## Supramolecular gel from folic acid with multiple responsiveness, rapid self-recovery and orthogonal selfassemblies

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Fig. S1 Gels encapsulate molecules: I~ III: RhB, Orange G and 1-Amino-anthraquinone, respectively.



Fig. S2 AFM images and cross section profile of samples of 10 mM. (6/4, DMSO/water, v/v). Arrows: twisted fibers.



Fig. S3 UV-vis spectra of samples with different acidity (a), basicity (b); CD spectra of samples with different acidity (c), basicity (d). Concentration of all samples was fixed at 10 mM, 6/4.



Fig. S4 Optical microscope images of samples with different acidity. 10 mM HCl (a), 15 mM HCl (b), 20 mM HCl (c), 25 mM HCl (d), magnified images of sample of 20 mM HCl (c), (f). Concentration of all samples was fixed at 10 mM, 6/4.



Fig. S5 UV-vis spectra of samples after irritation of for 1 hrs and an obvious color change and phase transition can be detected (insets).



Fig. S6 MS of sample after light irradiation.