

Supporting Information

Poly(acrylate) with pendant aggregation-induced emission (AIE) tetraphenylethene luminogens: Highly stable AIE polymer nanoparticles for effective detection of nitro-compounds

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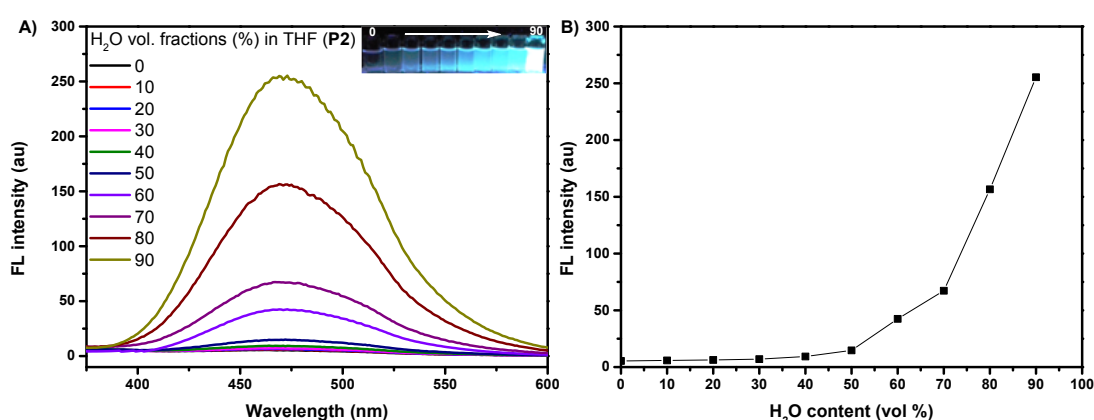


Figure S1. (A) FL spectra of **P2** in THF/H₂O mixtures with different H₂O contents ($\lambda_{\text{ex}} = 318 \text{ nm}$, $[\text{P2}] = 100.0 \mu\text{g} \cdot \text{mL}^{-1}$, inserted picture is photographs of **P2** solutions taken under UV illumination). (B) Change of FL maximum of **P2** with H₂O content of the aqueous mixture.

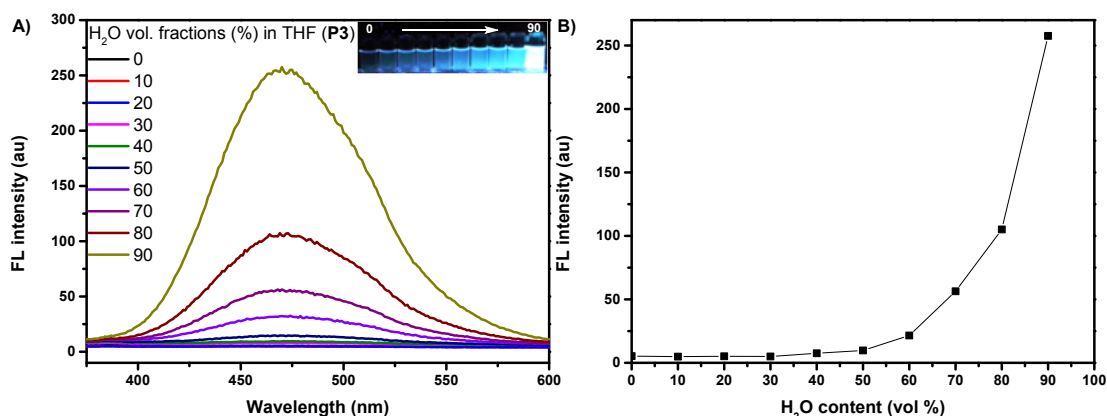


Figure S2. (A) FL spectra of **P3** in THF/H₂O mixtures with different H₂O contents ($\lambda_{\text{ex}} = 318 \text{ nm}$, $[\text{P3}] = 100.0 \mu\text{g} \cdot \text{mL}^{-1}$, inserted picture is photographs of **P3** solutions taken under UV illumination). (B) Change of FL maximum of **P3** with H₂O content of the aqueous mixture.

