
Stimulus-Responsiveness of Thermo-Sensitive Polymer Hybridized with N-Doped Carbon Quantum Dots and Its Applications in Solvent Recognition and Fe³⁺ Ion Detection

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Supporting information

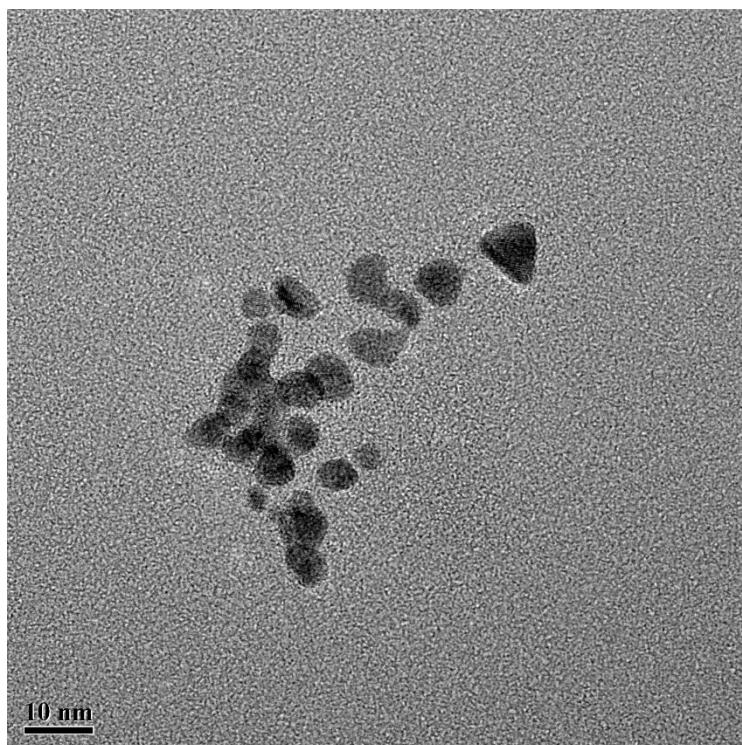


Figure S1. TEM images of poly₁₄-N-CQDs.

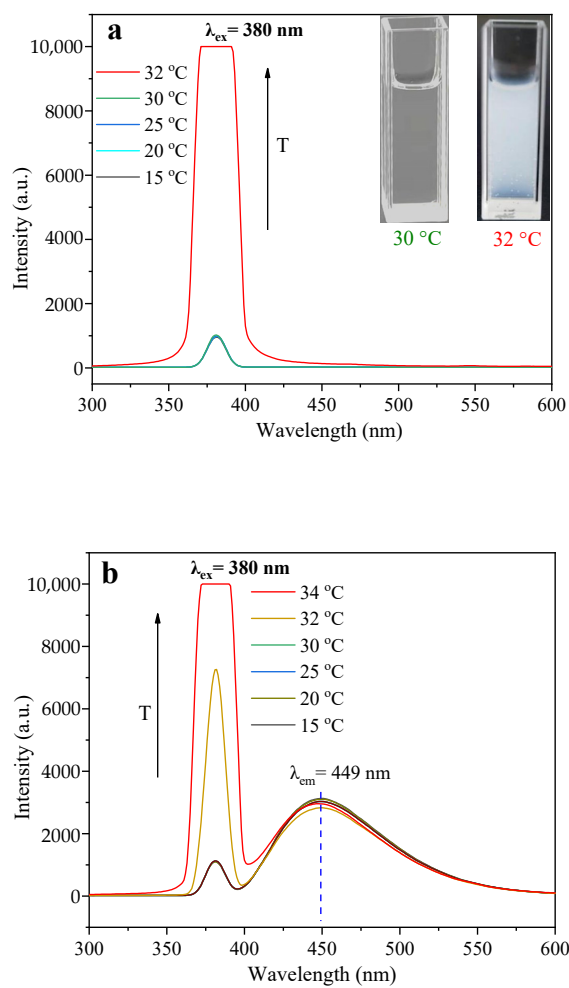


Figure S2. The fluorescence emission spectra of the poly₁₄ (a) and the mixture of poly₁₄ and N-CQDs (b) at 380 nm excitation wavelength at different temperatures.

