

Supporting Information for

Photocontrollable Induction of Supramolecular Chirality in Achiral

Side Chain Azo-containing Polymers through Preferential Chiral

Solvation

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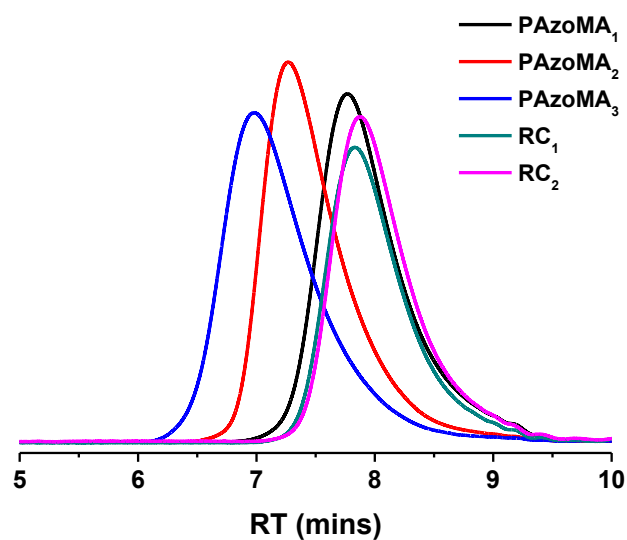


Fig. S1 GPC curves of PAzoMAs and P(AzoMA-*rans*-MMA)s.

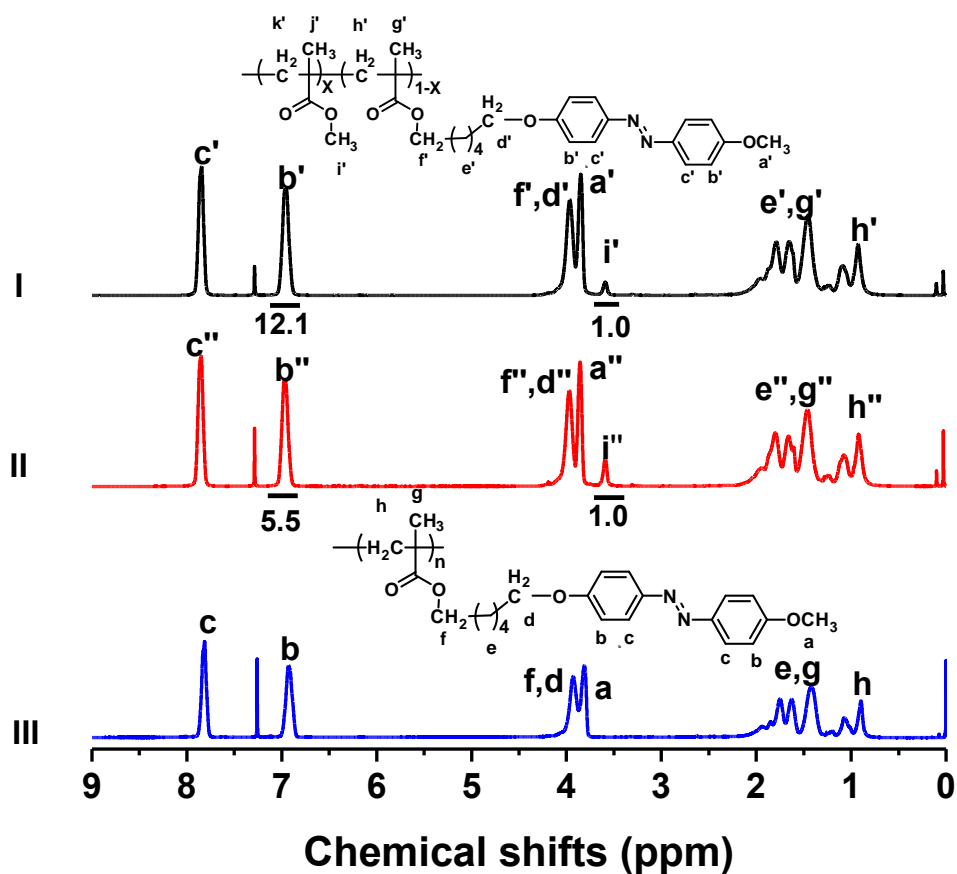


Fig. S2 ^1H NMR spectra of P(AzoMA-*rans*-MMA)s (I and II) and PAzoMA (III). The molar ratio of AzoMA and MMA was determined by the integration of i' and b' for RC_1 and i'' and b'' for RC_2 .

