

Anion Response of Organogels: Dependence on the Intermolecular Interaction between Gelators

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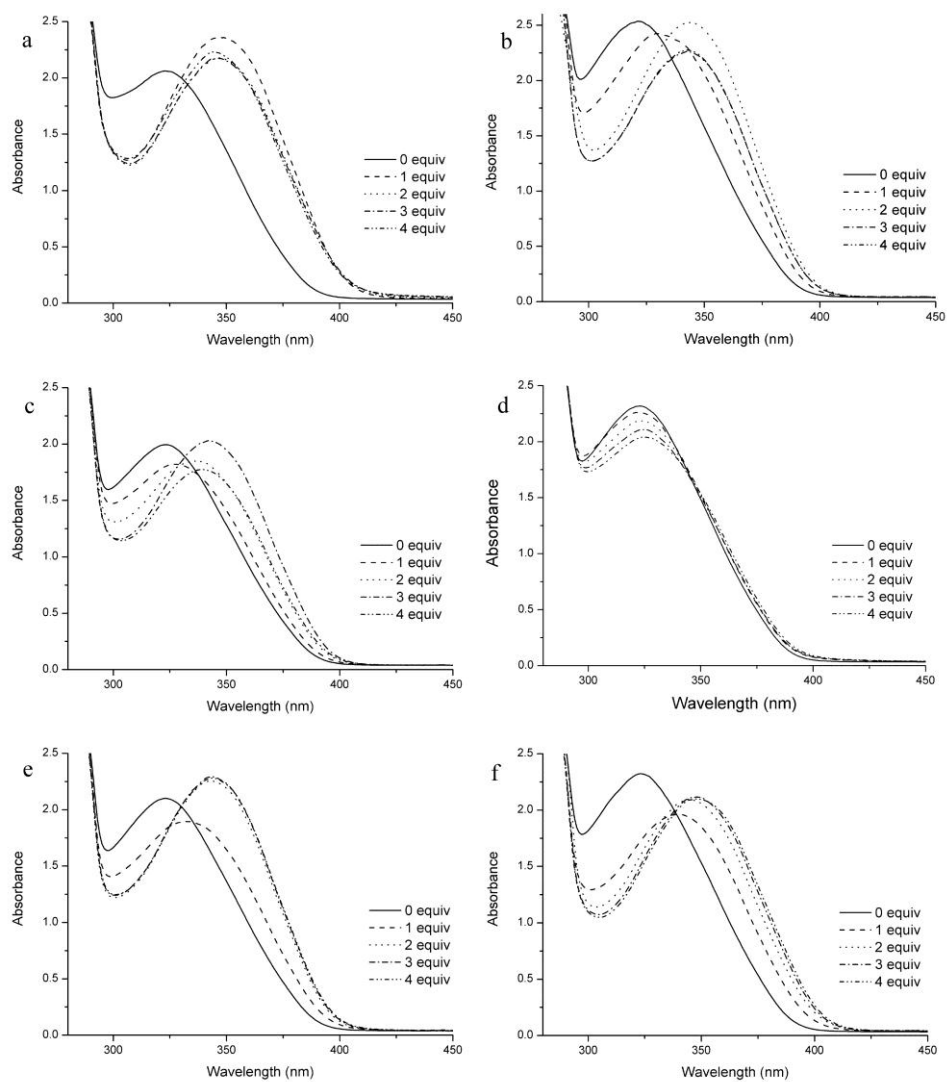


Fig. S1 The absorption spectra of **1** in *o*-dichlorobenzene (1.1 mM) upon the addition of (a) F^- , (b) Cl^- , (c) Br^- , (d) I^- , (e) AcO^- , and (f) $H_2PO_4^-$.

