Electronic Supporting Information

AIE-active polyanetholesulfonic acid sodium salts with room-temperature phosphorescence characteristics for Fe^{3+} detection

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Fig. S5 The fluorescence lifetimes before and after the addition of Fe^{3+} (0.2×10^{-3} mol/L)

Fig. S6 UV absorption spectra (a) and emission intensity changes (b) of PASAS aqueous solution (5 mg/mL) in the addition of Fe^{3+} with different concentrations.

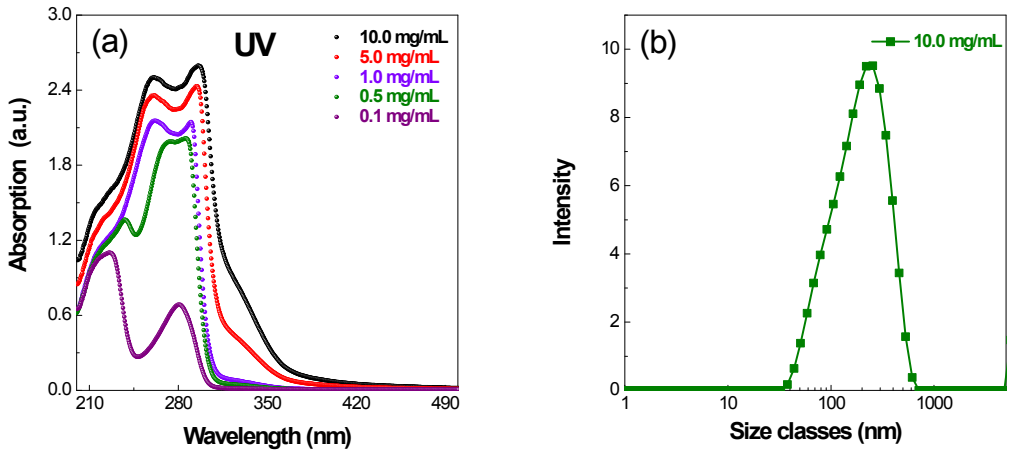

Fig. S1 (a) UV absorption spectra of PASAS aqueous solution with different concentrations. (b) Dynamic light scattering (DLS) measurement of PASAS aqueous solution (10 mg/mL).

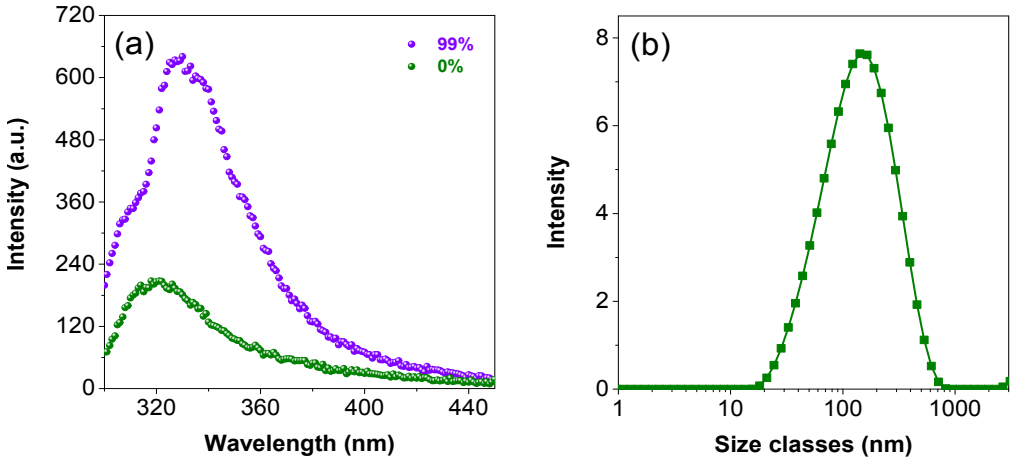

Fig. S2 (a) Fluorescence spectra of PASAS in water and ACN/water mixtures, excitation wavelength = 280 nm. (b) Dynamic light scattering (DLS) measurement of PASAS in ACN/water (f_{ACN} = 99%) mixtures. Concentration = 2×10^{-5} mol/L.

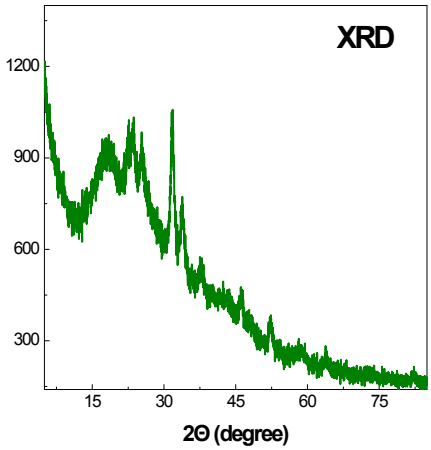

Fig. S3 XRD patterns of PASAS solid powder.

