

Electronic Supplementary Information (ESI)

Aggregation-induced emission enhancement and living cell imaging of novel diarylanthracene conjugated dyes

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1, Characterization of CzAn and BCzAn

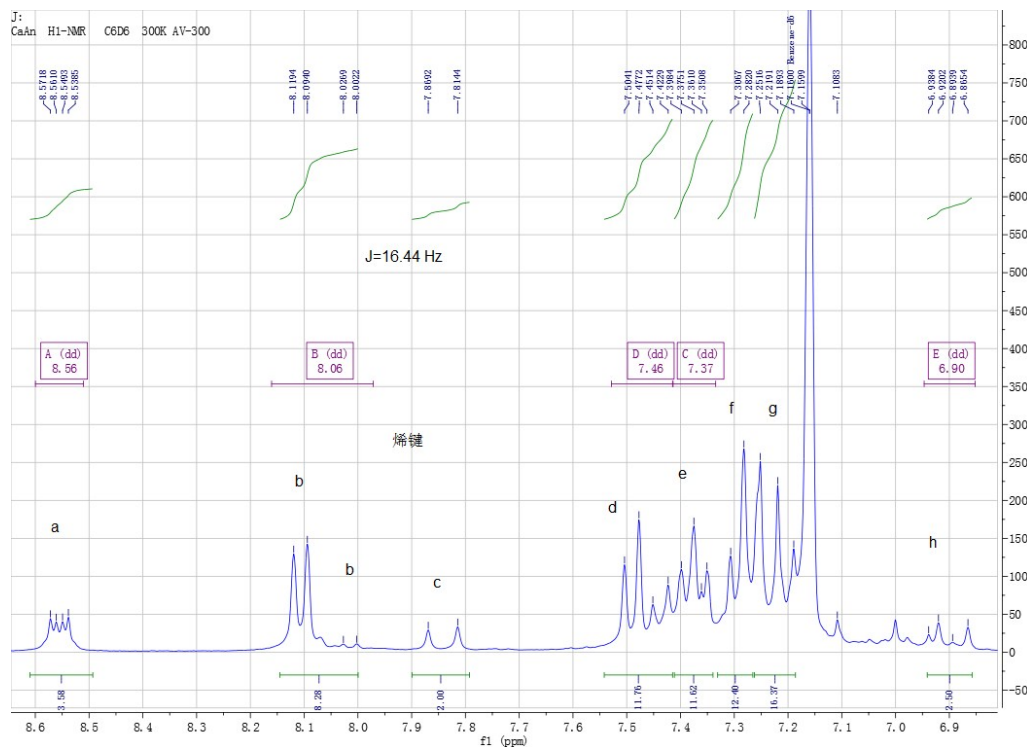


Fig. S1 ^1H NMR spectra of CzAn in C_6D_6

CaAn C13-NMR C6D6 300k AV-300

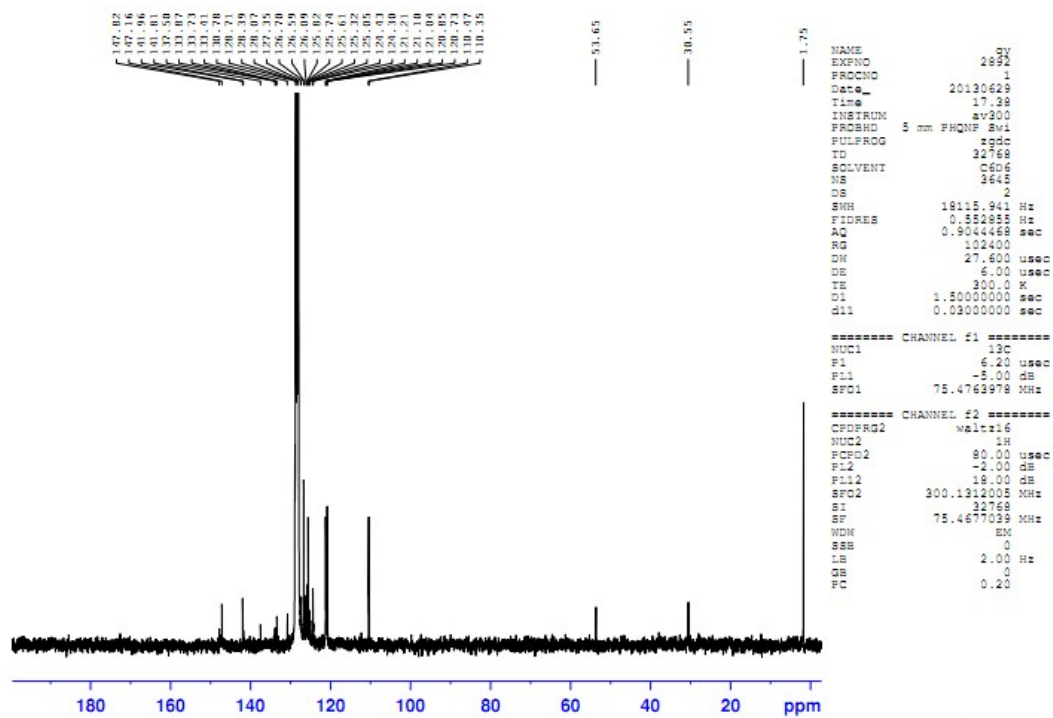


Fig. S2 ^{13}C NMR spectra of CzAn in C_6D_6

