Supplementary information

Green One-step Pyrolytic Synthesis of Folic Acid-Derived Carbon Dots for Sensitive Turn-on Fluorescence Detection of Cysteine

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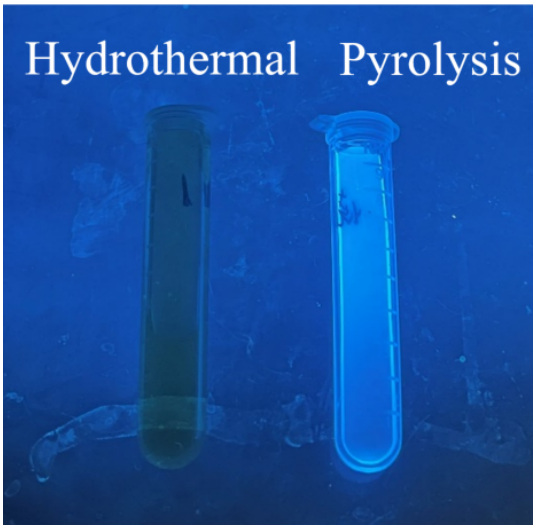

Figure S1 Comparison of the fluorescence of intensity between FACDs synthesized via hydrothermal (left) and pyrolysis (right) methods.

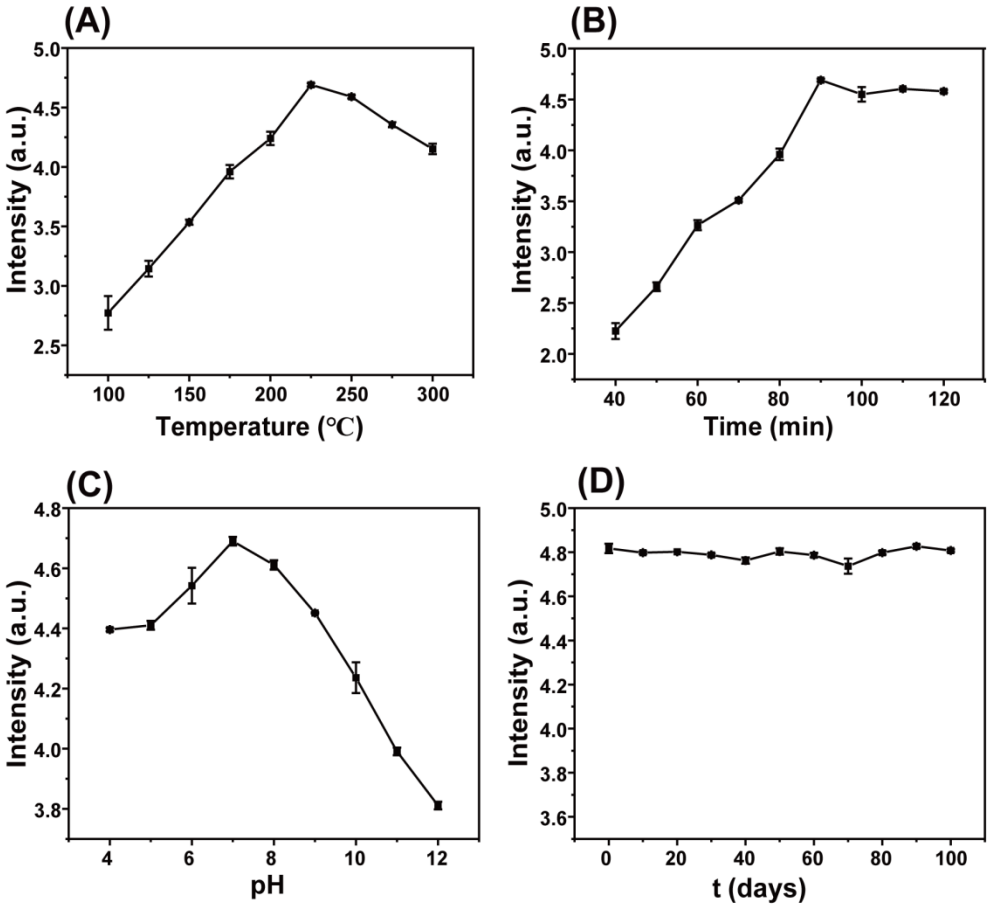

Figure S2 Optimized conditions for the synthesis of fluorescent FACDs: (**A**) Calcination temperature of FA in a muffle furnace, (**B**) Calcination duration in a muffle furnace for the FACDs synthesis, (**C**) pH of the dispersed FACDs solution, and (D) Long-term stability of FACDs over time.