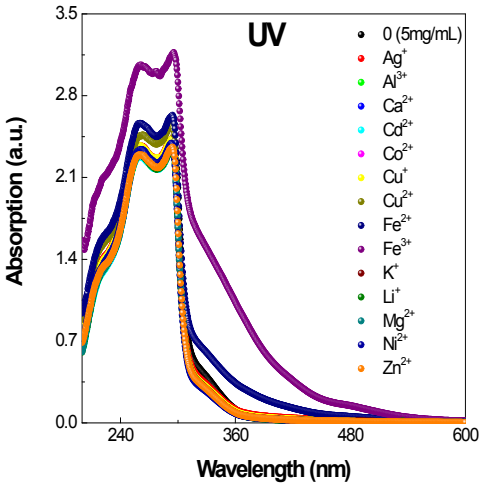

Fig. S4 UV absorption spectra of PASAS aqueous solution (5 mg/mL) in the presence of various metal ions (2×10^{-3} mol/L).

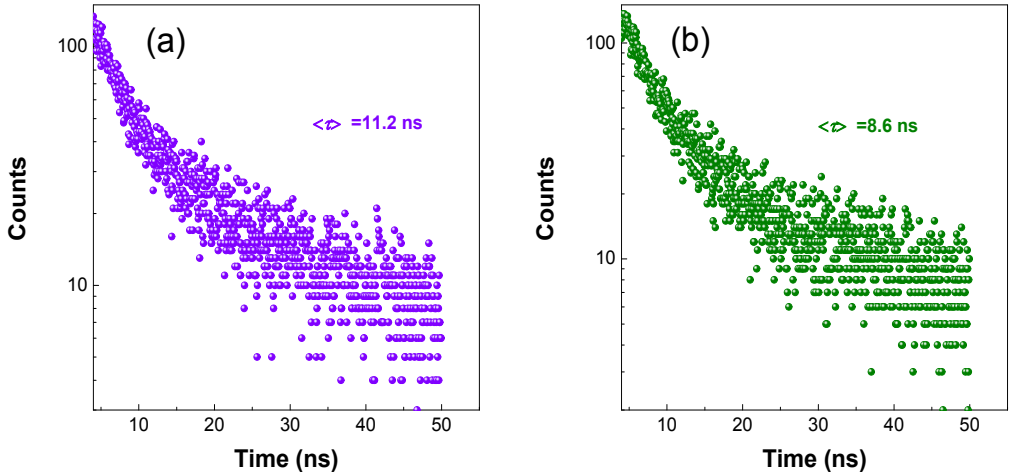

Fig. S5 The fluorescence lifetimes before (a) and after (b) the addition of Fe^{3+} (0.2×10^{-3} mol/L) monitored at 378 nm. λ_{ex} = 320 nm.

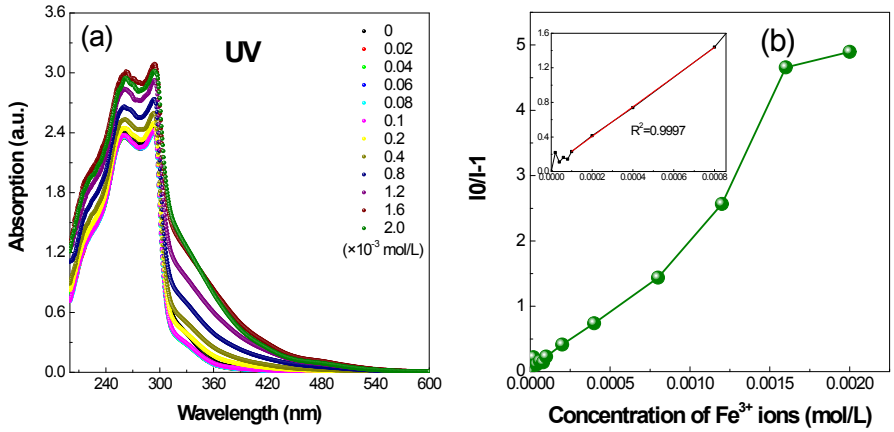

Fig. S6 UV absorption spectra (a) and emission intensity changes (b) of PASAS aqueous solution (5mg/mL) in the addition of Fe^{3+} with different concentrations.