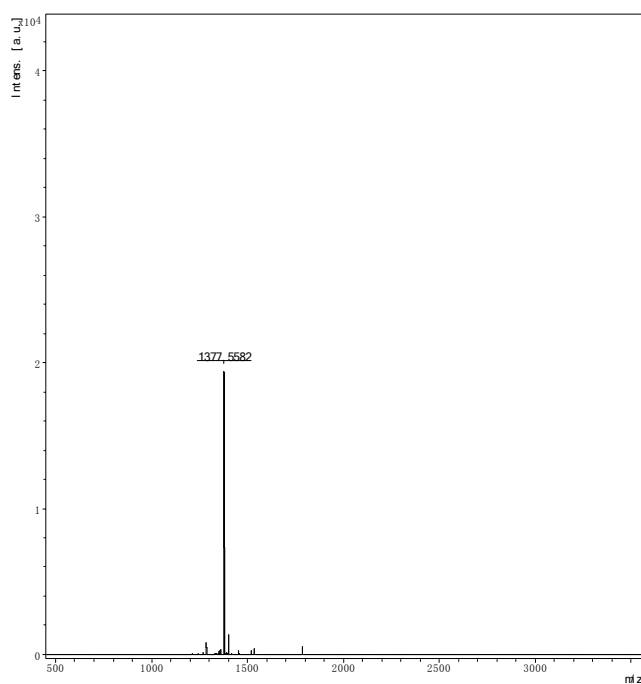


Fig. S3 HRMS-MALDI-TOF of CzAn

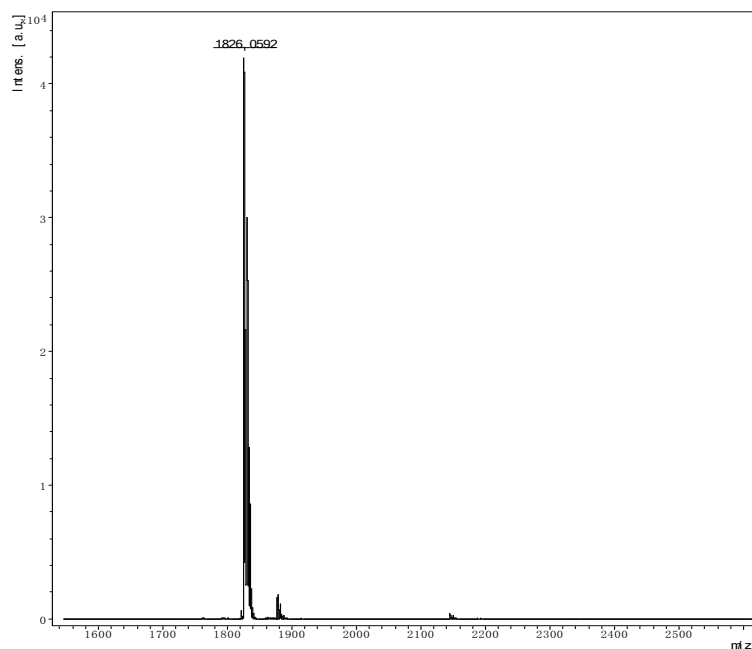


Fig. S6 HRMS-MALDI-TOF of BCzAn

2, Fluorescence spectra of CzAn in THF-water mixtures

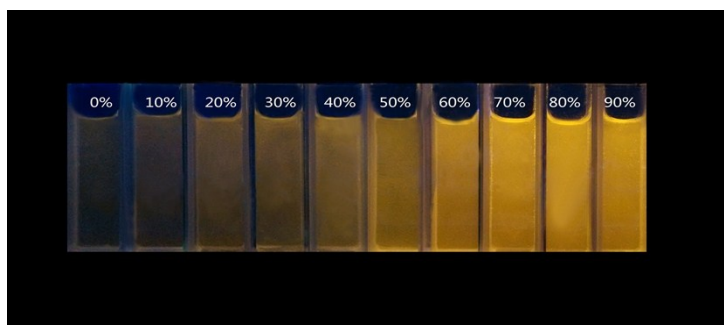
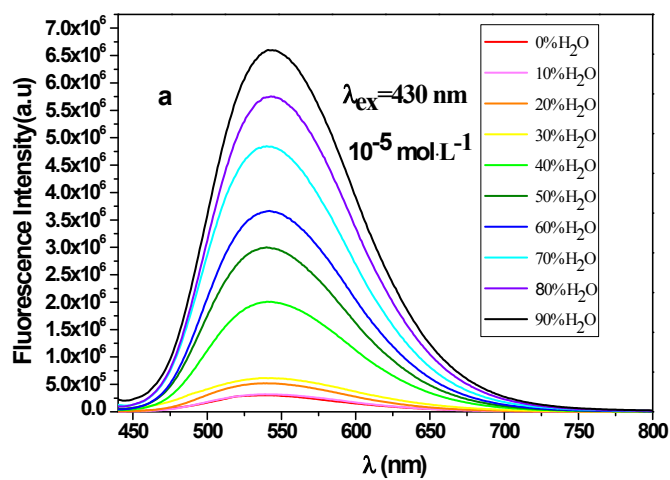


Fig. S7 Optical photographs recorded under 365 nm UV irradiation for and CzAn in THF-H₂O mixtures with various volume fractions of water



