Supporting Information

Salicylaldimine Difluoroboron Complexes Containing *tert*-Butyl Groups: Nontraditional π-Gelator and Piezofluorochromic Compounds

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Table S1. Photophysical date of **1B-3B**.

Compound	Solution[a]		Xerogel	As-prepared crystal	Ground powder	Heated sample	Fumed sample[e]
	λ^{abs}_{max} (nm) (ε 10^4 L·mol^{-1}·cm^{-1})	λ_{em} (nm) (Φ_F[b] %)	λ_{em}[c] (nm) (Φ_F %)	λ_{em}[d] (nm) (Φ_F %)	λ_{em}[d] (nm) (Φ_F %)	λ_{em}[d] (nm)	λ_{em} (nm)
1B	289 (1.9) 355 (0.5)	458 (19)	445 (13)	-	-	-	-
2B	326 (2.8) 403 (1.7)	505 (13)	-	487 (12)	509 (12)	478	-
3B	311 (3.9) 396 (1.5)	506 (19)	-	480 (17)	503 (16)	476	475

[a] in CH_2Cl_2 (5.0×10^{-6} M); [b] for **1B** using quinine sulfate in 0.1 M H_2SO_4 (Φ_F = 54.6%) as the standard, for **2B** and **3B**, using 9,10-diphenylanthracene in benzene (Φ_F = 85 %) as the standard; [c] Excited at 288 nm; [d] Excited at 350 nm for **2B** and 407 nm for **3B**; [e] Fumed with CH_2Cl_2.

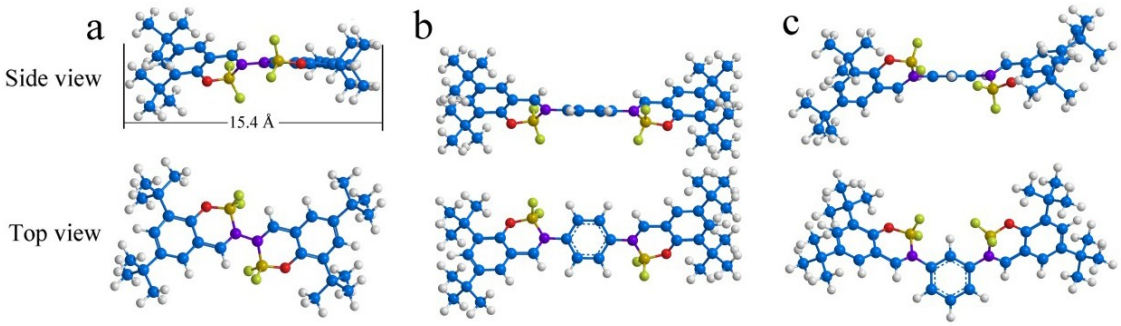

Figure S1. The optimized configurations for **1B** (a), **2B** (b) and **3B** (c) calculated by the **DFT** method (B3LYP/6-31G level) on Gaussian 09 software.