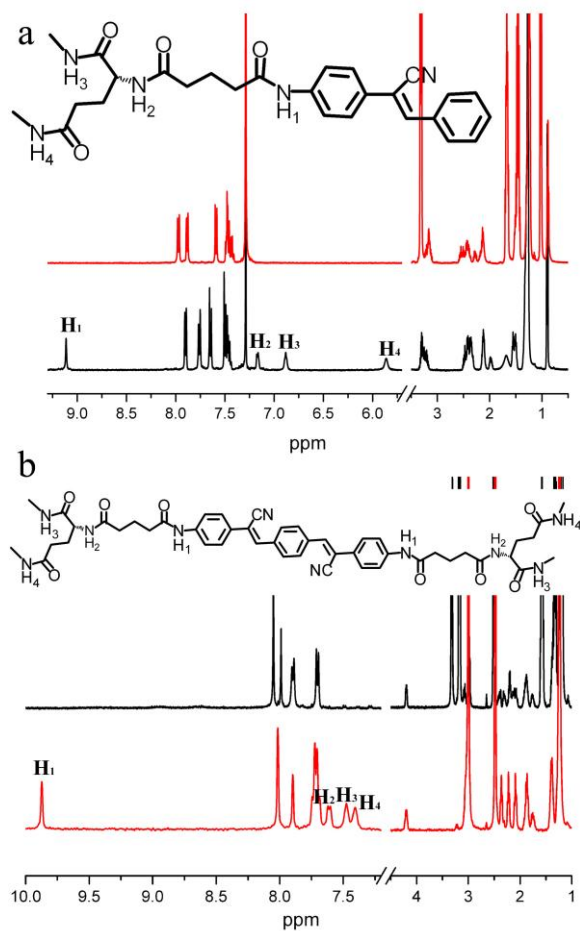


Fig. S2 ^1H NMR spectra of **1** (a) in CDCl_3 (4.2 mM) and **2** in d_6 -DMSO (2.1 mM) before and after adding 4 equiv of TBAF.

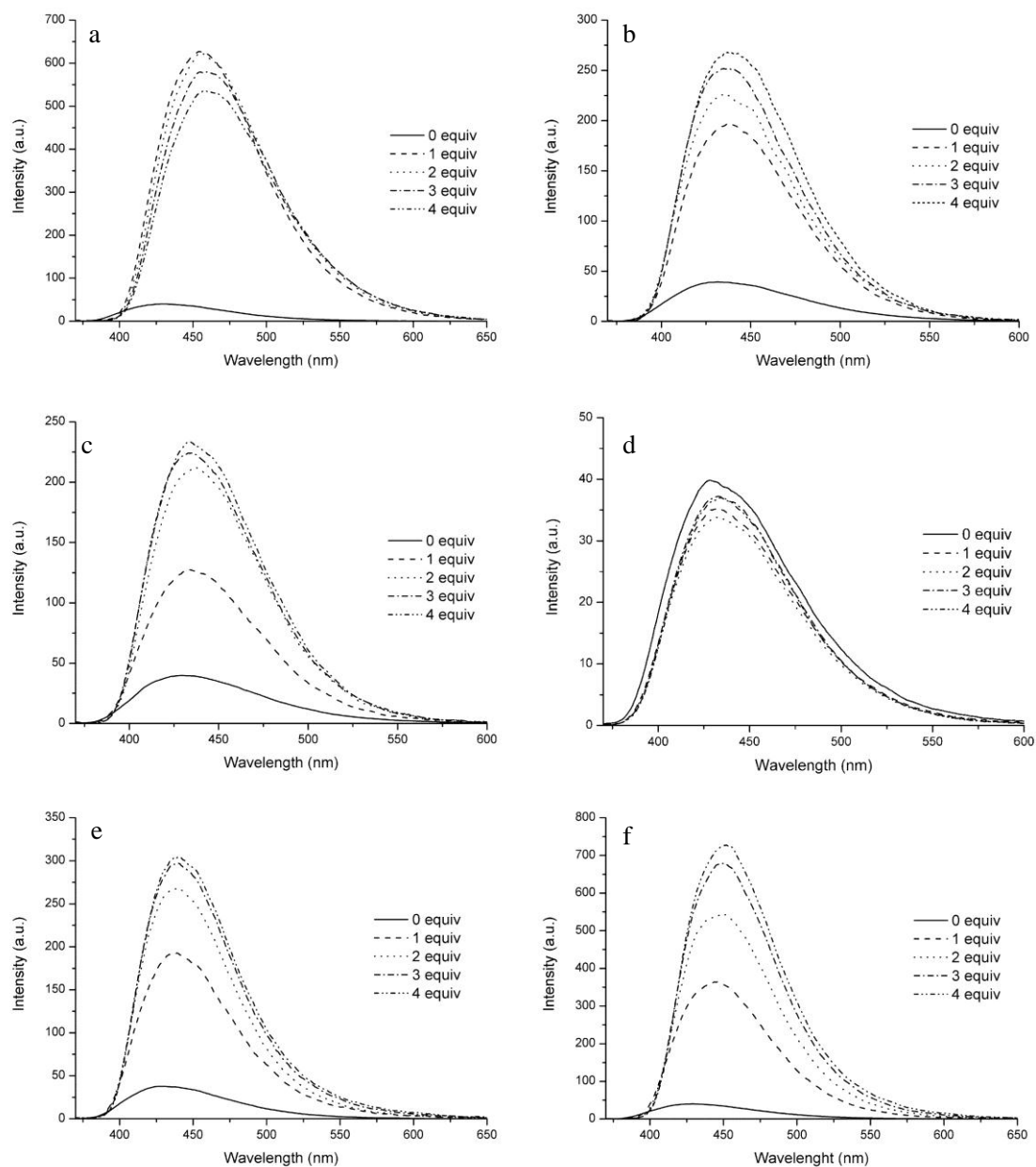


Fig. S3 The fluorescence spectral changes of **1** in *o*-dichlorobenzene (1.1 mM) upon the addition of (a) F⁻, (b) Cl⁻, (c) Br⁻, (d) I⁻, (e) AcO⁻, and (f) H₂PO₄⁻.

