

Supporting information

Simple Structural Hydrazone-based Gelator as a Fluoride Ion Colorimetric Sensor

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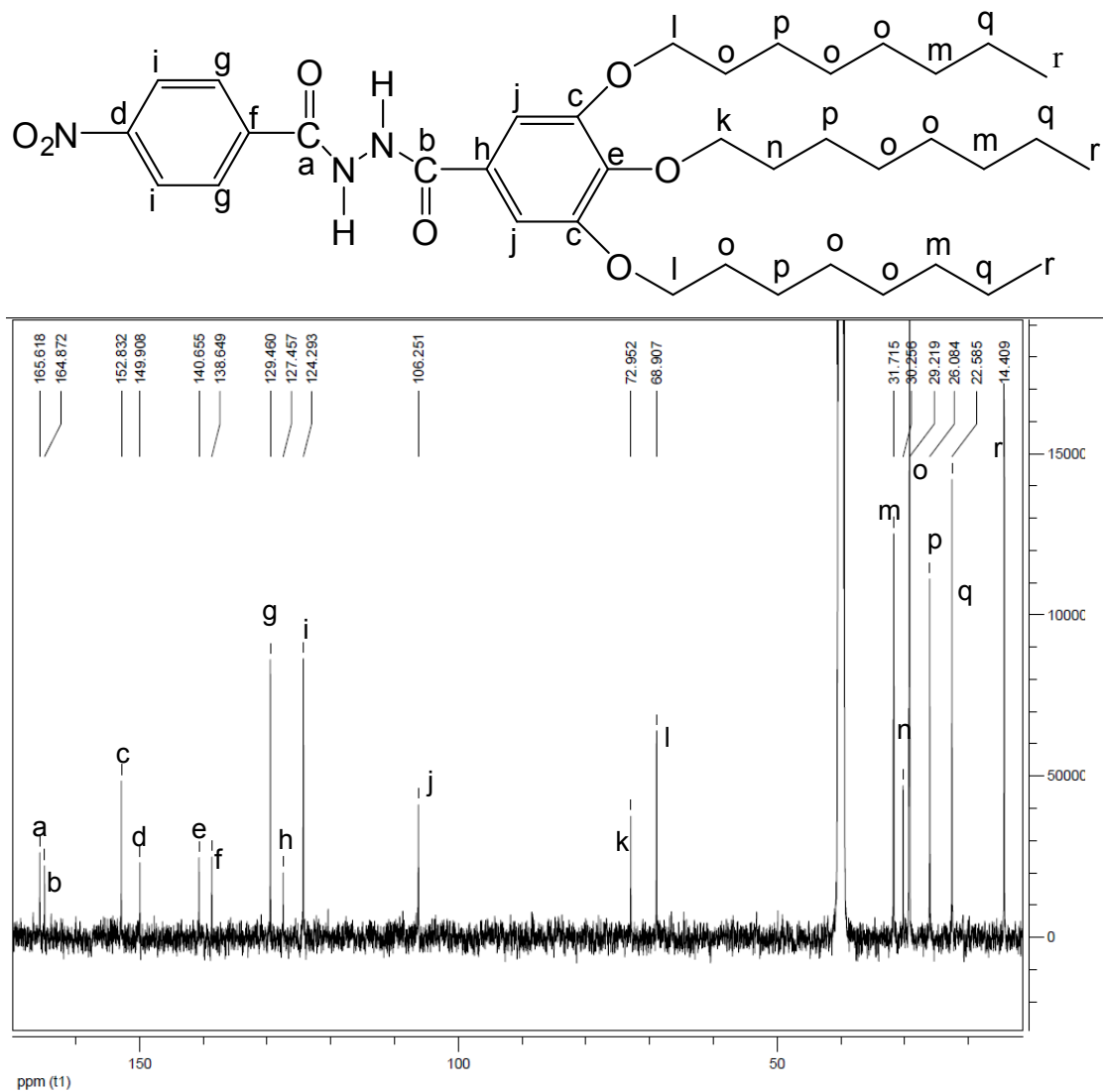


Fig. S1 ^{13}C NMR spectra (δ 10-170 ppm region shown; $\text{DMSO-}d_6$; 500MHz) of C8.

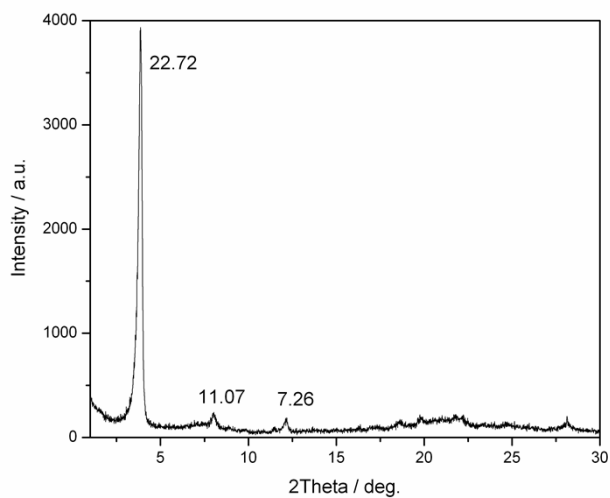


Fig. S2 XRD pattern of C8 xerogel from cyclohexane.

