

Electronic Supplementary Information for

Rational Construction of Gel-based Supramolecular Logic Gates by Functional Gelator with Multiple-Stimuli Responsive Properties

Kaiqi Fan ^a, Jun Yang ^{bc}, Xiaobo Wang ^d, Jian Song ^{*bc}

^a School of Material and Chemical Engineering, Zhengzhou University of Light Industry, Zhengzhou 450002, P.R. China

^b School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China. E-mail: songjian@tju.edu.cn

^c The Co-Innovation Center of Chemistry and Chemical Engineering of Tianjin, Tianjin 300072, China

^d Journal Editorial Department, Zhengzhou University of Light Industry, Zhengzhou 450002, P.R. China School of Chemical Engineering and Technology, Tianjin University,

1. Minimum gelator concentration and gel-sol transition temperatures of **1 in different solvents.**

Table S1. Minimum gelator concentration (MGC) at 25 °C of gelator **1** in different organic-water mixtures. Gel-sol transition temperatures (T_{gel}) of the gels containing 5 mM gelator are also listed.

solvent	methanol/H ₂ O (v/v = 1:1)	ethanol/H ₂ O (v/v = 1:1)	DMSO/H ₂ O (v/v = 1:1)	DMF/H ₂ O (v/v = 1:1)
MGC/mM	3.0	3.1	2.7	2.9
T_{gel} /K	315	321	331	328

2. TEM images of the xerogel of **1**.

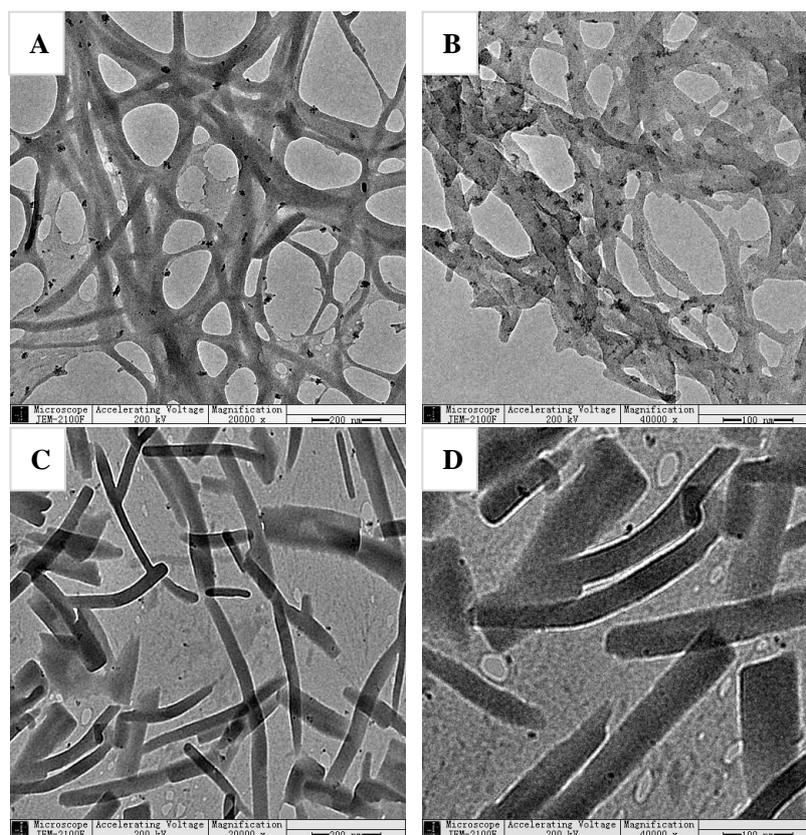


Fig. S1. TEM images of a xerogel of **1** obtained from DMSO/H₂O (v/v = 1/1, A and B) and DMF/H₂O (v/v = 1/1, C and D).

3. XRD profile of the xerogel of **1** measured at room temperature

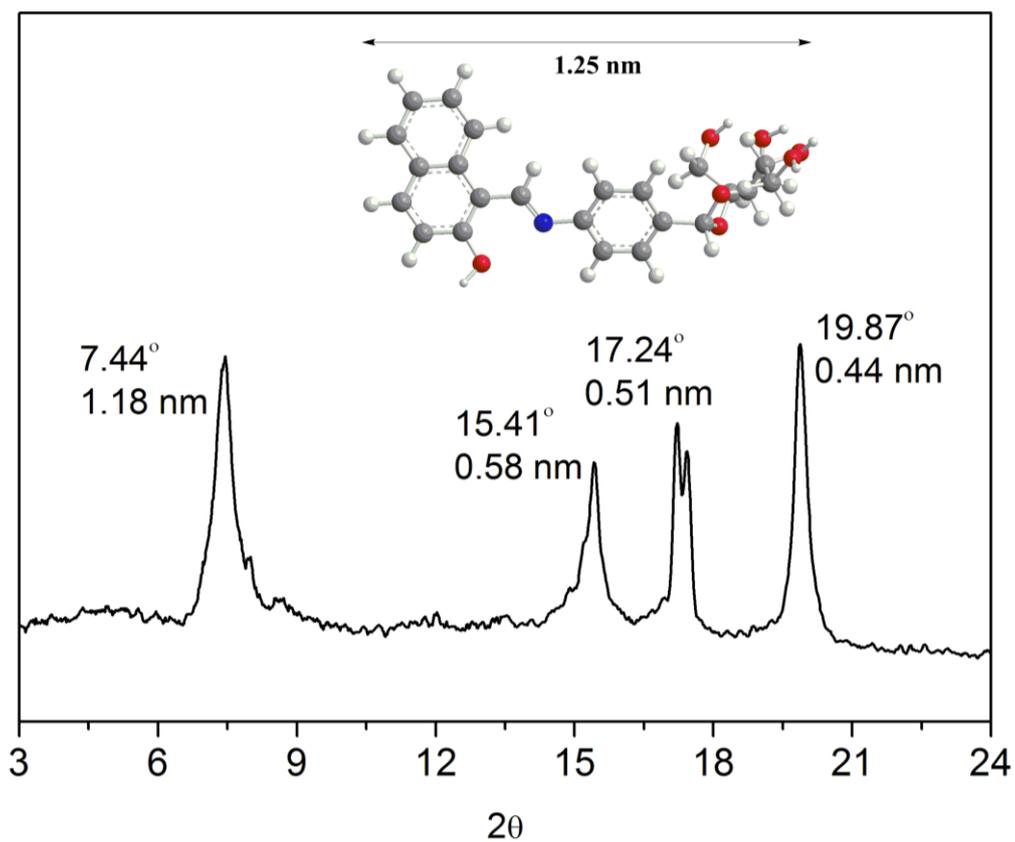


Fig. S2. XRD profile of the xerogel of **1** measured at room temperature. The xerogel was obtained from DMSO/H₂O (v/v = 1:1).