

Supporting Information

Multi-stimuli Responsive Supramolecular Gels Based on a D- π -A Structural Cyanostilbene Derivative with Aggregation Induced Emission Properties

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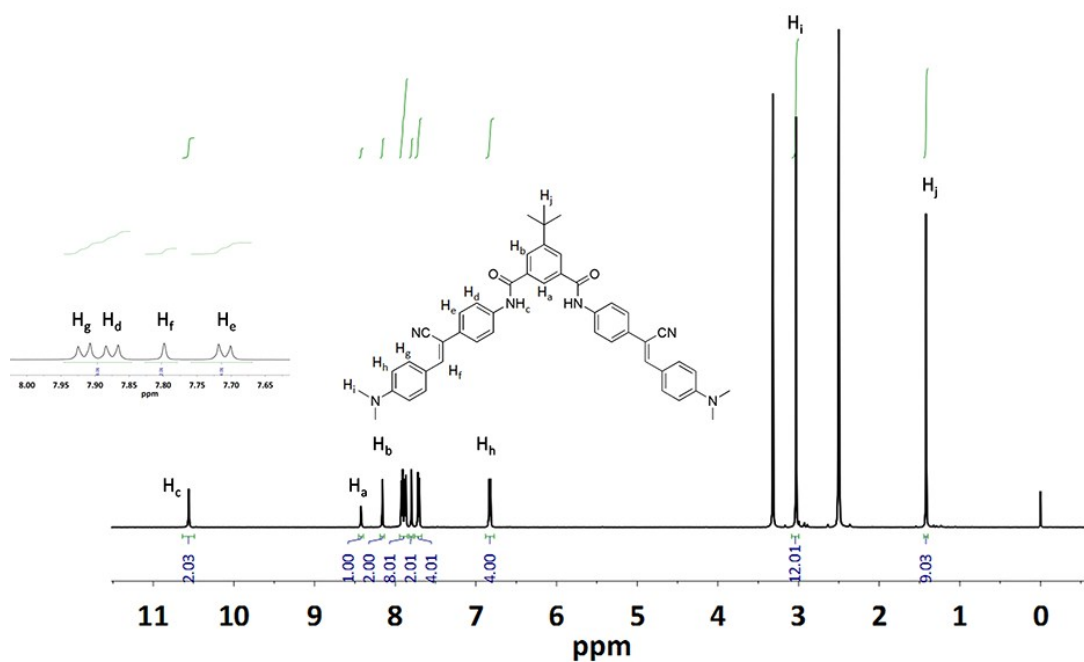


Fig. S1 ^1H NMR spectrum of BAPBIA.

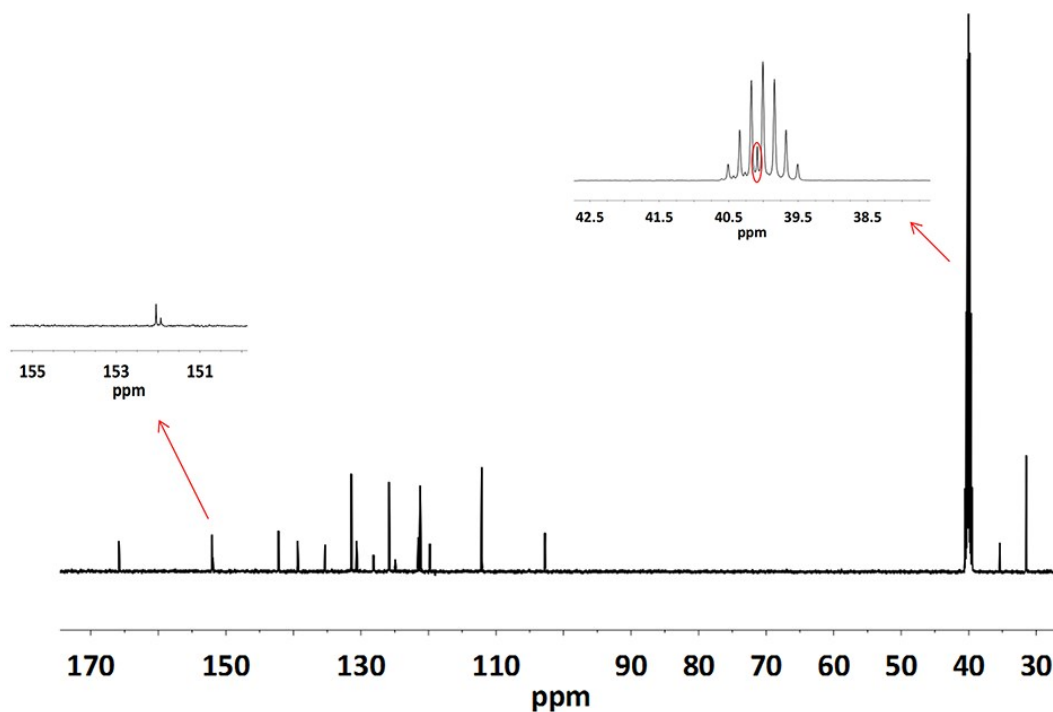


Fig. S2 ^{13}C NMR spectrum of BAPBIA.