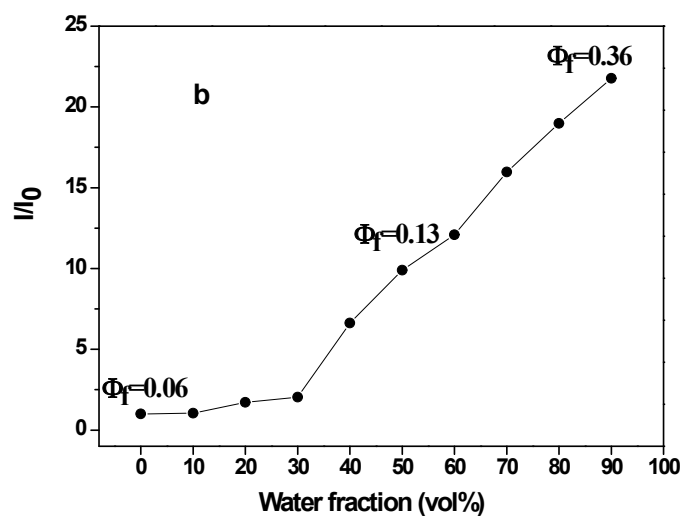


Fig. S8 Fluorescence spectra of CzAn ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) in THF with different water fractions excited at 425nm (a); fluorescence peak intensities of BCzAn in THF ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) with different water fractions (I/I_0 , I_0 = fluorescence intensity in pure THF solution, $\lambda_{\text{ex}}=430 \text{ nm}$, Φ_f represents fluorescence quantum yield) (b)