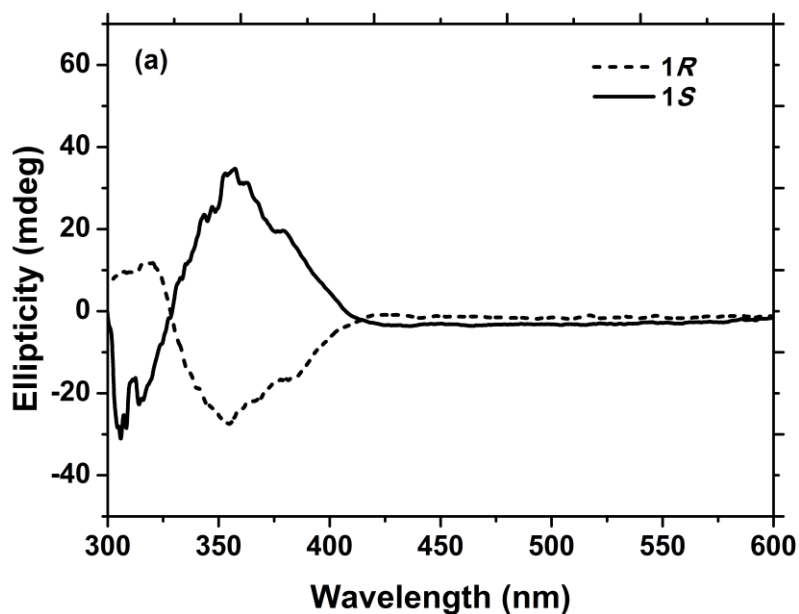


Fig. S3 CD spectra of PAzoMA aggregates in mixed cosolvents. DCE/(1*R* or 1*S*) = 0.5/2.5, [repeating units]₀ = 1.26×10^{-4} mol/L.

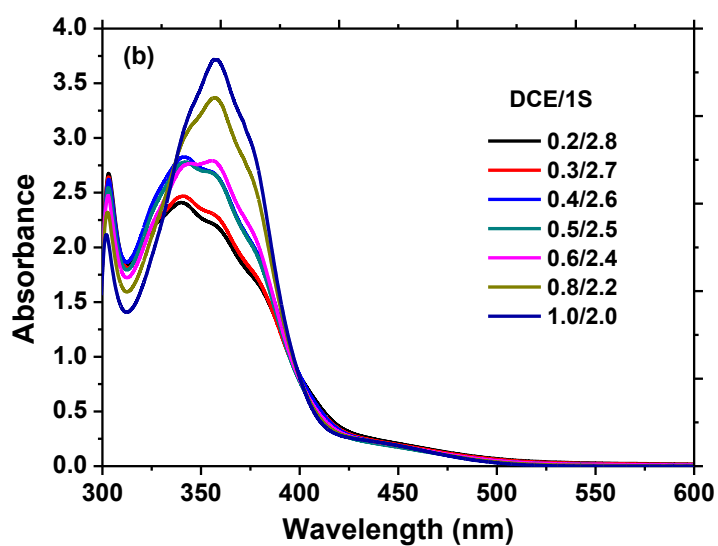


Fig. S4 UV-vis spectra of PAzoMA aggregates with different DCE/1*S* volume fractions. [repeating units]₀ = 1.26×10^{-4} mol/L.