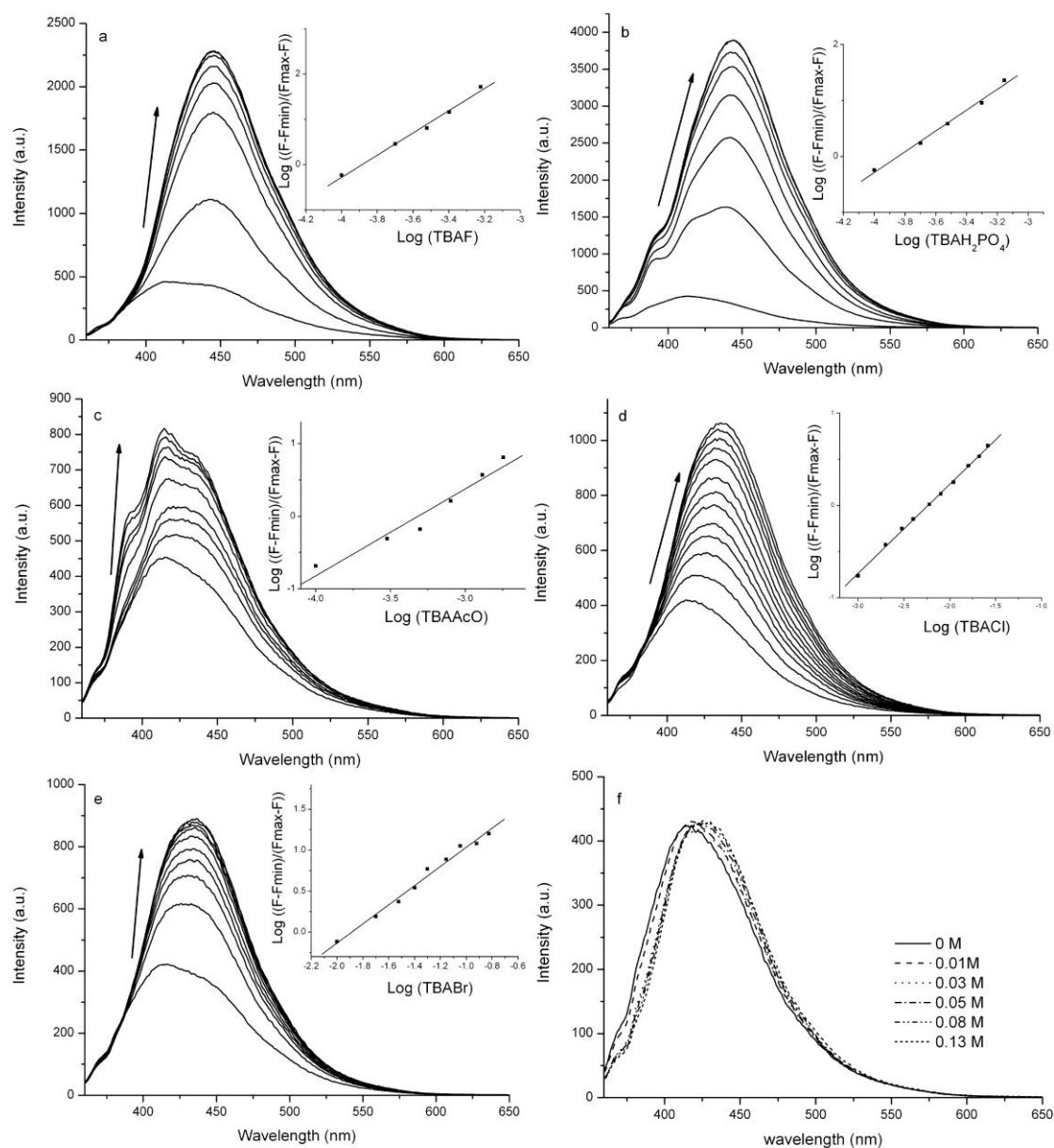


Fig. S4 Fluorescent spectral changes of **1** (10 μM) in CHCl_3 upon the addition of (a) F^- , (b) H_2PO_4^- , (c) AcO^- , (d) Cl^- , (e) Br^- , and (f) I^- at 20 $^\circ\text{C}$. Excitation wavelength was 340 nm. The insets show a plot of $\log((F-F_{\min})/(F_{\max}-F))$ at 420 nm vs. $\log(\text{anions})$.