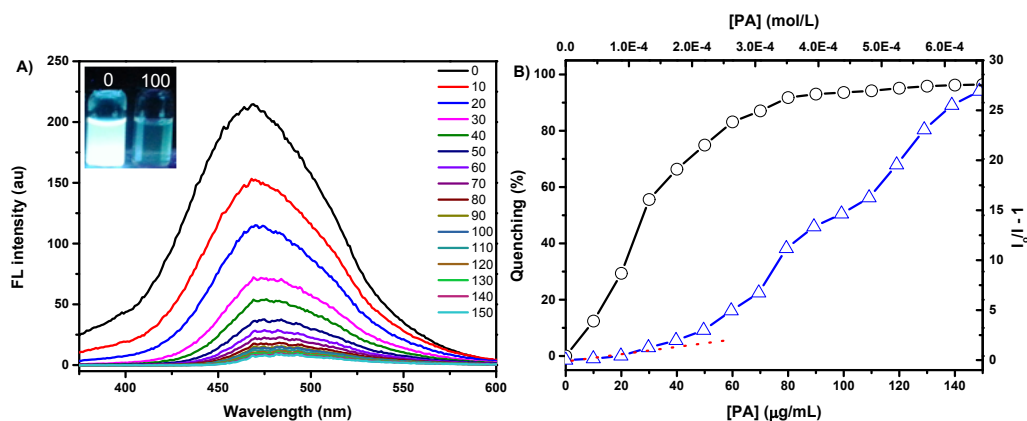


Figure S3. (A) Fluorescence spectra of $100.0 \mu\text{g}\cdot\text{mL}^{-1}$ **P2** in THF/H₂O (1:9 v/v) mixture in the presence of different PA concentrations ($\mu\text{g}\cdot\text{mL}^{-1}$), the insets display the photo of **P2** in the absence and presence of $100 \mu\text{g}\cdot\text{mL}^{-1}$ PA under UV light (365 nm) illumination. (B) Concentration-dependent fluorescence quenching of **P2** by PA.

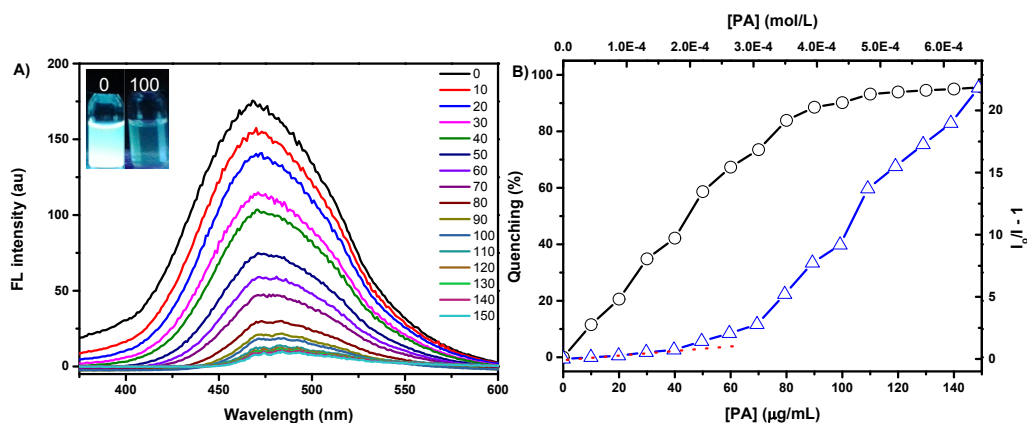


Figure S4. (A) Fluorescence spectra of $100.0 \mu\text{g}\cdot\text{mL}^{-1}$ **P3** in THF/H₂O (1:9 v/v) mixture in the presence of different PA concentrations ($\mu\text{g}\cdot\text{mL}^{-1}$), the insets display the photo of **P3** in the absence and presence of $100 \mu\text{g}\cdot\text{mL}^{-1}$ PA under UV light (365 nm) illumination. (B) Concentration-dependent fluorescence quenching of **P3** by PA.