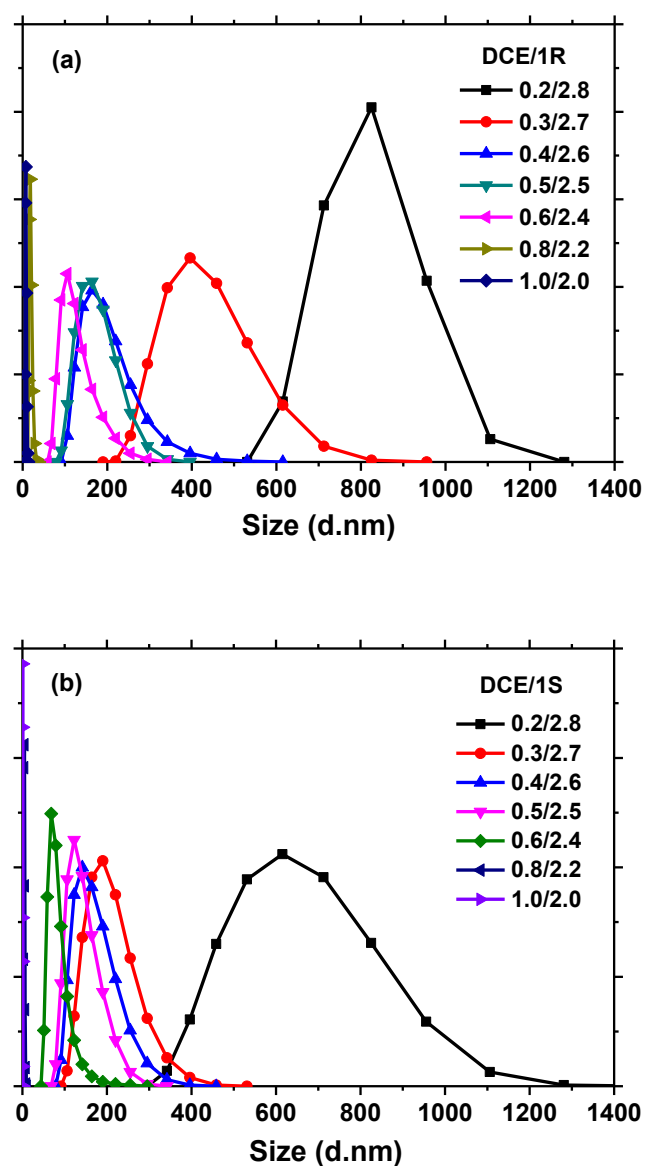


Fig. S5 Intensity-average size distributions for PAzoMA aggregates with different DCE/(1R or 1S) volume fractions. $[\text{repeating units}]_0 = 1.26 \times 10^{-4} \text{ mol/L}$.

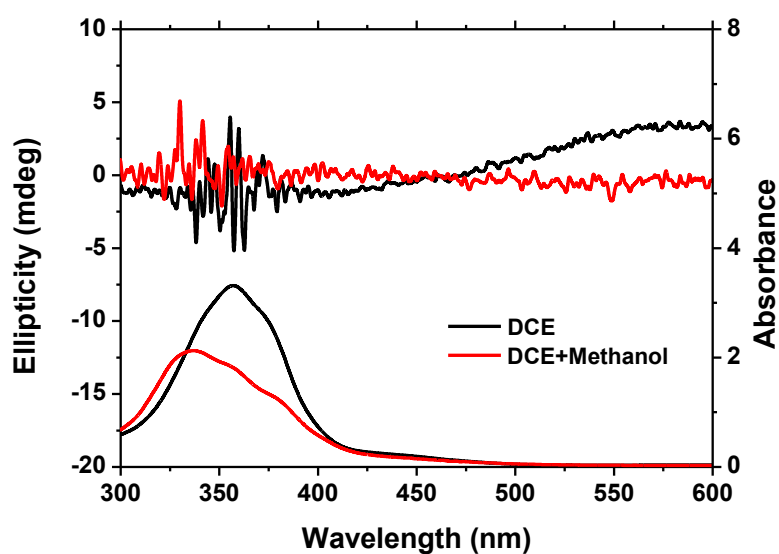


Fig. S6 UV-vis and CD spectra of PAzoMA aggregates in DCE and DCE/CH₃OH (0.5/2.5, v/v). [repeating units]₀ = 1.26×10^{-4} mol/L.