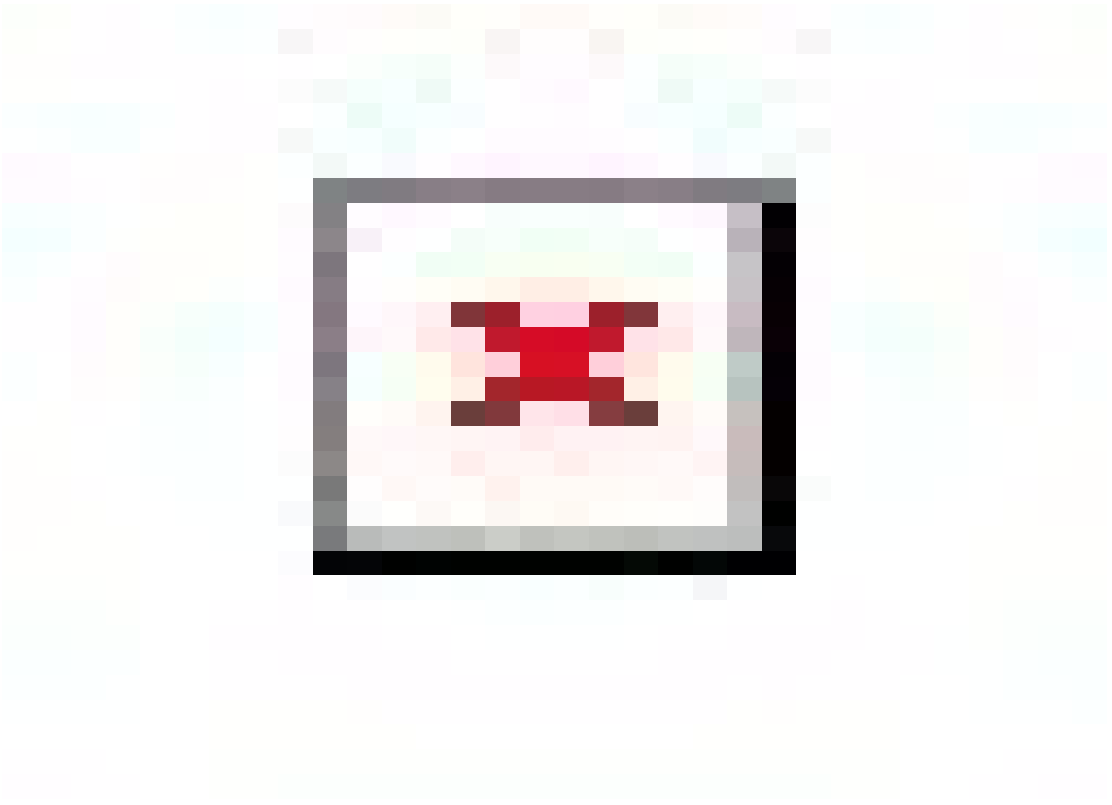

Figure S2. Normalized UV-vis absorption (solid line) and fluorescence emission (dash line) spectra of **2B** and **3B** in toluene (a), THF (b) and DMF (c) (5.0×10^{-6} M, λ_{ex} = 400 nm).

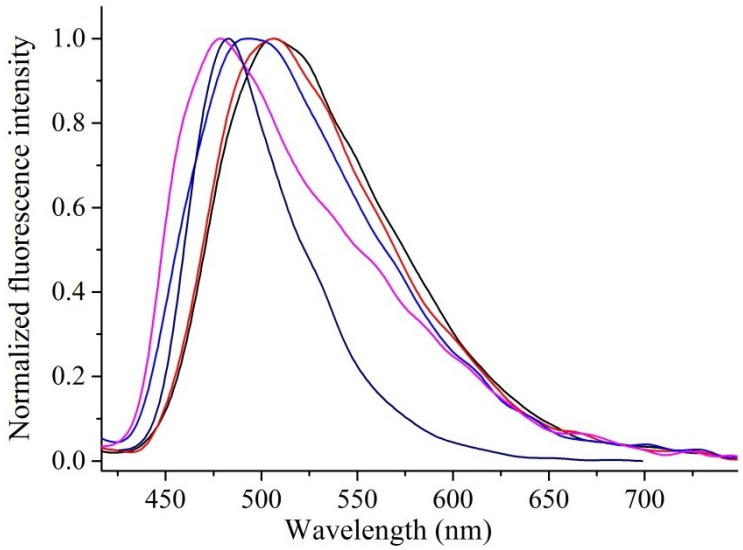

Figure S3. Fluorescence emission spectra of **2B** excited at 350 nm in as-prepared crystal (navy); ground powder (black); ground powder was heated at 100 °C for 1 min (red), at 100 °C for 30 min (blue) and at 200 °C for 10 min (magenta).

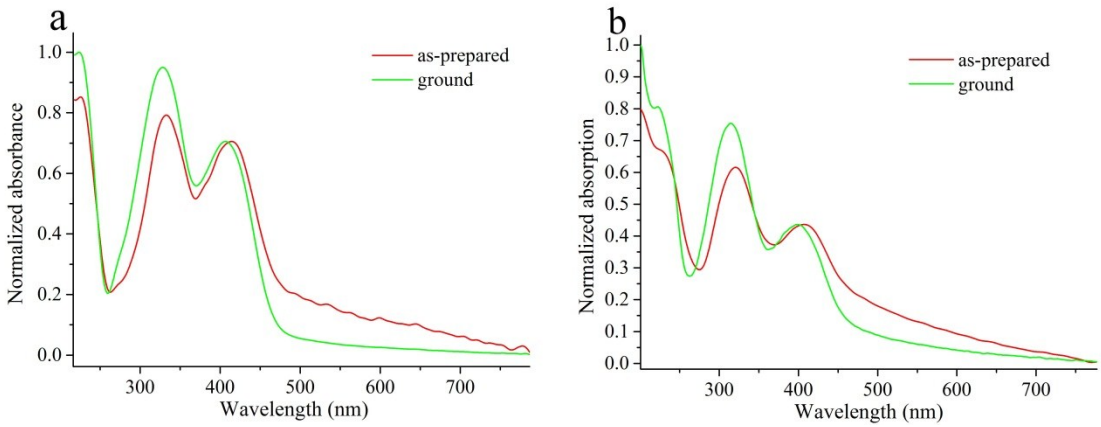

Figure S4. UV-vis absorption spectra of **2B** (a) and **3B** (b) in different solid states.