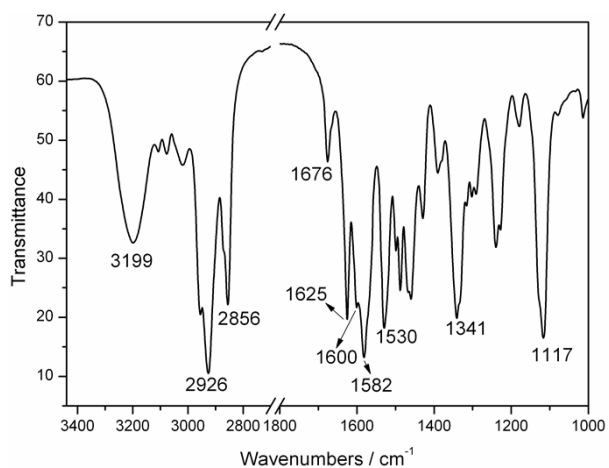


Fig. S3 FT-IR spectrum of the xerogel of C8 from cyclohexane.

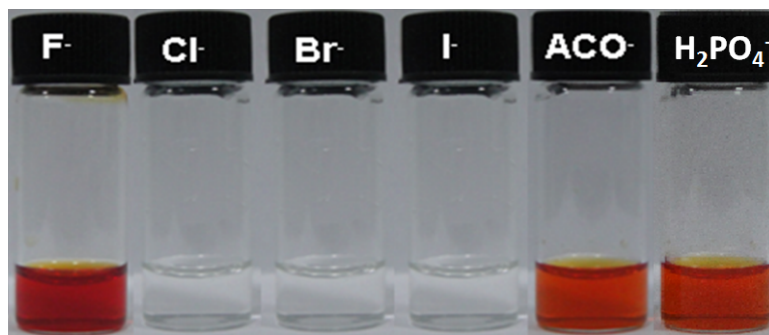


Fig. S4 The color changes of C8 (1×10^{-2} mol/L) upon addition of 35 equiv. various anions in acetonitrile.

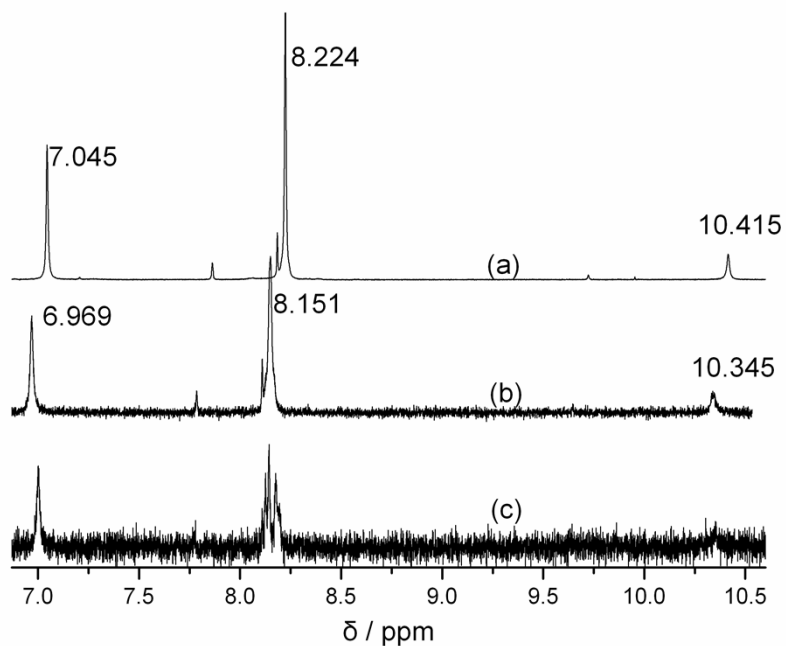


Fig. S5 Partial proton NMR spectra (500 MHz, DMSO-*d*₆, 25 °C) of compound (C8 and 2 equiv. TBAF) at different concentrations: (a) 1×10^{-2} mol/L, (b) 1×10^{-4} mol/L, (c)

1×10^{-5} mol/L.

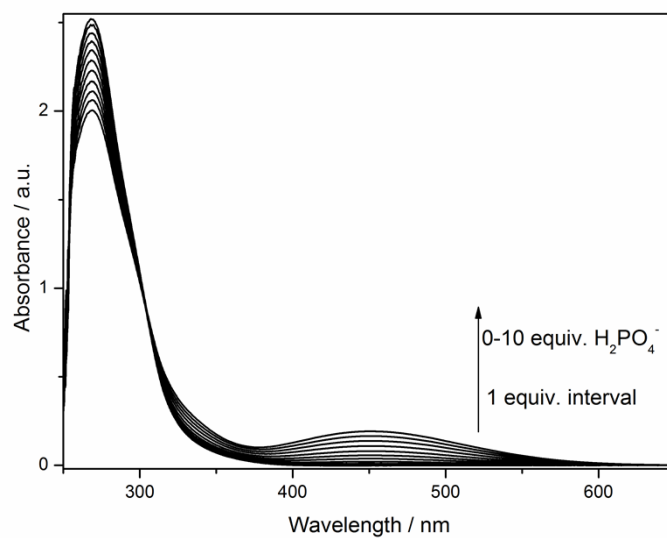


Fig. S6 Absorbance spectra changes of C8 (3×10^{-4} mol/L) upon the addition of 0–10 equiv. H_2PO_4^- in DMSO.