3, UV-vis absorbance spectra of BCzAn in THF-water mixtures

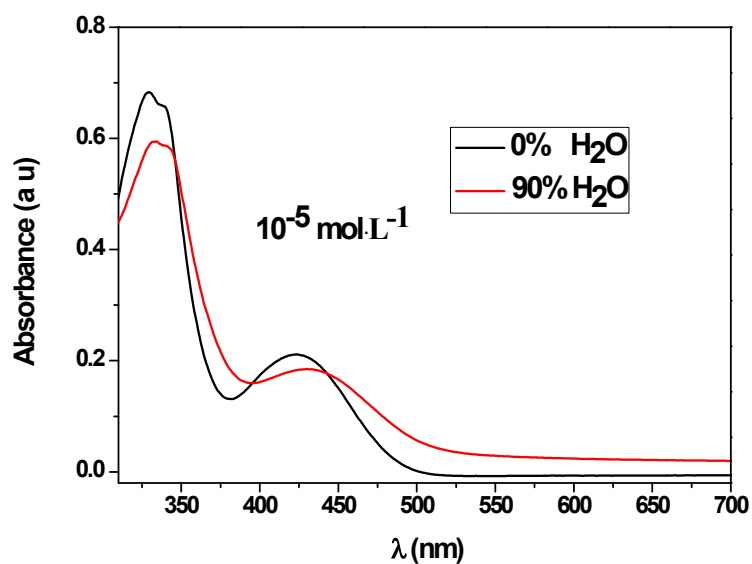


Fig. S9 UV-vis absorbance spectra of CzAn in THF ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) with different water fractions

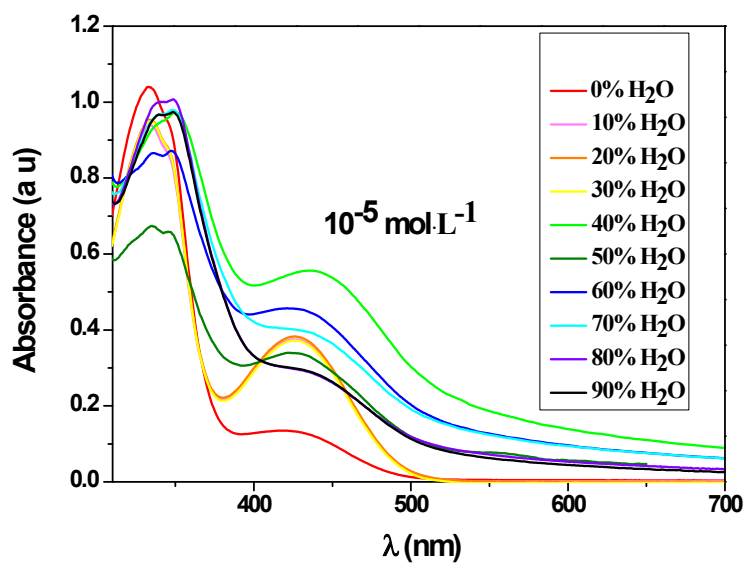


Fig. S10 UV-vis absorbance spectra of BCzAn in THF ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) with different water fractions