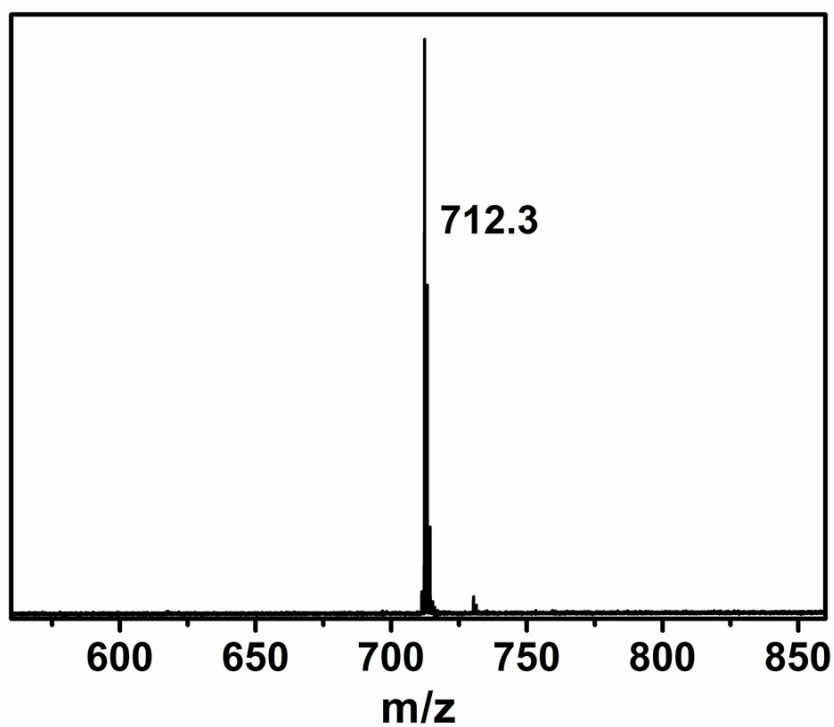


Fig. S3 MALDI-TOF mass spectrum of **BAPBIA**.

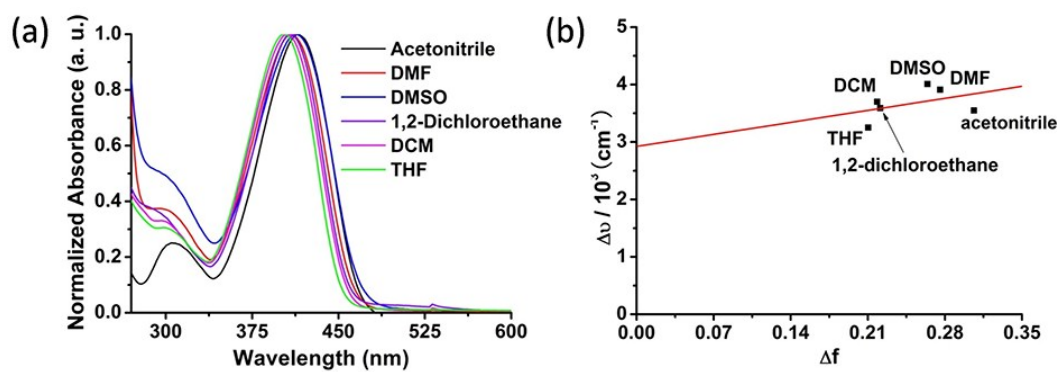


Fig. S4 (a) Normalized absorption and (b) Lippert-Mataga plot of **BAPBIA** in solvents with different polarities ($1 \times 10^{-5} \text{ M}$, $\lambda_{\text{ex}} = 400 \text{ nm}$).

