

Electronic Supplementary Information (ESI) for

Photo-responsive cholesterol-substituted diacetylenic organogel: morphology tuning, photo-switching and photo-polymerization

Jin Wang, Guang Yang, Hao Jiang, Gang Zou,* Qijin Zhang

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering,

Key Laboratory of Optoelectronic Science and Technology in Anhui Province, University of

Science and Technology of China, Hefei, Anhui 230026, P. R. China

*Corresponding author, E-mail: gangzou@ustc.edu.cn

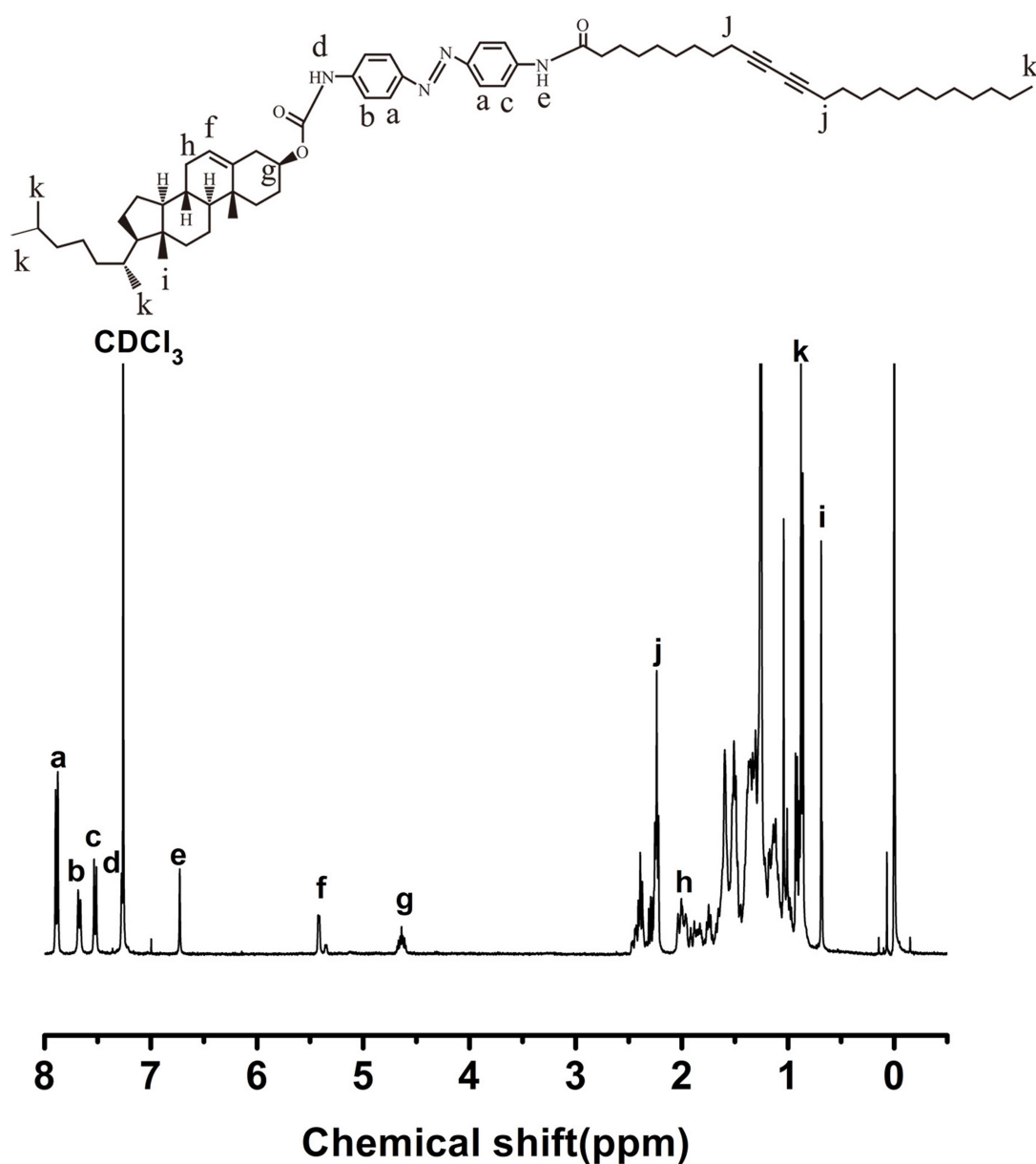


Fig. S1 ^1H NMR of CAZODA (3mg in 1.0 ml CDCl_3 , 400 MHz).