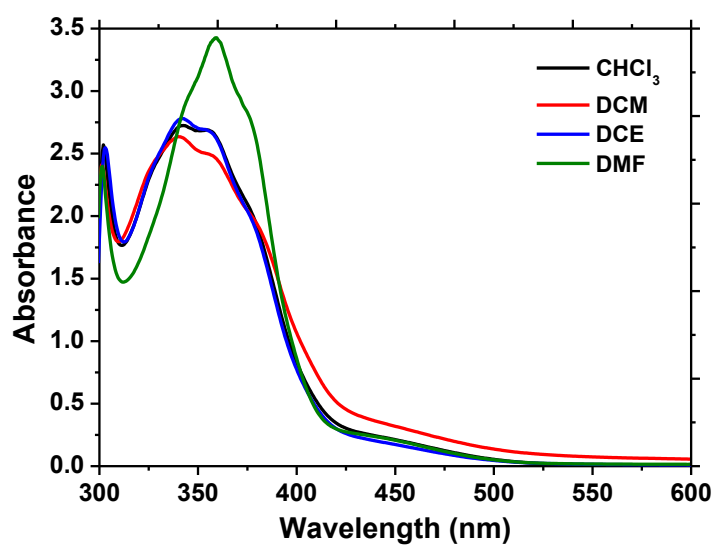
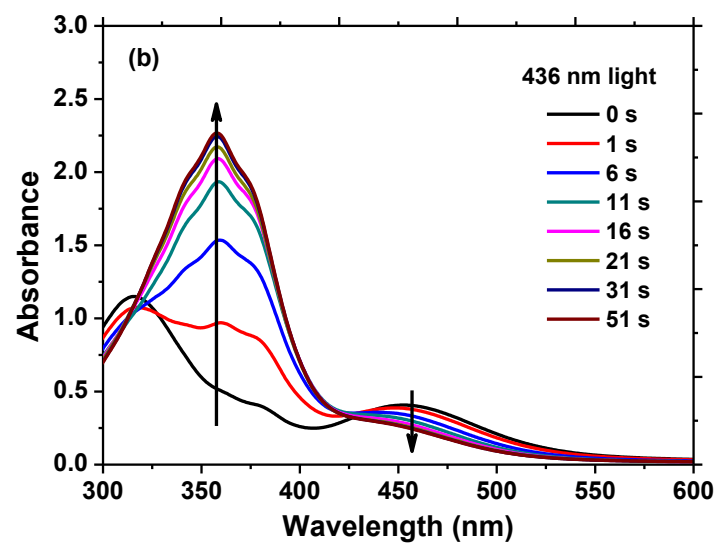
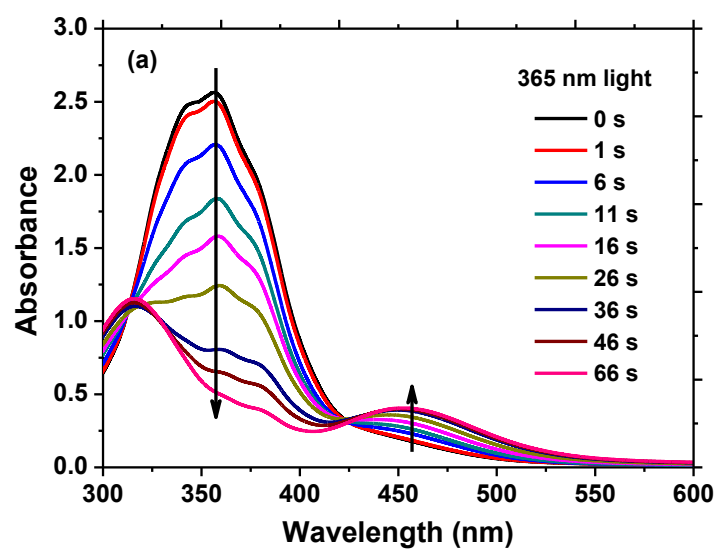


Fig. S7 UV-vis spectra of PAzoMA aggregates in mixed solvents with different good solvents. Good solvent/1S = 0.5/2.5 (v/v). [repeating units]₀ = 1.26×10^{-4} mol/L.



