

Supplementary Material:

Visualization of Polymer-Surfactant Interaction by Dual Emissive Gold Nanoclusters Labeling

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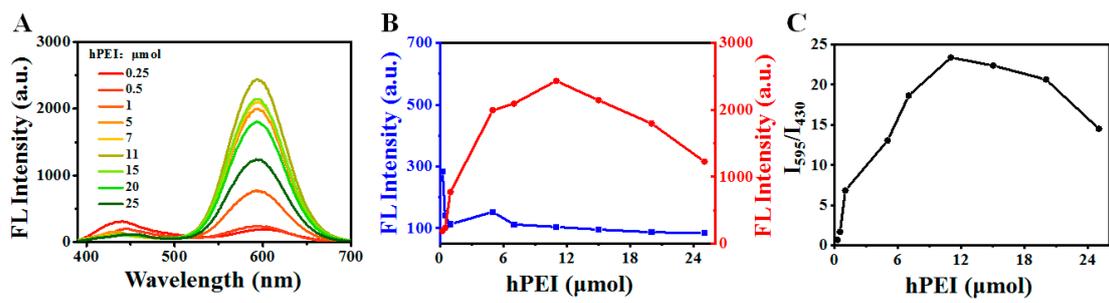


Figure S1. (A) Fluorescence emission spectra of DE-Au NCs prepared with various hPEI amounts. (B) Fluorescence intensity of I_{595} (red line) and I_{430} (blue line) of DE-Au NCs *versus* the hPEI amount. (C) The intensity ratio (I_{595}/I_{430}) of DE-Au NCs *versus* the hPEI amount.

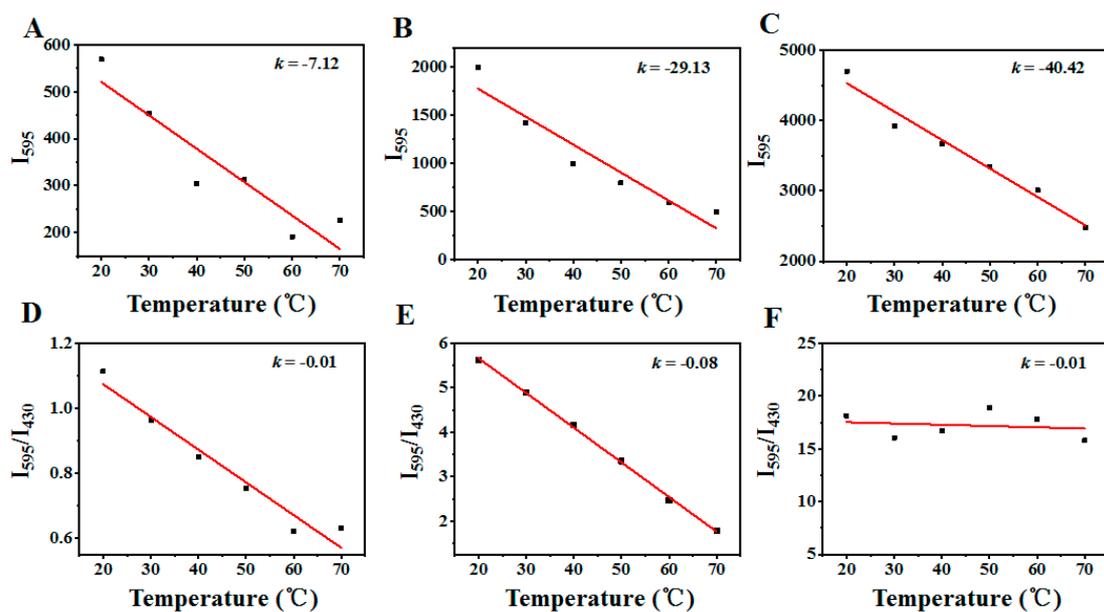


Figure S2. (A) The temperature-dependent fluorescence intensity (I_{595}) and intensity ratio (I_{595}/I_{430}) of DE-Au NCs produced by 0.25 μmol (A and D), 1 μmol (B and E), 11 μmol (C and F) hPEI, respectively.