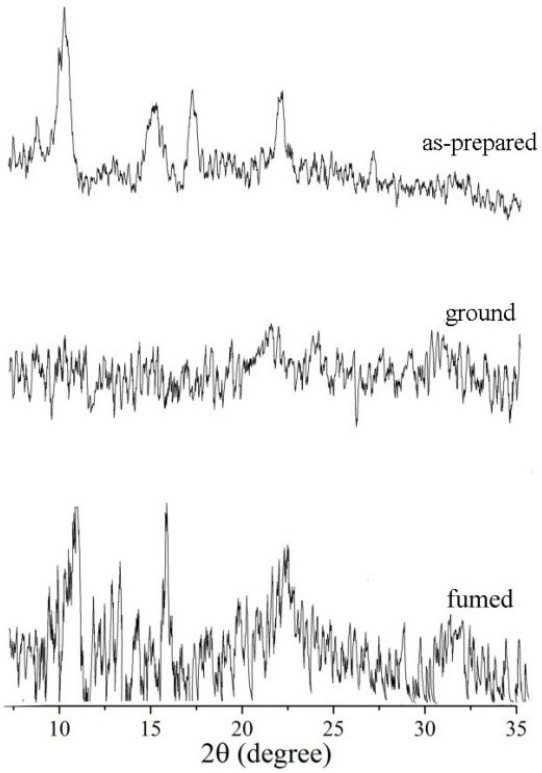

Figure S5. XRD patterns of compound **3B** in as-prepared crystal, ground powder, and fumed sample.

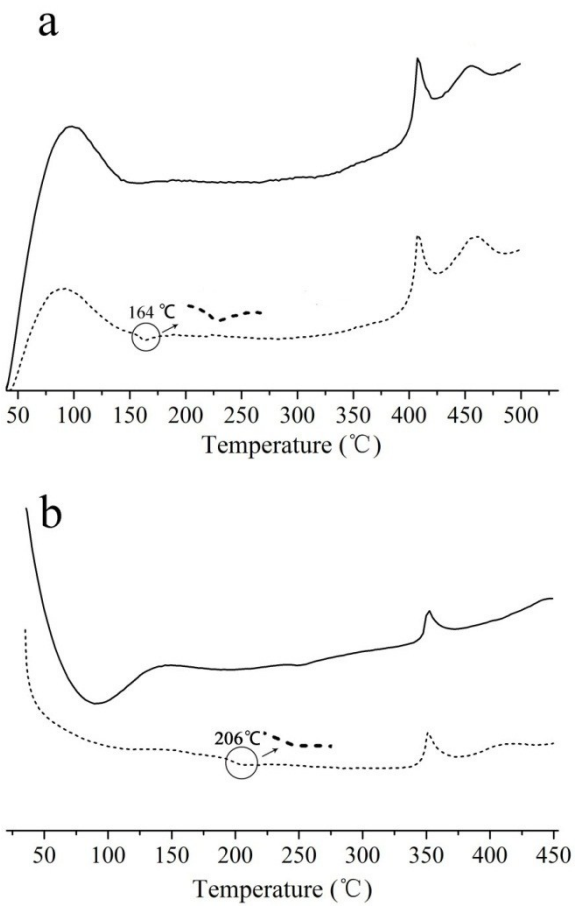

Figure S6. DSC thermograms of **2B** (a) and **3B** (b) in as-prepared crystal (solid line) and ground powder (dash line) under nitrogen atmosphere at a heating rate of 10 °C min^{-1}.