The binding constant of **1** to different anions can be obtained by following equation.

$$\log \frac{F - F_{\min}}{F_{\max} - F} = n \log[G] + B$$

F_{\min} , F_{\max} and F are the emission intensities of the solution at wavelength 420 nm in the absence of anions, the presence of a large excess of anions, and after the addition of a given amount of anions to certain concentration, respectively. $[G]$ is the concentration of anions, n is the number of anions bound per **1**, B is the binding constant ($\log(K_{\text{ass}})$).

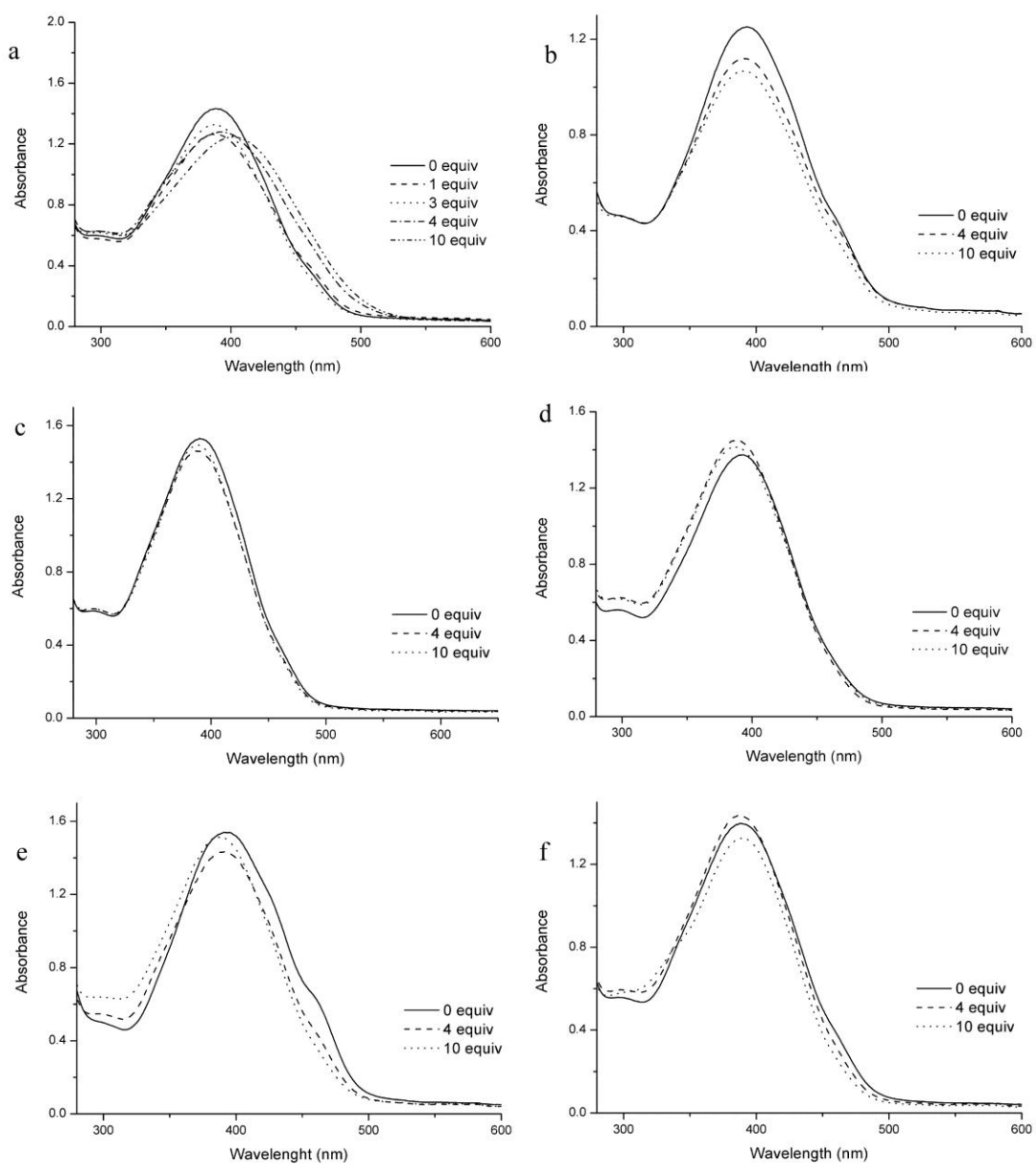


Fig. S5 The absorption spectra of **2** (0.33 mM) in DMSO upon addition of (a) F^- , (b) Cl^- , (c) Br^- , (d) I^- , (e) AcO^- , and (f) $H_2PO_4^-$.