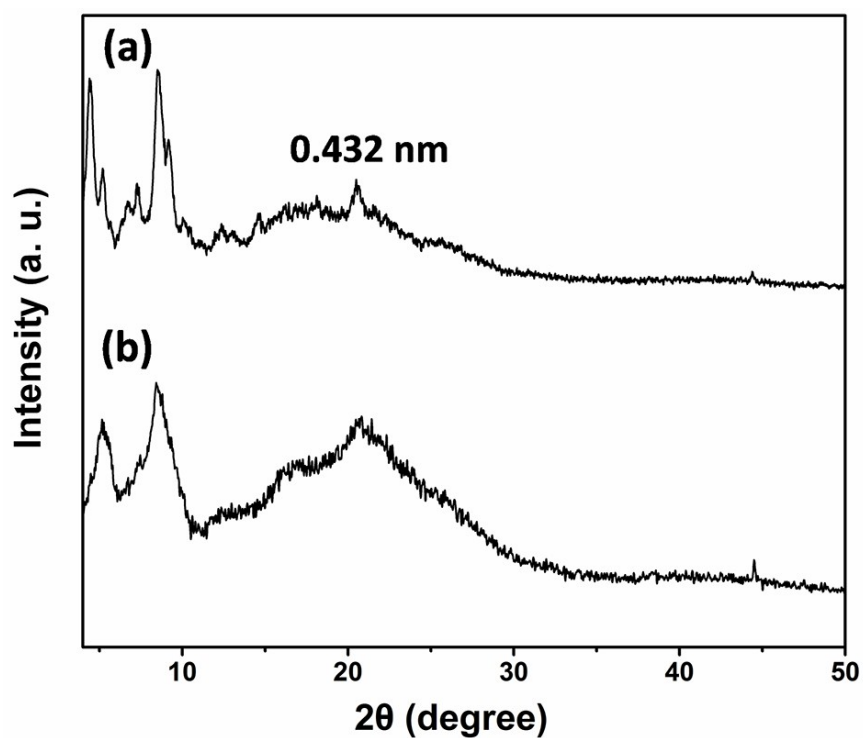


Fig. S5 X-ray powder diffraction patterns of **BAPBIA**: (a) xerogel obtained from acetonitrile and (b) xerogel obtained from DCM.

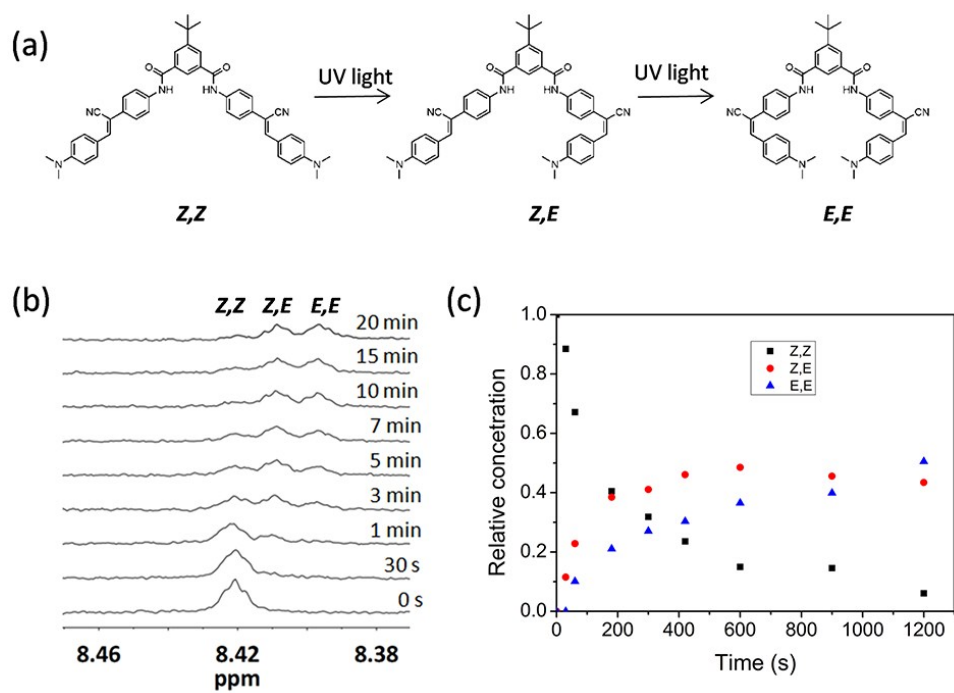


Fig. S6 (a) Three isomers (*Z,Z*, *Z,E* and *E,E* isomers), (b) amplifying ^1H NMR spectra of proton peaks near amide bonds (H_a) of **BAPBIA** and (c) varied fractions of all three isomers during continuous UV irradiation in $\text{DMSO-}d_6$ solution.