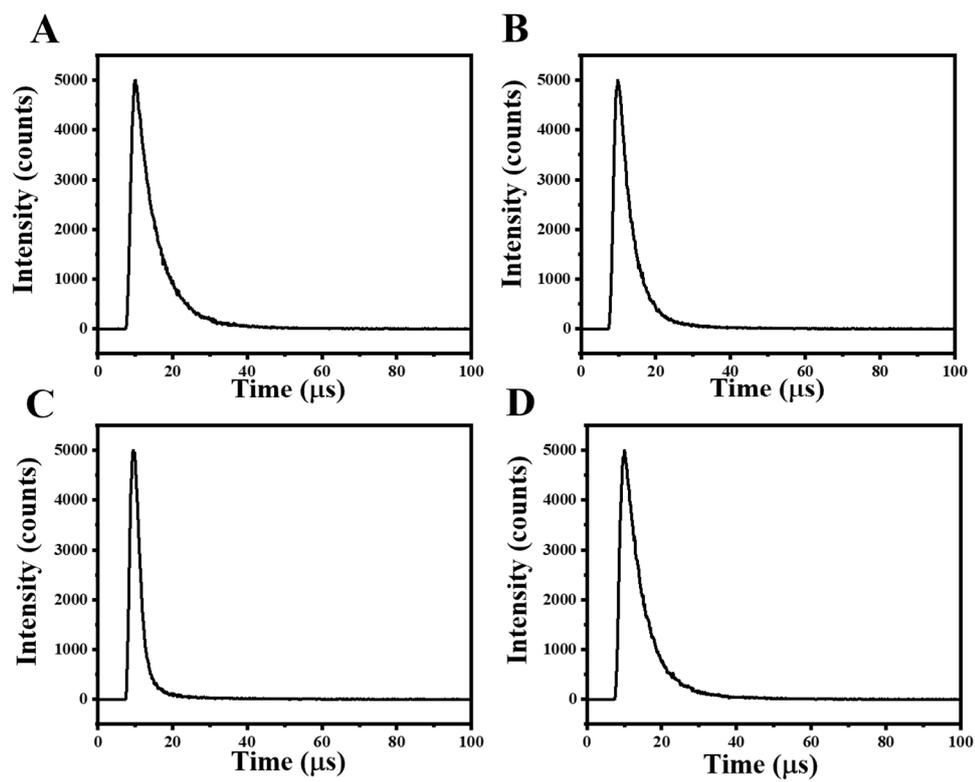


Figure S3. Time-resolved fluorescence decay spectra of DE-Au NCs under 20 °C (A), 45 °C (B), 70 °C (C), and return to room temperature (D), respectively.

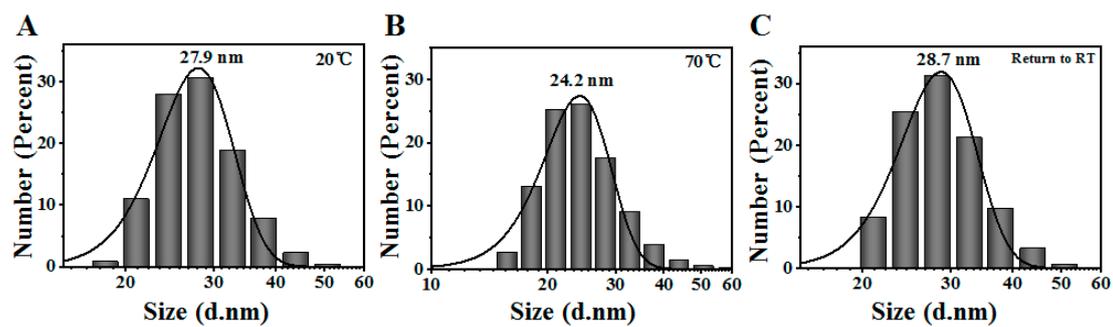


Figure S4. Hydrodynamic diameters of DE-Au NCs at 20 °C (A), 70 °C (B) and restored to room temperature (C), respectively.

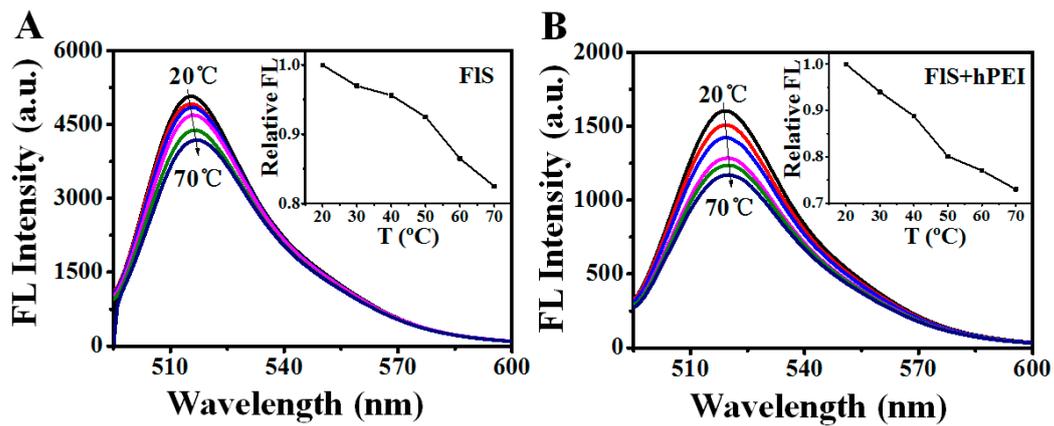


Figure S5. Temperature-dependent fluorescence emission spectra of FIS in the absence (A) and presence (B) of hPEI. Inset images are the plots of corresponding relative intensity (490 nm) *versus* the temperature.