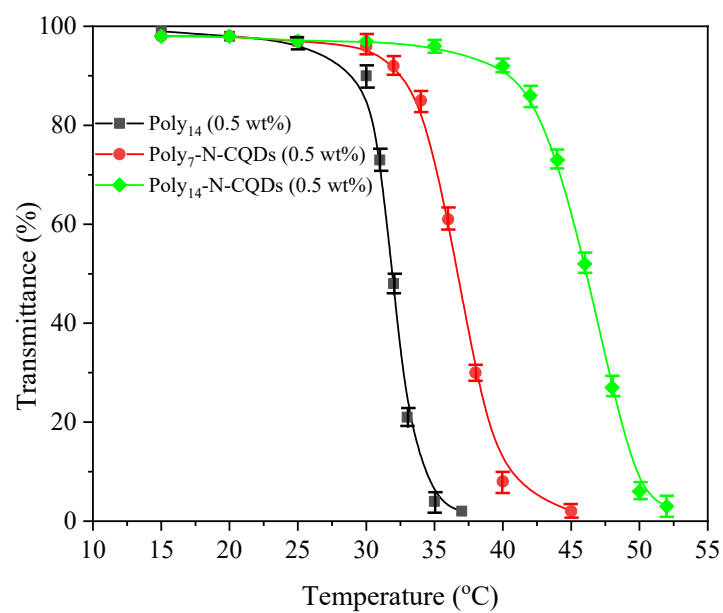


Figure S3. The transmittance of different samples with a concentration of 0.5 wt% as a function of the temperature.

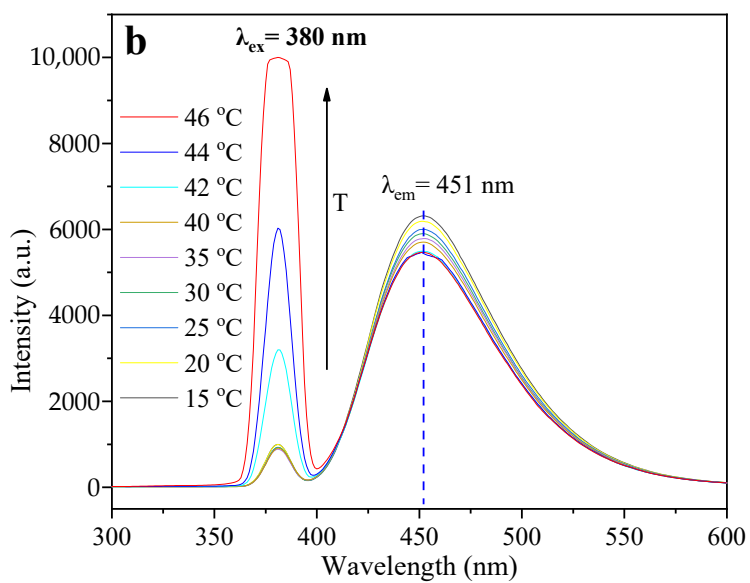
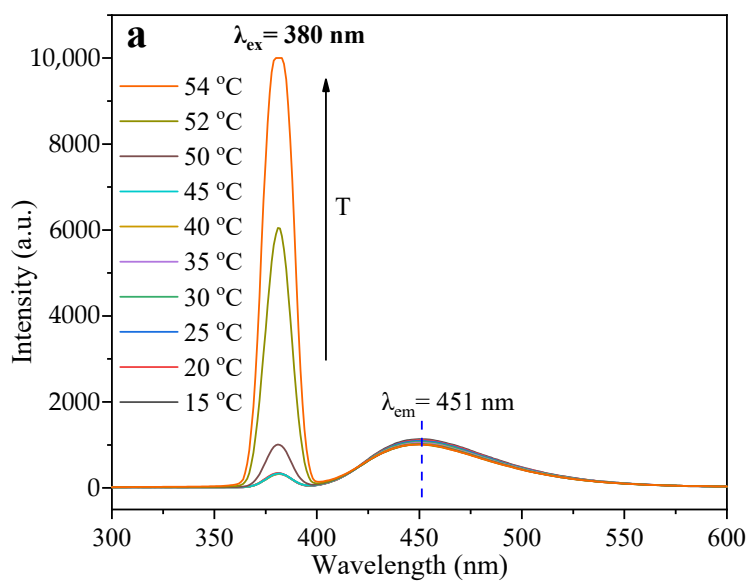


Figure S4. The fluorescence emission spectra of 0.1 wt% (a) and 1 wt % (b) of poly₁₄-N-CQDs solutions at 380 nm excitation wavelength and different temperatures.