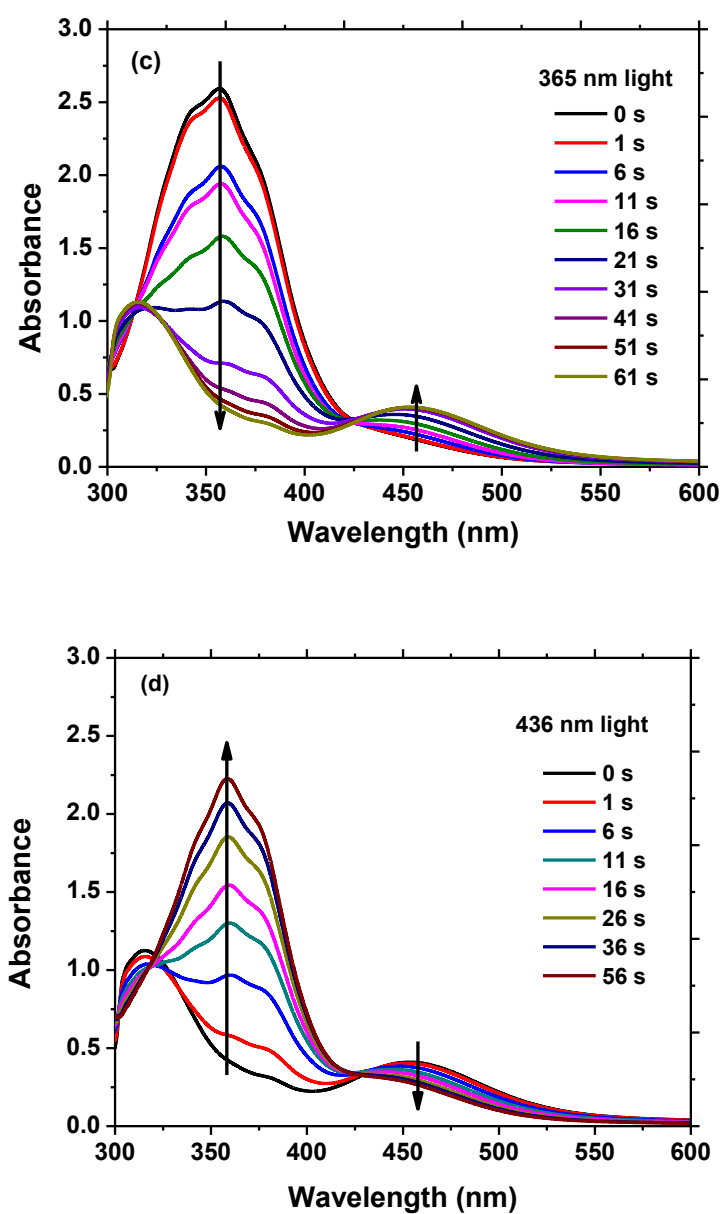


Fig. S8 Photoisomerization switching of the UV-vis spectra ((a,b) DCE/1*R* and (c,d) DCE/1*S*) of PAzoMA aggregates by alternating irradiation with 365 nm and 436 nm light.

