Supporting information

Lamellar-cubic transition of a dihydrazide derivative and its effect on the gel stability

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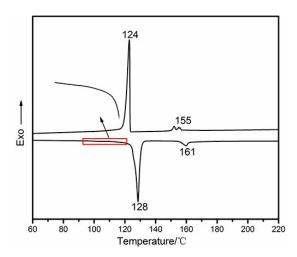


Fig. S1 DSC curves of $4D_{16}$ xerogel from cyclohexane (15 mg/mL, 20 °C) during second heating and cooling cycles with the heating rate of 10 °C/min.

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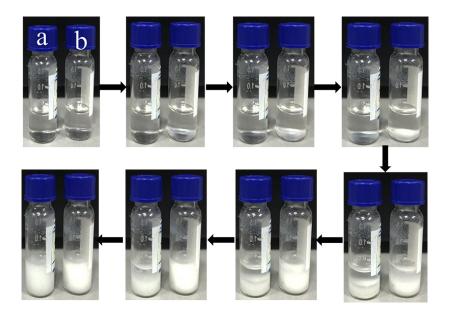


Fig. S2 Photos of gelation process of $4D_{16}$ at 20 °C in cyclohexane with the concentration of **(a)** 10 mg/mL, **(b)** 15 mg/mL.

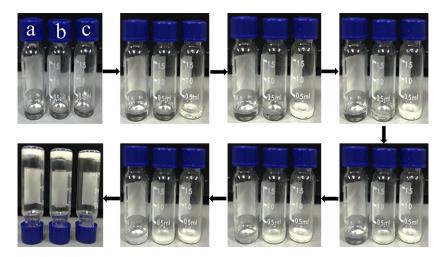


Fig. S3 Photos of gelation process of $4D_{16}$ at 20 °C in benzene with the concentration of (a) 26 mg/mL, (b) 40 mg/mL, (c) 60 mg/mL.

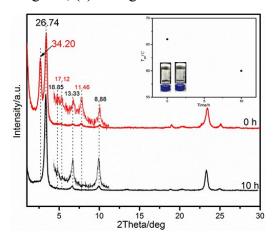


Fig. S4 XRD patterns of $4D_{16}$ xerogels obtained from benzene (40 mg/mL, 20 °C) after different annealing time at 58 °C. Inset graph was the plots of gel-sol phase transition temperature (T_{gel}) of $4D_{16}$ gels formed in benzene (40 mg/mL, 20 °C) annealed at 58 °C for different time period.

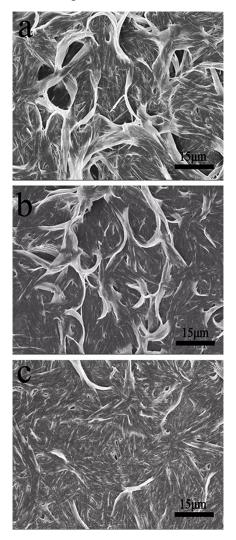
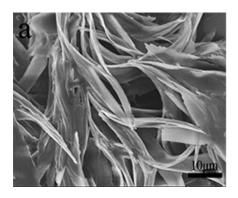


Fig. S5 SEM images of $4D_{16}$ xerogels obtained from cyclohexane (15 mg/mL, 20 °C) after different annealing time at 52 °C: (a) 0 h, (b) 110 h, (c) 260 h.



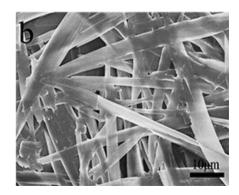


Fig. S6 SEM images of $4D_{16}$ xerogels obtained from benzene (40 mg/mL, $20 ^{\circ}\text{C}$) after different annealing time at 58 $^{\circ}\text{C}$: (a) 0 h, (b) 10 h.