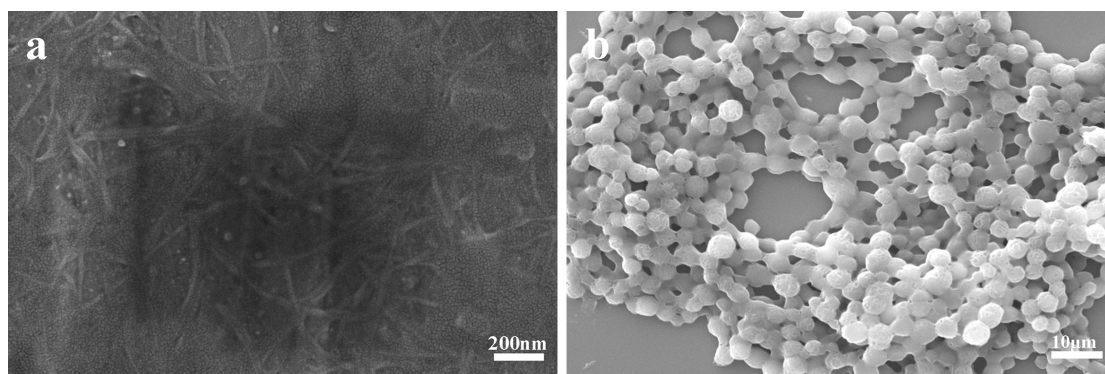


Fig. S2 SEM images of topological microstructure from (a) the ethyl acetate solution of CAZODA (0.2% w/v) and (b) the ethyl acetate gel of CAZODA (1% w/v).

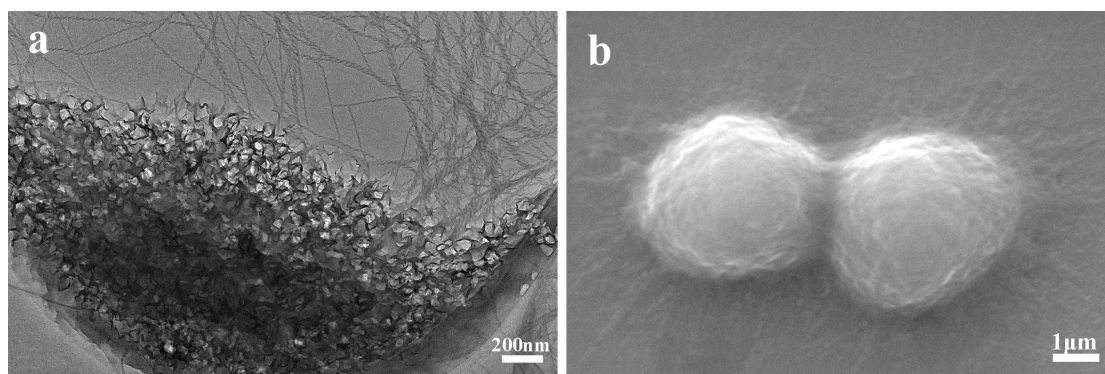


Fig. S3 (a) TEM and (b) SEM images of globular particles with entangled helical fibers.



Fig. S4 Pictures of the gel-sol-gel transitions of the ethyl acetate gel of CAZODA, showing the reversibility of the gel.

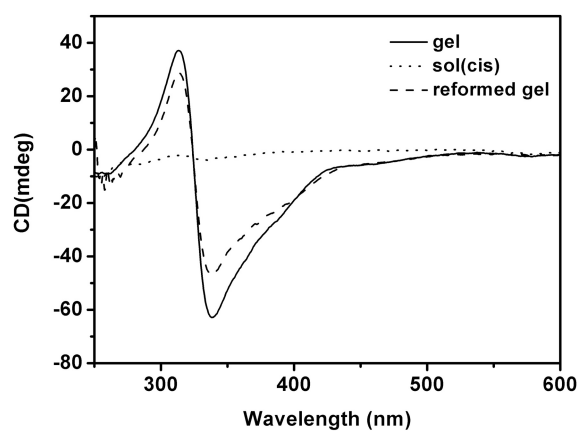


Fig. S5 CD spectra of the ethyl acetate gel of CAZODA (1% w/v) (solid line), the solution obtained after irradiation at 365 nm for 5 min (dotted line) and the reformed gel (dashed line).

