescence intensity (B) of C-dots in different volumes of water when the mass of arginine was 0.1 g at a temperature of 160 °C for 4 hours ($\lambda_{\text{em}}=345 \text{ nm}$).

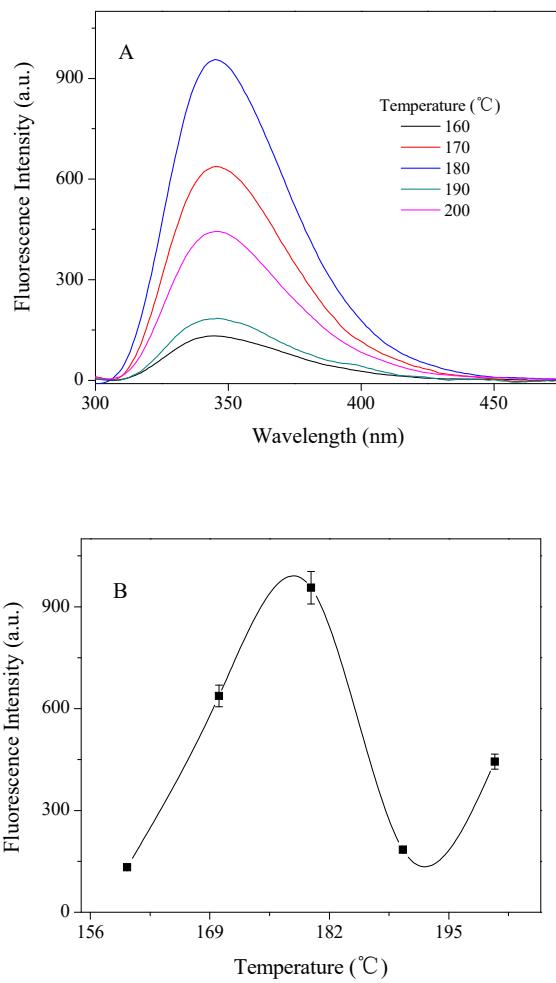


Figure S2. Fluorescence spectrum (A) and fluorescence intensity (B) of C-dots under various temperature when the amount of water remains unchanged at a time of 4 hour ($\lambda_{em}=345$ nm).

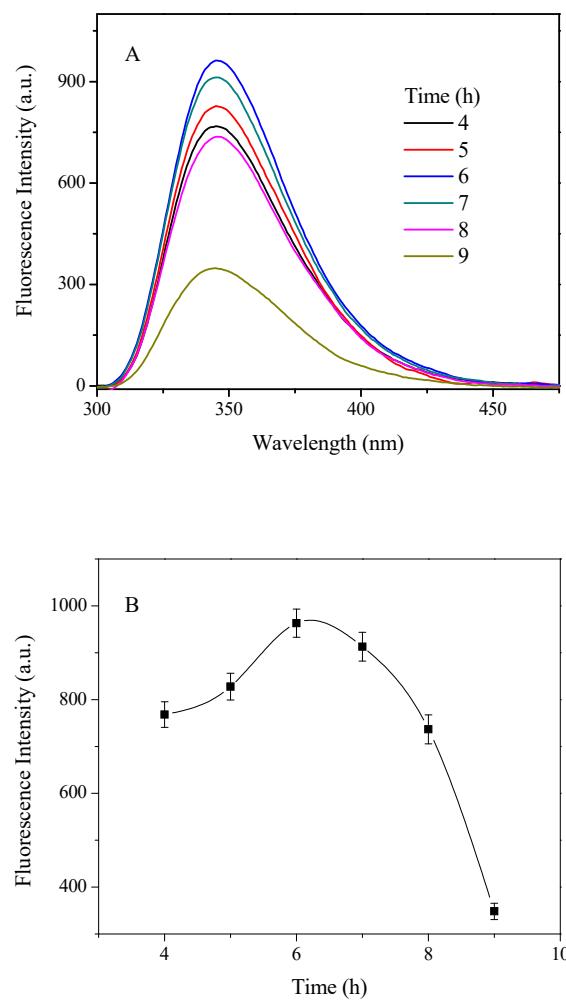


Figure. S3 Fluorescence spectrum (A) and fluorescence intensity (B) of C-dots under various reaction time when the amount of water remains unchanged at a temperature of 180 °C (λ_{em} =345 nm).

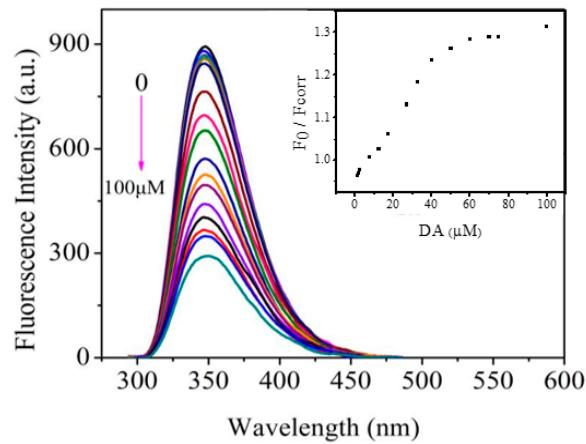


Figure. S4. The quenching fluorescence spectra of the system by DA; Inset: the calibration graph of the corrected fluorescence quenching and different concentrations of DA.

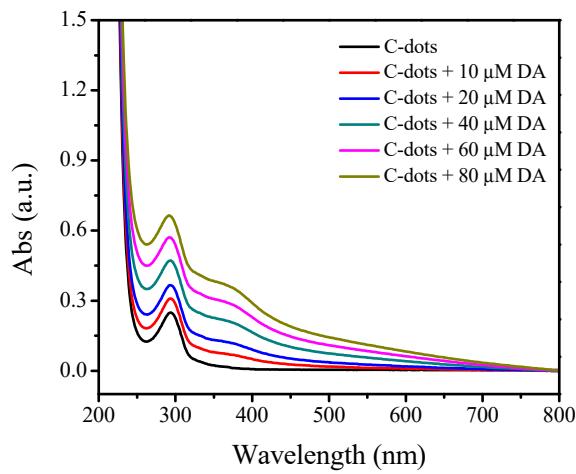


Figure. S5. The UV-vis absorption spectrum of C-dots and DA at different concentrations.