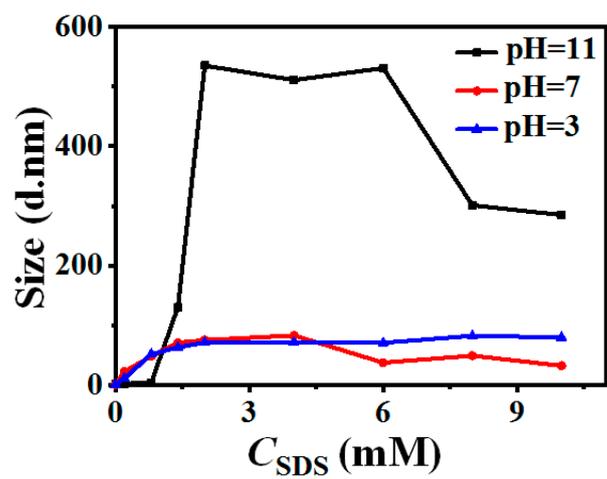


Figure S6. Hydrodynamic diameters of hPEI solution after addition of SDS with different concentrations at pH=11 (black line), pH=7 (red line) and pH=3 (blue line), respectively.

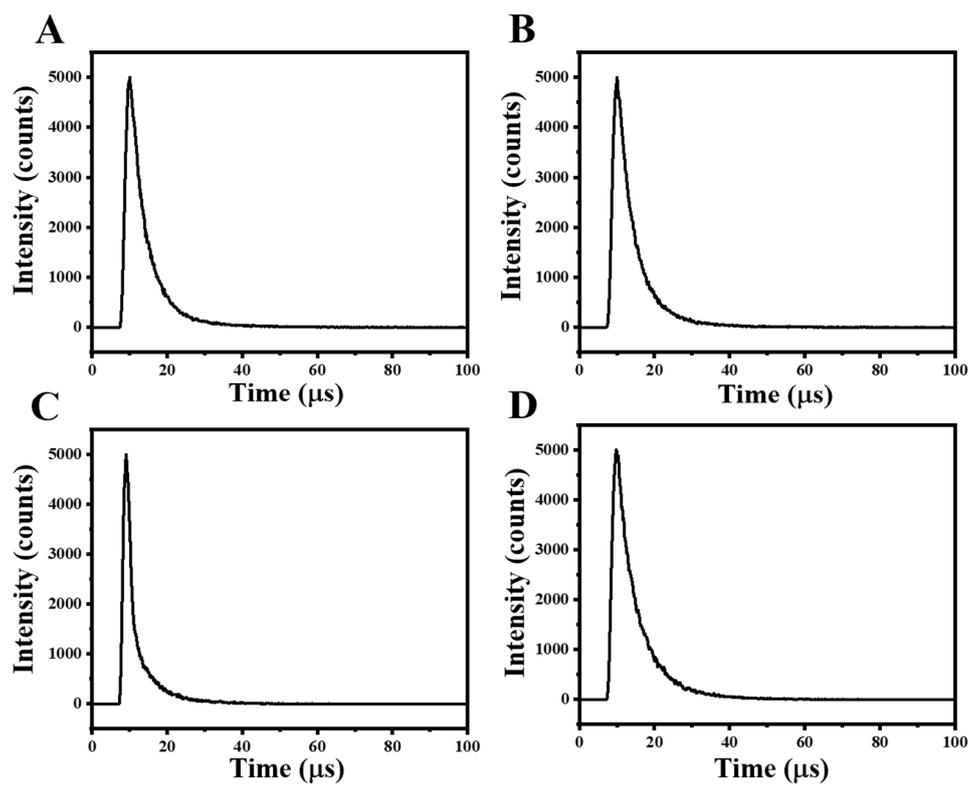


Figure S7. Time-resolved fluorescence decay spectra of DE-Au NCs solution with 0 mM SDS (A), 1.6 mM SDS (B), 5 mM SDS (C) and 8 mM SDS (D).

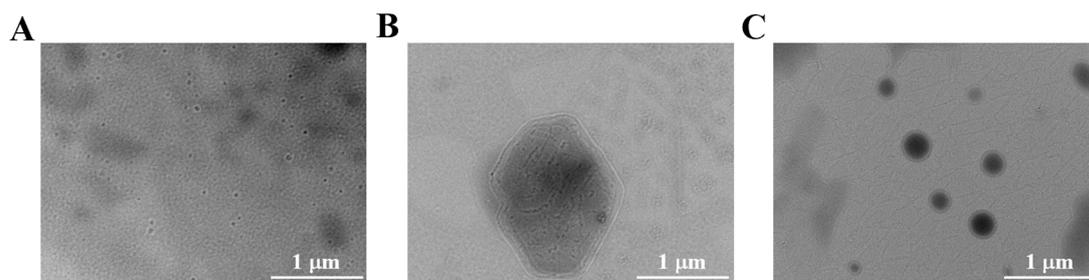


Figure S8. TEM images of DE-Au NCs solution with 1.6 mM SDS (A), 5 mM SDS (B) and 8 mM SDS (C).