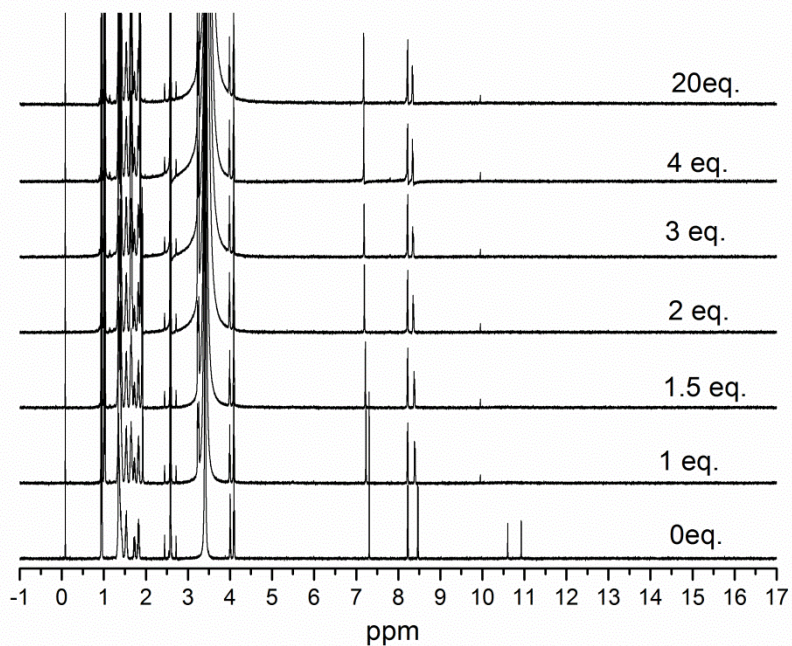


Fig. S7 Plots of ^1H NMR spectra of C8 (2×10^{-3} mol/L) upon the addition of AcO^- in $\text{DMSO}-d_6$.

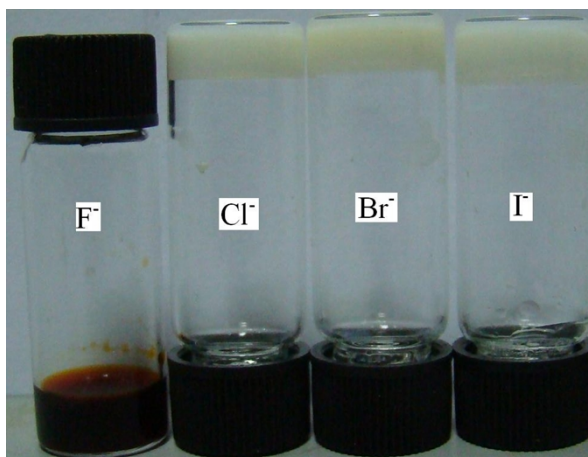


Fig. S8 Organogels formed from a solution of C8 in acetonitrile (3.86 wt%) after addition 35 equiv of solid various anions.

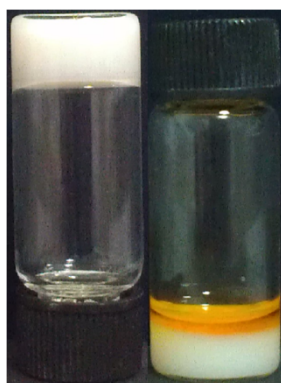


Fig. S9 The changes in the ethanol gel (3.65 wt%) after addition of THF solution of [Bu₄N]F (1 equiv.)

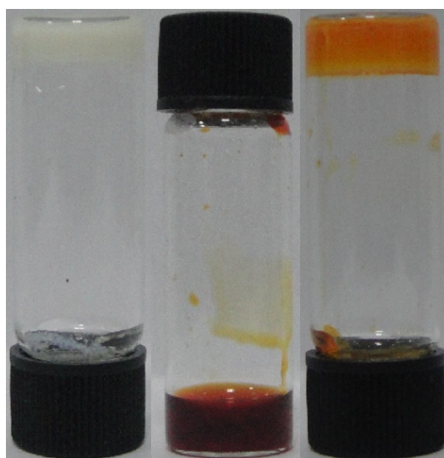


Fig. S10 Organogel formed from a solution of C8 in acetonitrile (3.86 wt%, left); after addition of solid AcO⁻ (8 equiv., middle); after addition of 20 μ l methanol (right).