4, Fluorescence spectra of CzAn in DMF-glycerol mixtures

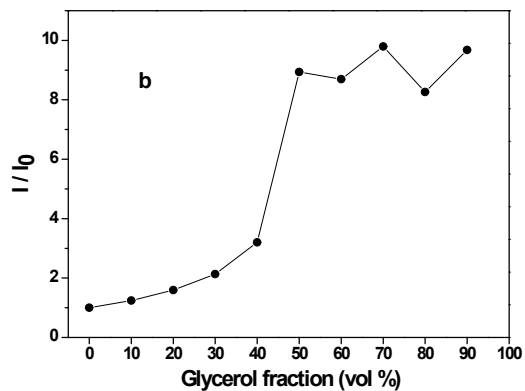
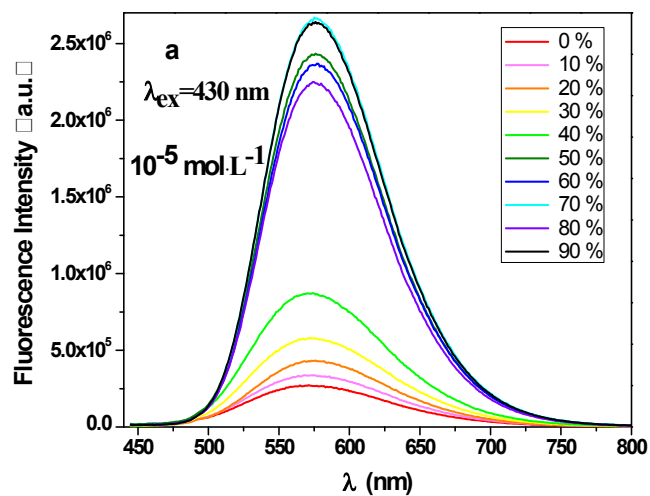


Fig. S11 Fluorescence spectra of CzAn at $10^{-5} \text{ mol}\cdot\text{L}^{-1}$ in DMF with different glycerol fractions ($\lambda_{\text{ex}}=430 \text{ nm}$) (a); fluorescence peak intensities of BCzAn in DMF ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) with different glycerol fractions (I/I_0 , I_0 = fluorescence intensity in pure DMF solution, $\lambda_{\text{ex}}=425 \text{ nm}$) (b).

5, Fluorescence, UV-vis absorption spectra of CzAn and BCzAn in different organic solvents

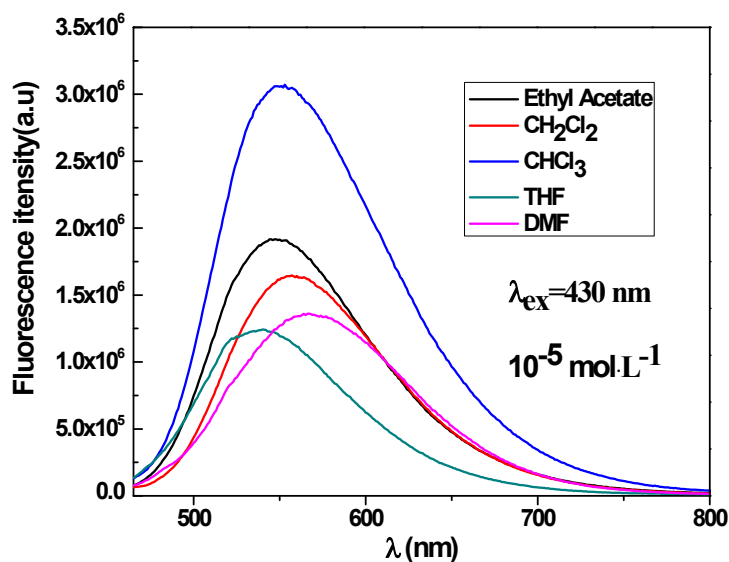


Fig. S12 Fluorescence spectra of CzAn ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) in different organic solvents excited at 430nm