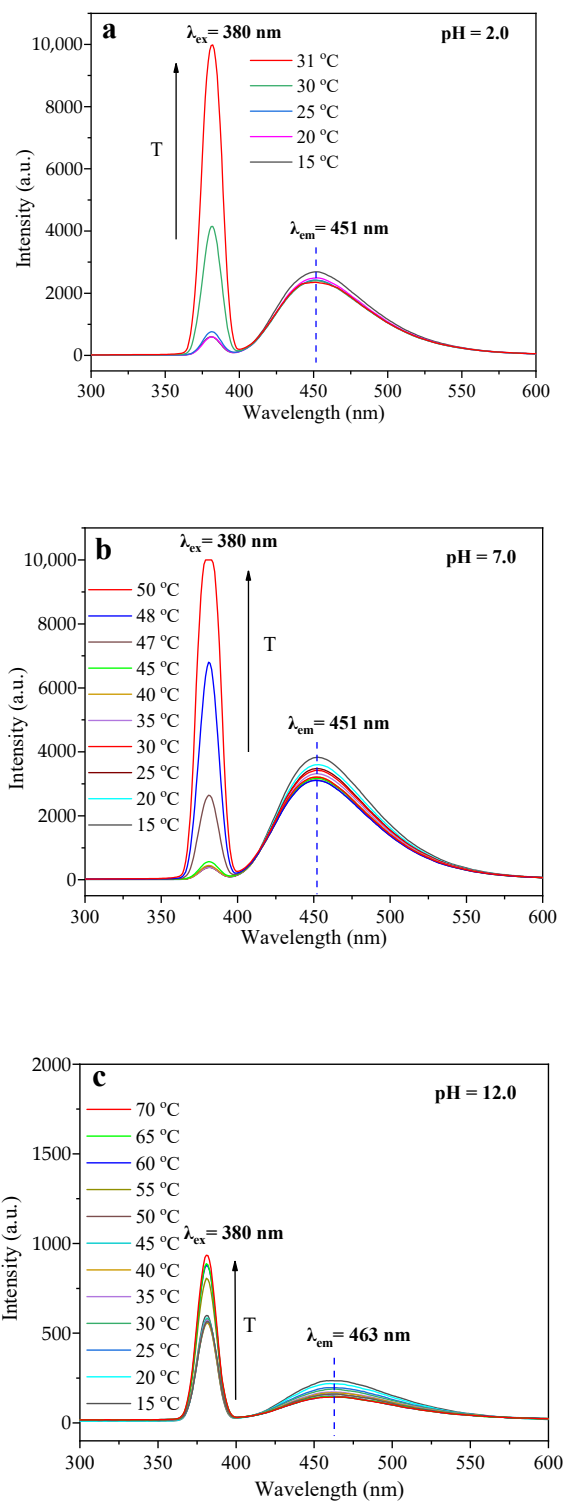


Figure S5. The fluorescence emission spectra of poly-N-CQDs at pH 2.0 (a), pH 7.0 (b) and pH 12.0 (c) at 380 nm excitation wavelength and different temperatures.

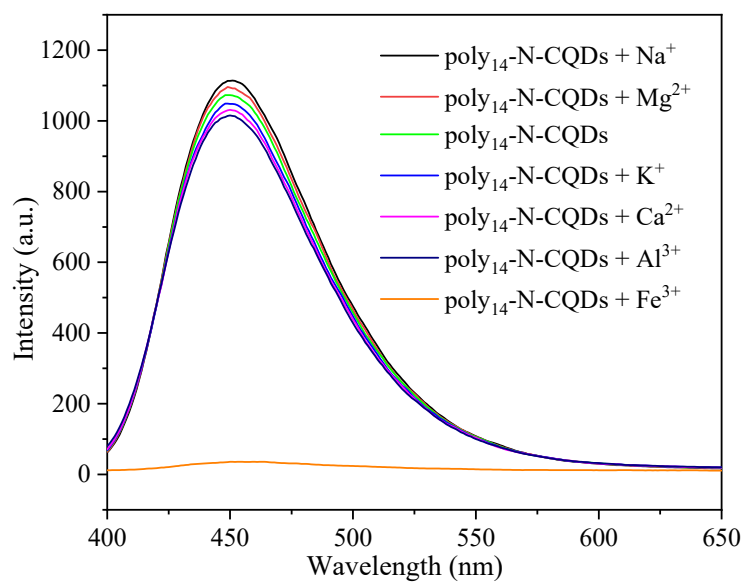


Figure S6. The fluorescence emission spectra of 0.1 wt% poly₁₄-N-CQDs solution in the presence of different metal ions (4 mM) at 380 nm excitation wavelength.