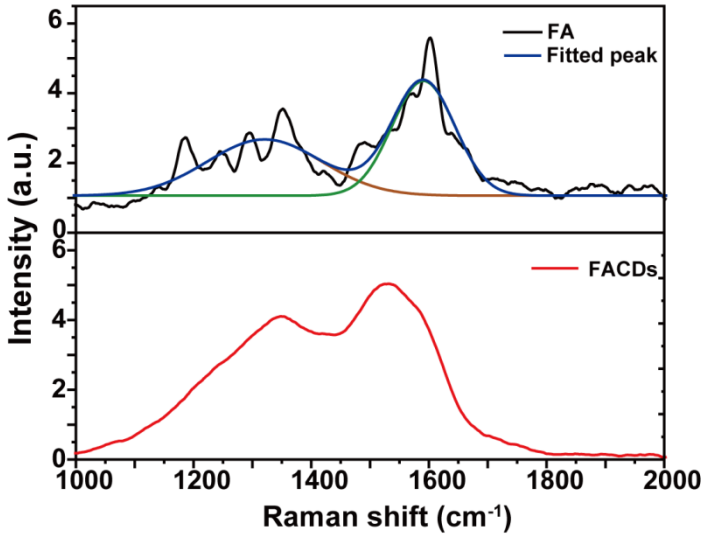

Figure S3 Raman comparison of FA and FACDs.

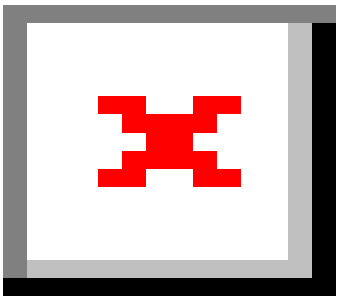

Figure S4 The effect of temperature fluctuations on the performance of the sensor

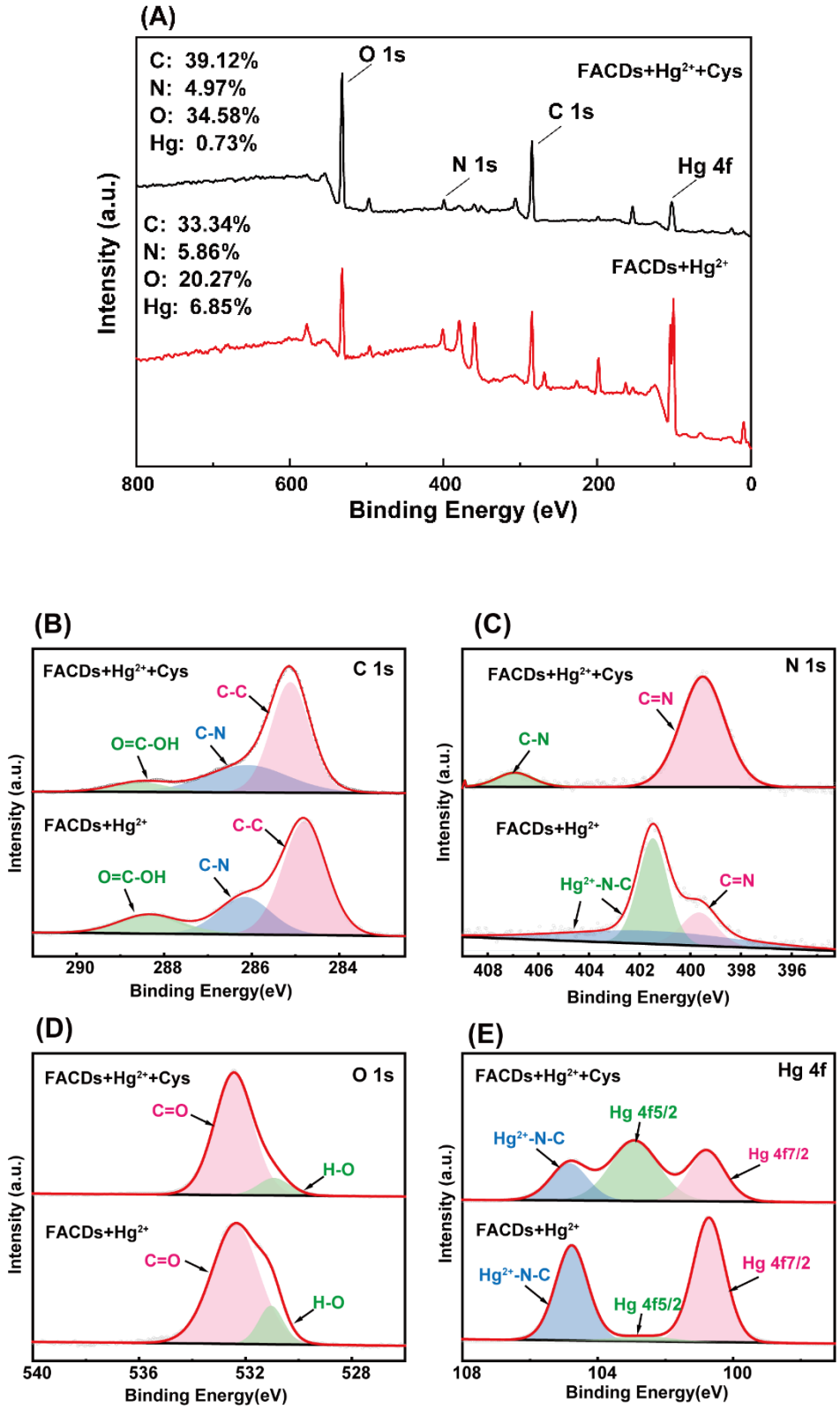

Figure S5 (A) XPS survey spectra and deconvoluted spectra of (B) C 1s, (C) O 1s, (D) N 1s, (E) Hg 4f.