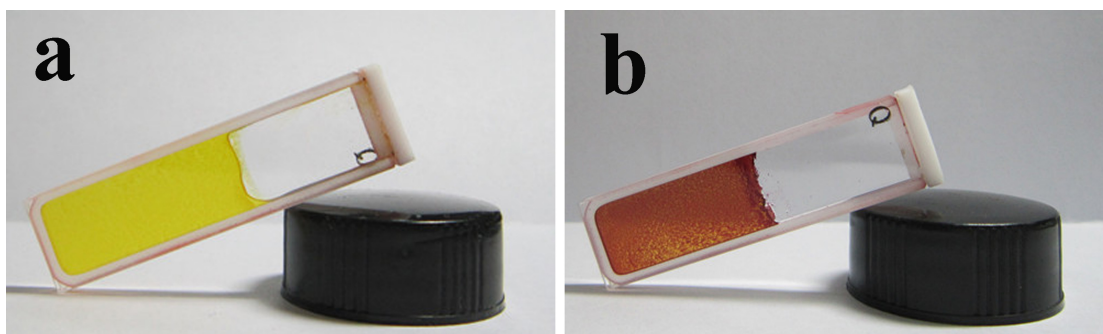


Fig. S6 Photographic images of the ethyl acetate gel of CAZODA (1% w/v): (a) before and (b) after irradiation at 254 nm for 280 min.

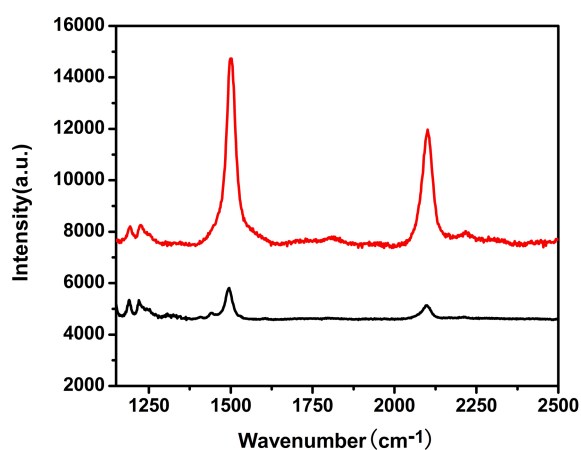


Fig. S7 Raman spectrum of gel before(black line) and after (red line) polymerization.

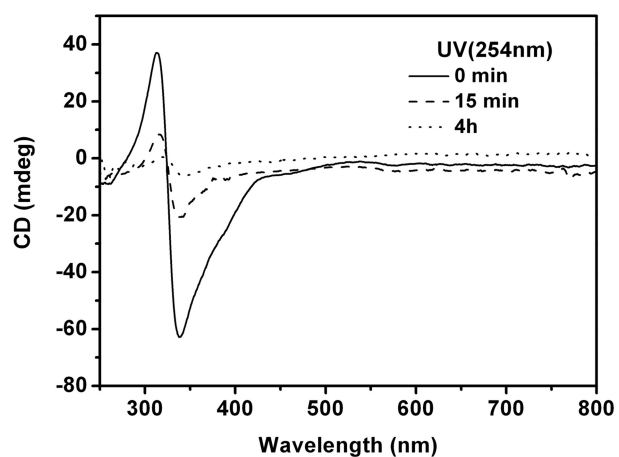


Fig. S8 Variation of the CD spectra of the ethyl acetate gel of CAZODA (1% w/v) under irradiation at 254 nm for (a) 0 min (solid line), (b) 15 min (dotted line) and (c) 280 min (dashed line).

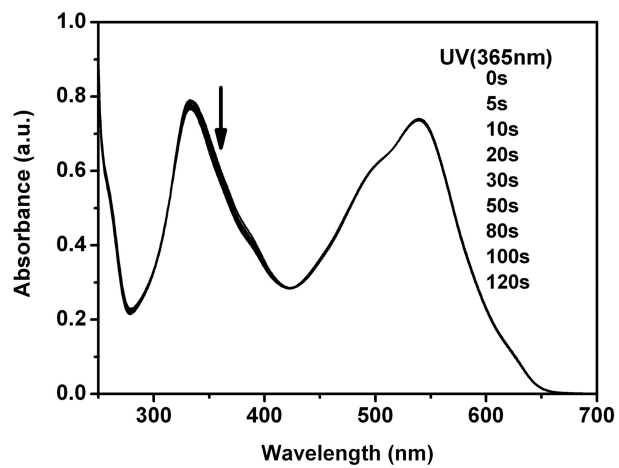


Fig. S9 Variation of the UV-vis spectra of the polymerized gel upon irradiation at 365 nm.