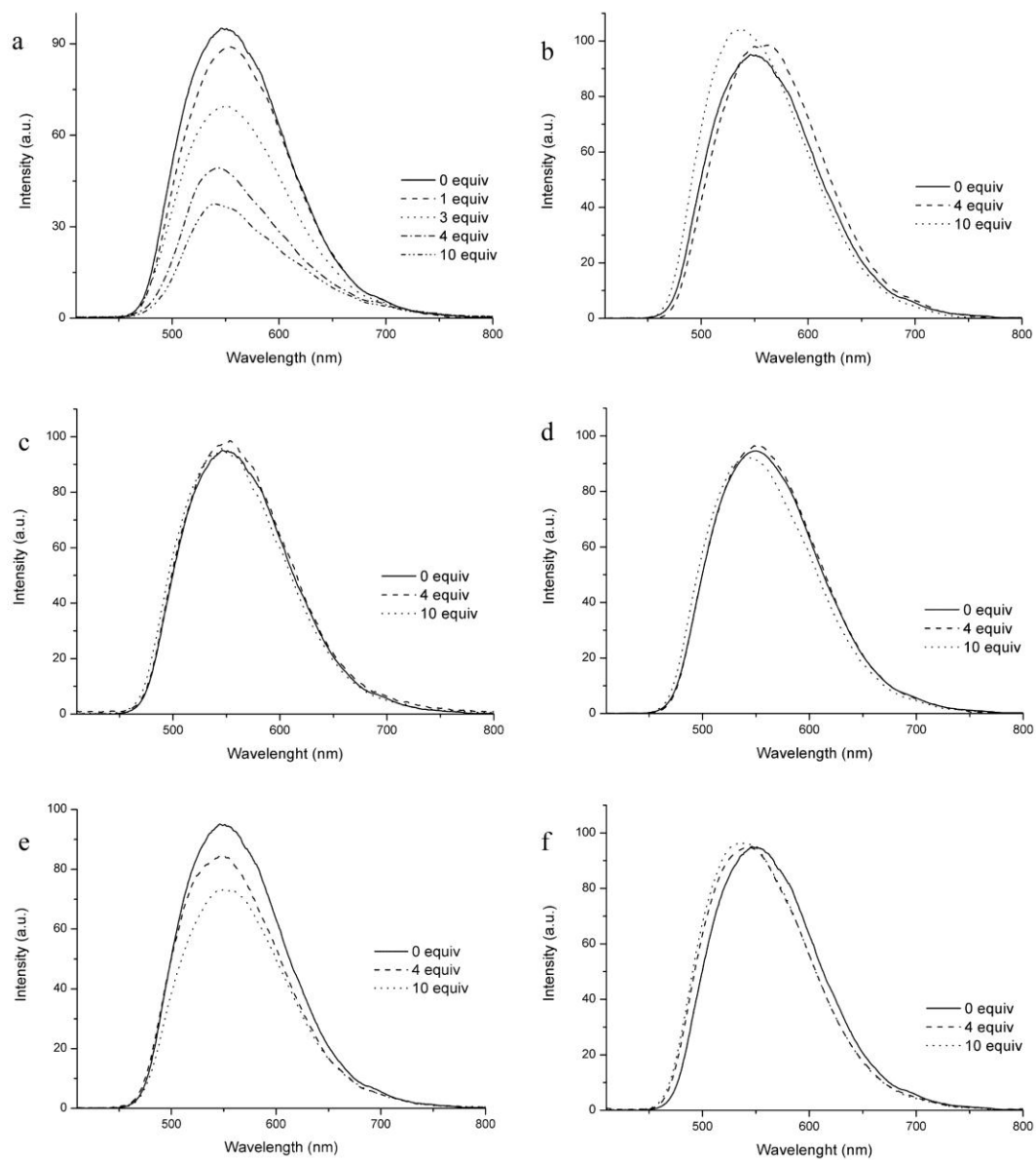


Fig. S6 The fluorescence spectra of **2** in DMSO (0.33 mM) upon the addition of (a) F^- , (b) Cl^- , (c) Br^- , (d) I^- , (e) AcO^- , and (f) $H_2PO_4^-$.