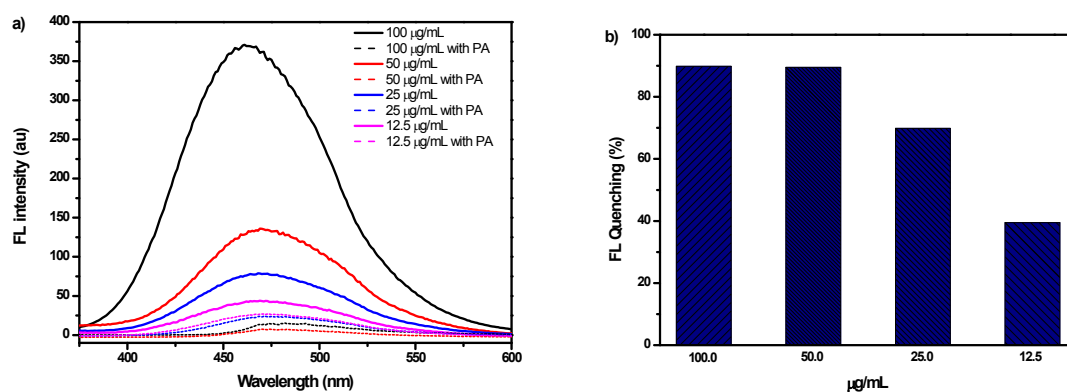


Figure S5. (a) Fluorescence spectra of polymer **P1** (100.0, 50.0, 25.0 and 12.5 $\mu\text{g}\cdot\text{mL}^{-1}$) in THF/H₂O (1:9 v/v) mixtures in the absence and presence of equal PA concentration. (b) Fluorescence quenching of polymer **P1** in THF/H₂O (1:9 v/v) mixtures at different concentrations.

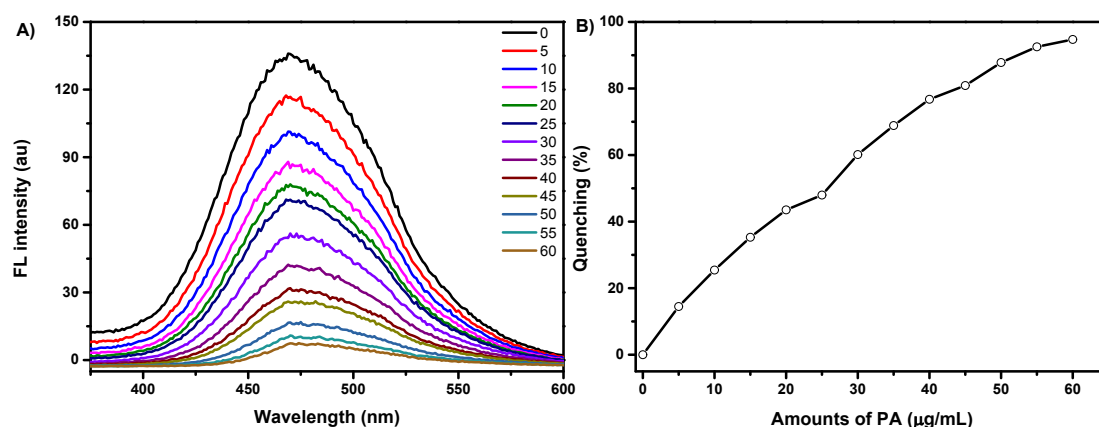


Figure S6. (A) Fluorescence spectra of 50.0 $\mu\text{g}\cdot\text{mL}^{-1}$ **P1** in THF/H₂O (1:9 v/v) mixture in the presence of different PA concentrations ($\mu\text{g}\cdot\text{mL}^{-1}$). (B) Concentration-dependent fluorescence quenching of **P1** by PA.