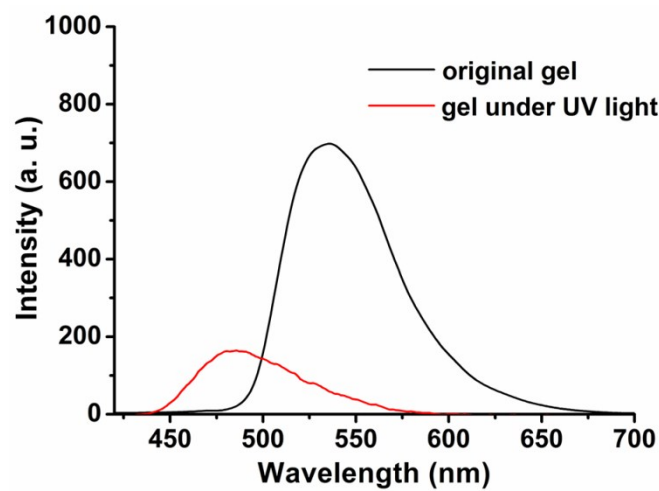


Fig. S7 Emission spectra of **BAPBIA** gel (8 mg/ml) before and after UV irradiation ($\lambda_{\text{ex}} = 400$ nm).

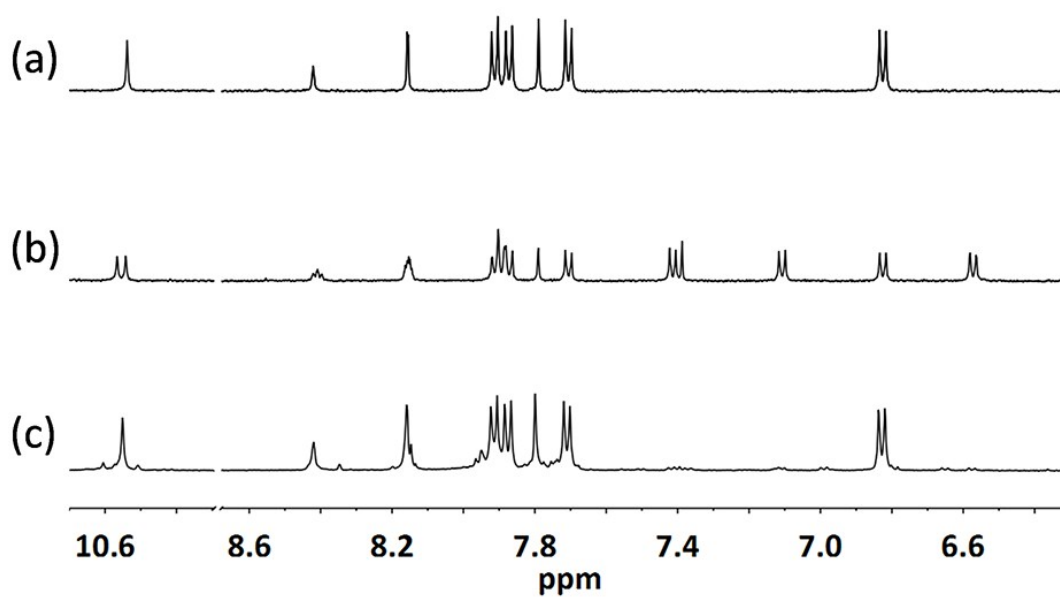


Fig. S8 (a) ^1H NMR spectra of **BAPBIA** (1×10^{-3} M) in $\text{DMSO}-d_6$ (a) before UV irradiation; (b) upon UV irradiation at 365 nm for 5 minutes; (c) upon UV irradiation at 365 nm for 5 minutes and then heating at 348 K for three days.

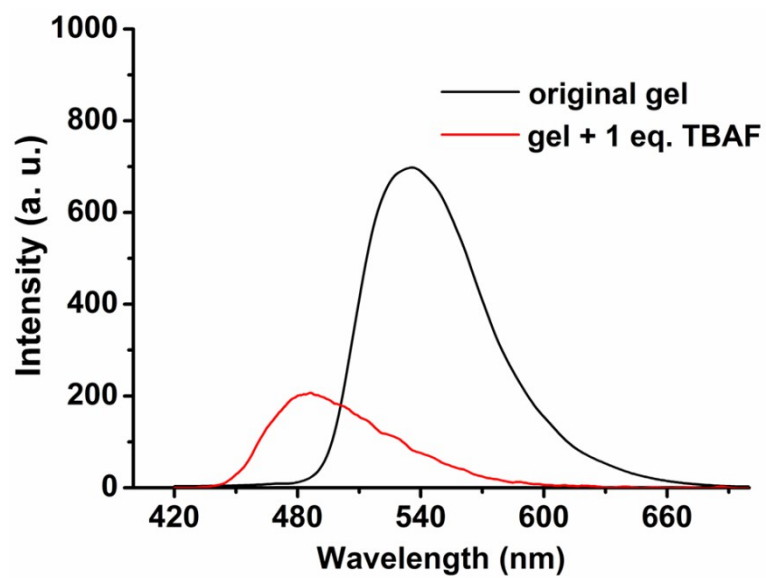


Fig. S9 Emission spectra of **BAPBIA** gel (8 mg/ml) before and after adding 1 equiv. TBAF ($\lambda_{\text{ex}} = 400$ nm).