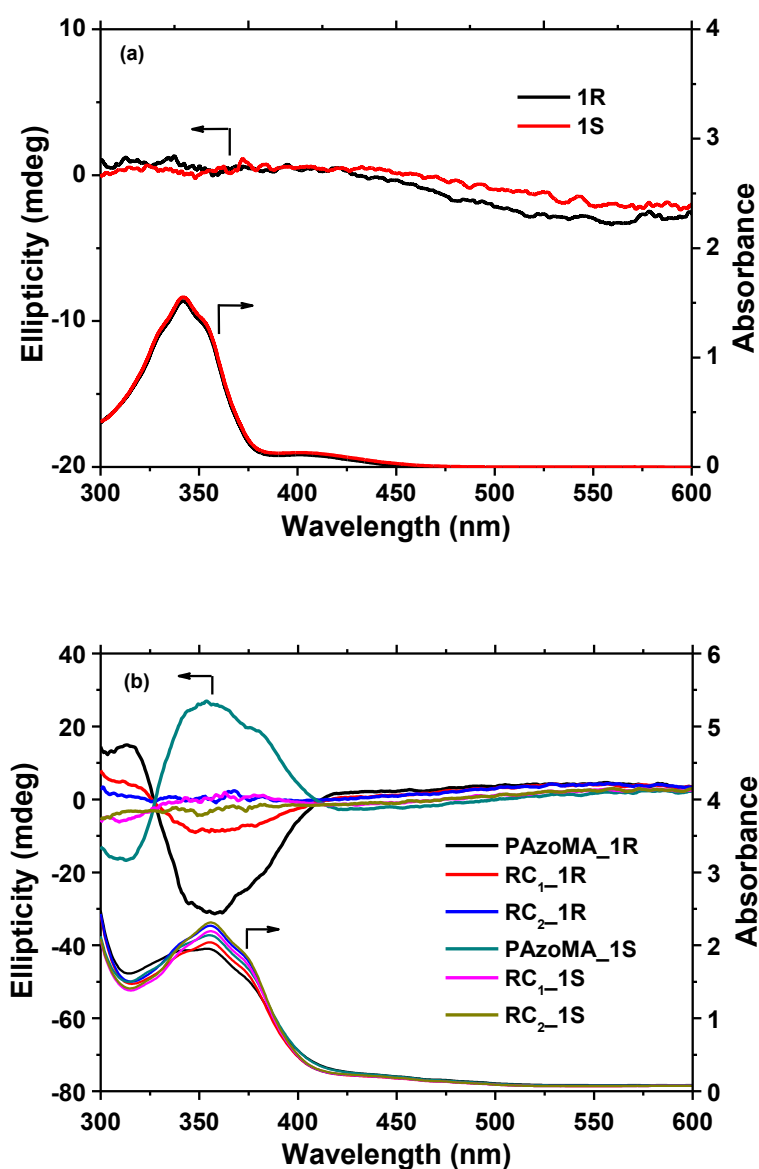
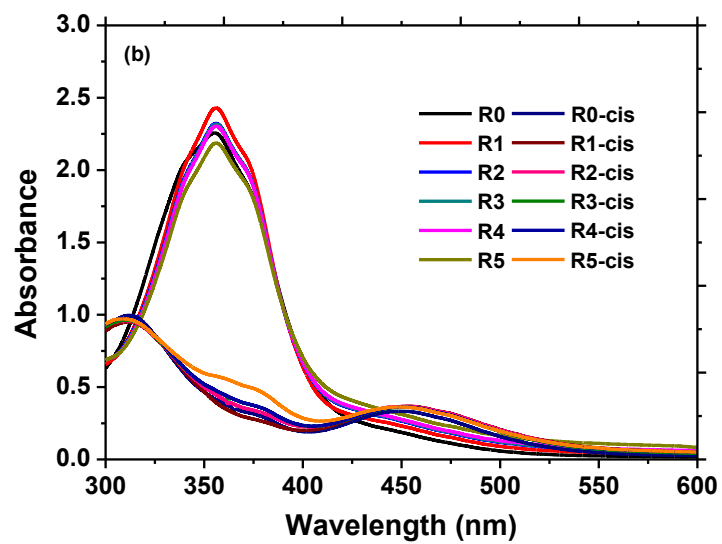
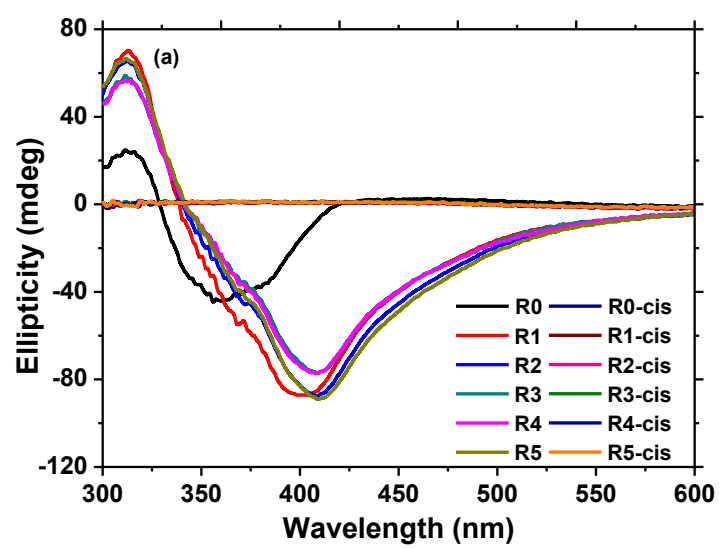