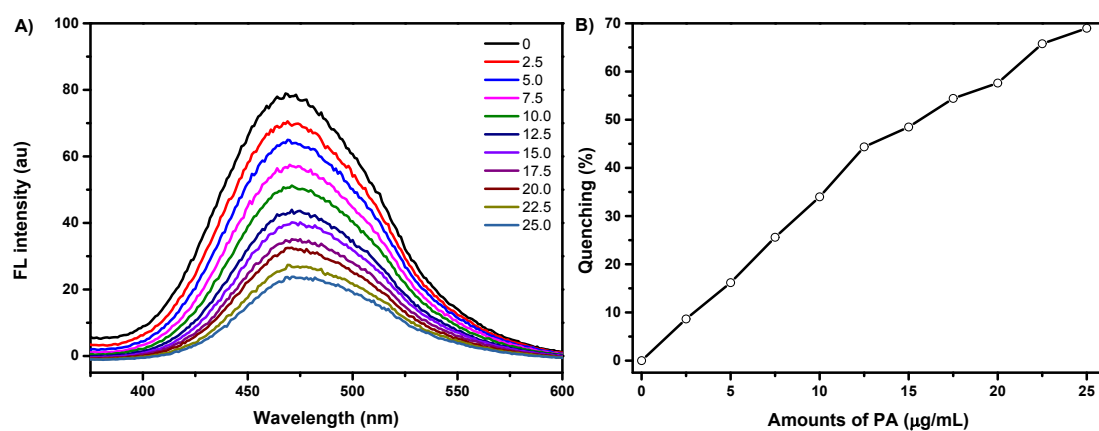


Figure S7. (A) Fluorescence spectra of 25.0 $\mu\text{g}\cdot\text{mL}^{-1}$ **P1** in THF/H₂O (1:9 v/v) mixture in the presence of different PA concentrations ($\mu\text{g}\cdot\text{mL}^{-1}$). (B) Concentration-dependent fluorescence quenching of **P1** by PA.

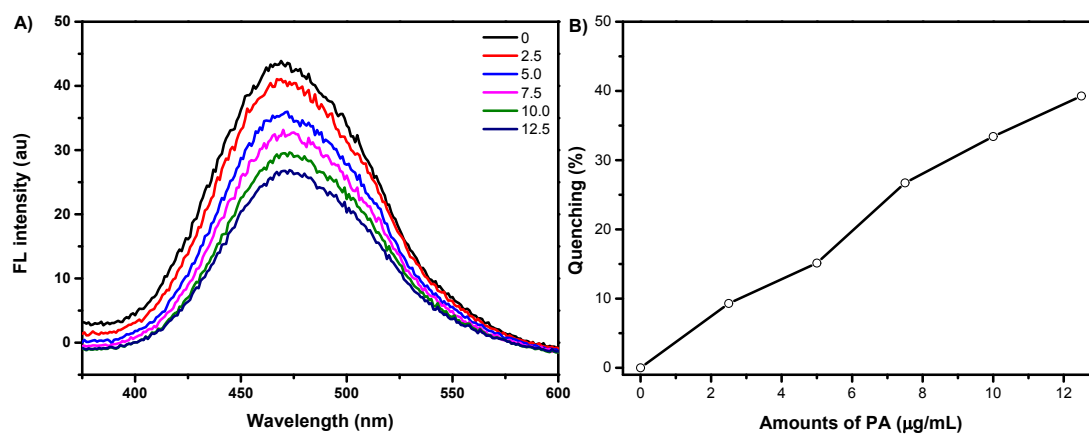


Figure S8. (A) Fluorescence spectra of $12.5 \mu\text{g}\cdot\text{mL}^{-1}$ **P1** in THF/H₂O (1:9 v/v) mixture in the presence of different PA concentrations ($\mu\text{g}\cdot\text{mL}^{-1}$). (B) Concentration-dependent fluorescence quenching of **P1** by PA.