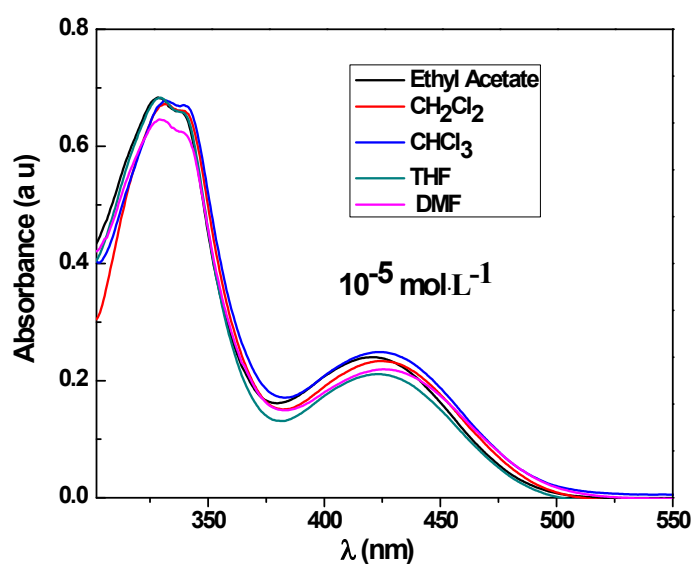


Fig. S13 UV-vis absorption spectra of CzAn ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) in different organic solvents

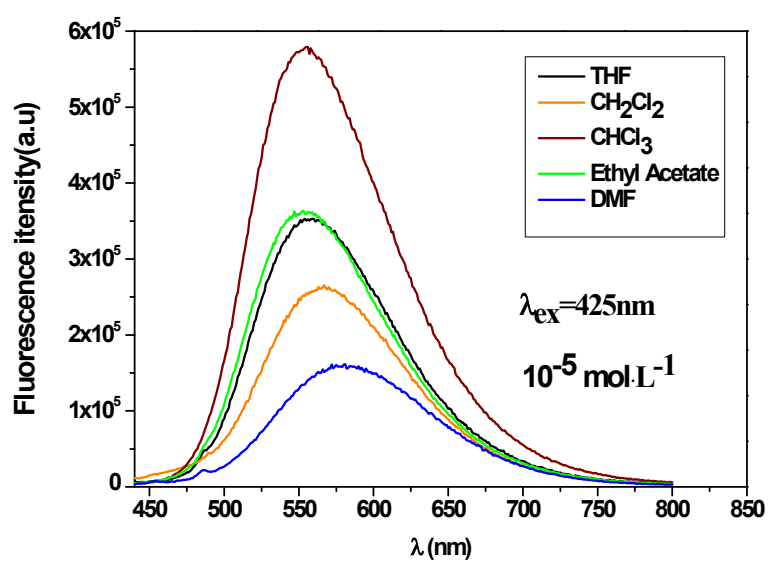


Fig. S14 Fluorescence spectra of BCzAn ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) in different organic solvents excited at 425nm

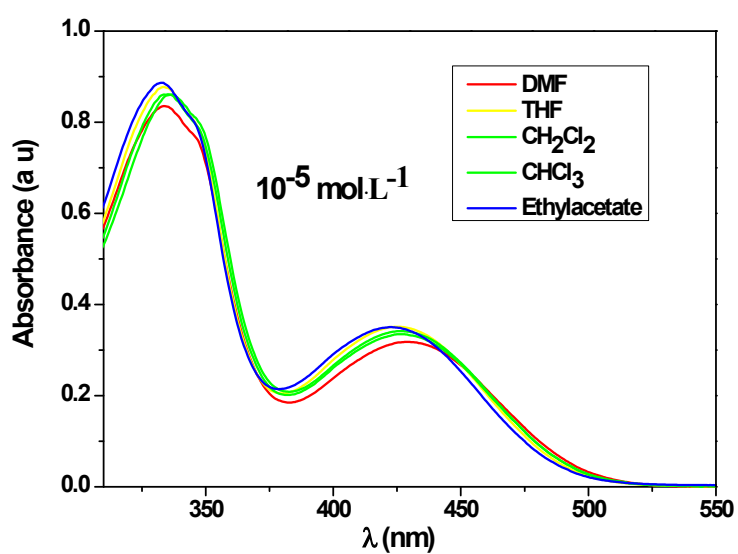


Fig. S15 UV-vis absorption spectra of BCzAn ($10^{-5} \text{ mol}\cdot\text{L}^{-1}$) in different organic solvents