Fig. S9 UV-vis and CD spectra of AzoMA (a) and PAzoMA and P(AzoMA-*rans*-MMA) aggregates with different MMA contents (b) in mixed tersolvents. DCE/(1R or 1S) = 2.5/0.5 (v/v), [repeating units]₀ = 8.41×10^{-5} mol/L.



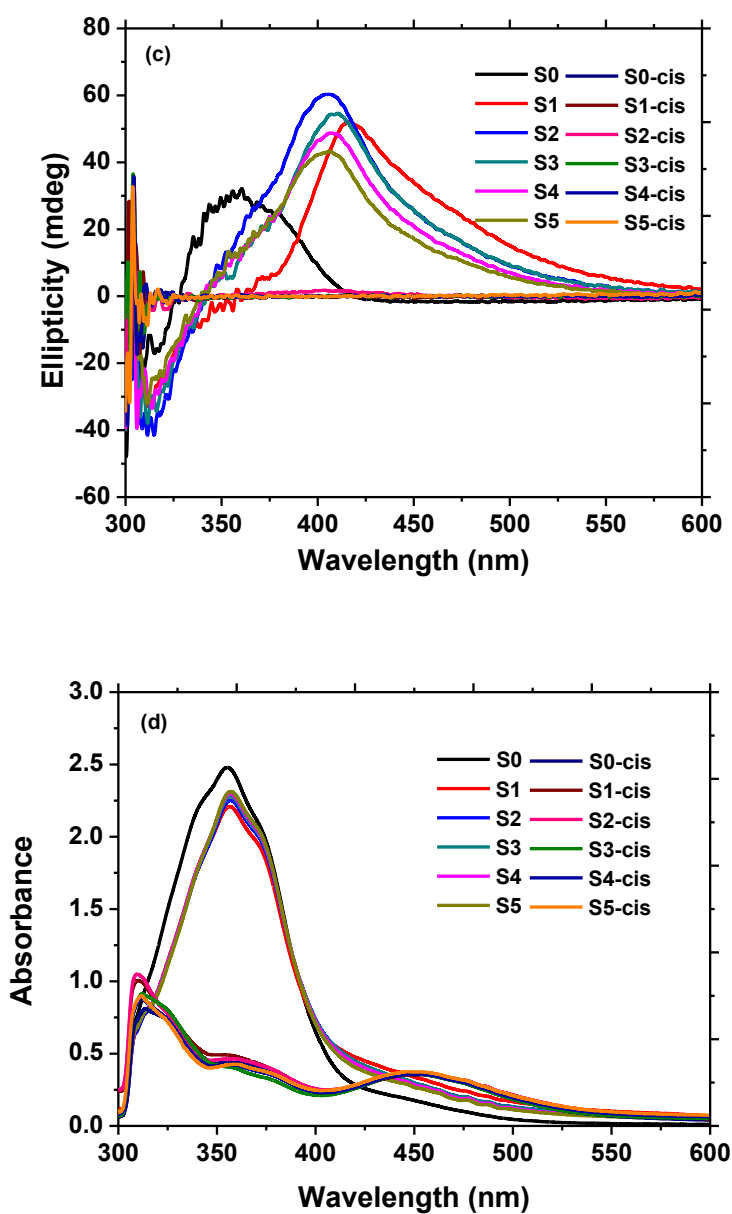


Fig. S10 Chiroptical switching of the CD ((a) for DCE/1R and (c) for DCE/1S) and UV-vis spectra ((b) for DCE/1R and (d) for DCE/1S) of PAzoMA aggregates by alternating with 365 nm light irradiation for 2 min and keeping at 60 °C for 40 min. DCE/(1R or 1S) = 2.5/0.5 (v/v), [repeating units]₀ = 1.26×10^{-4} mol/L.