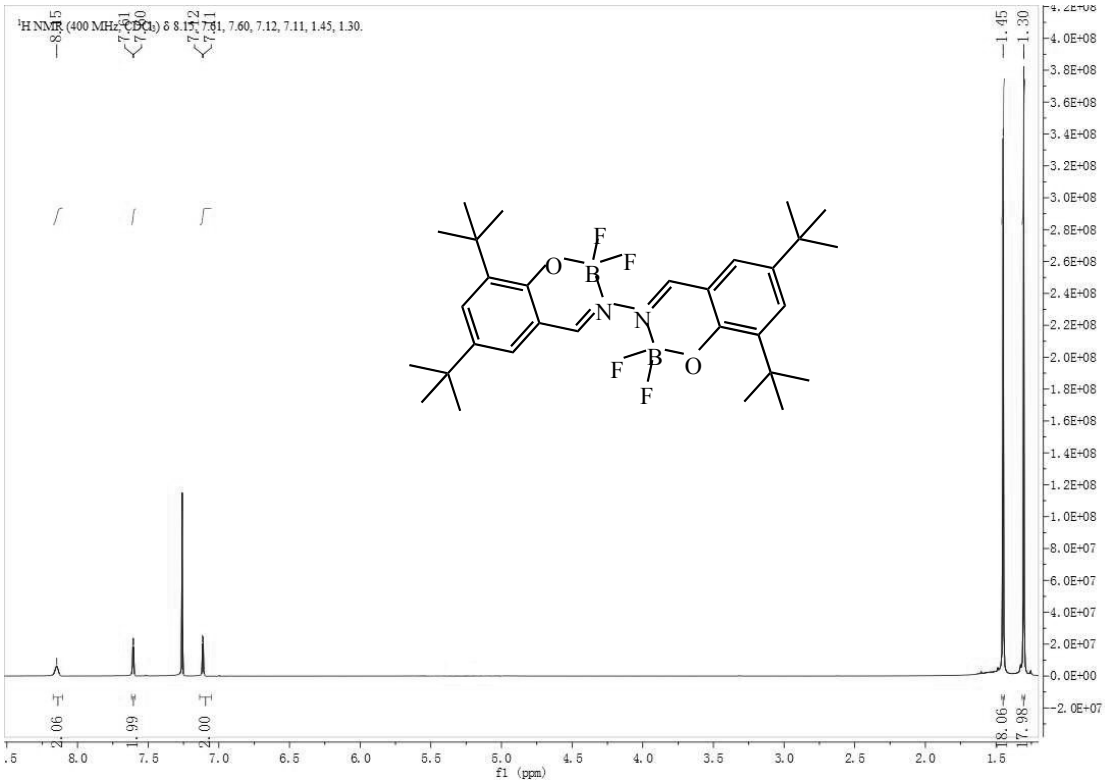

Figure S7 ^{1}H NMR (400 MHz, $CDCl_3$) spectrum of **1B**.

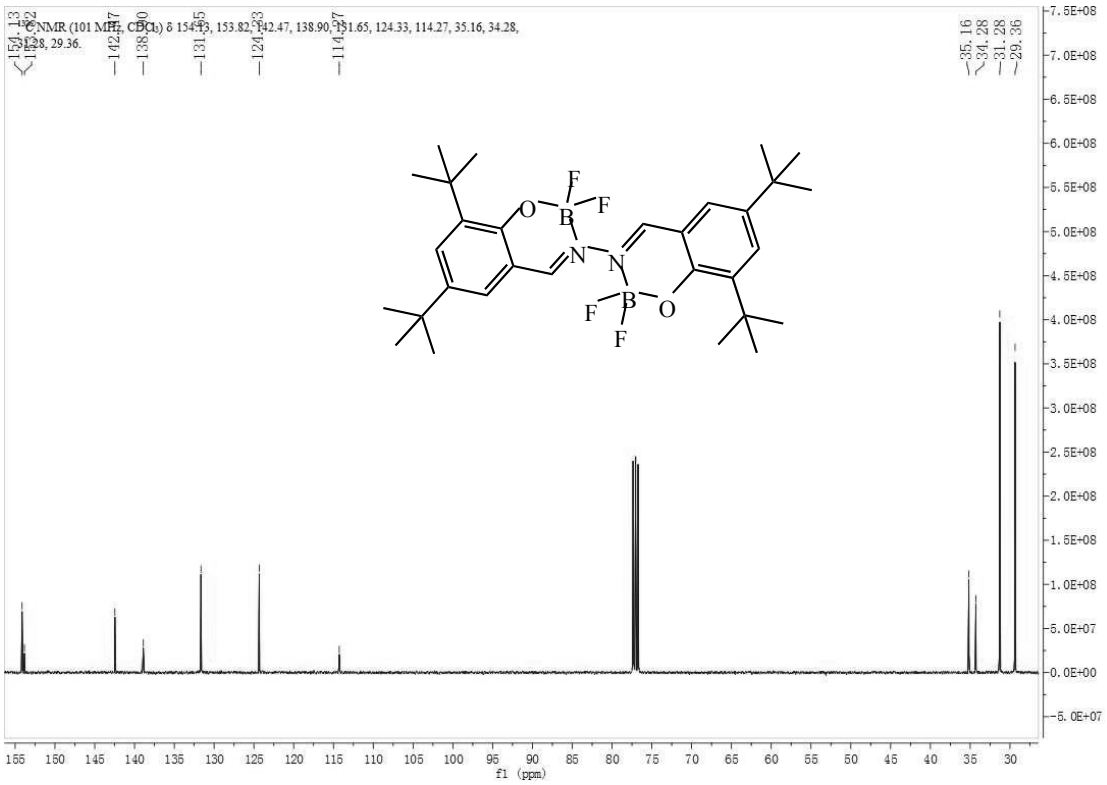

Figure S8 ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of **1B**.

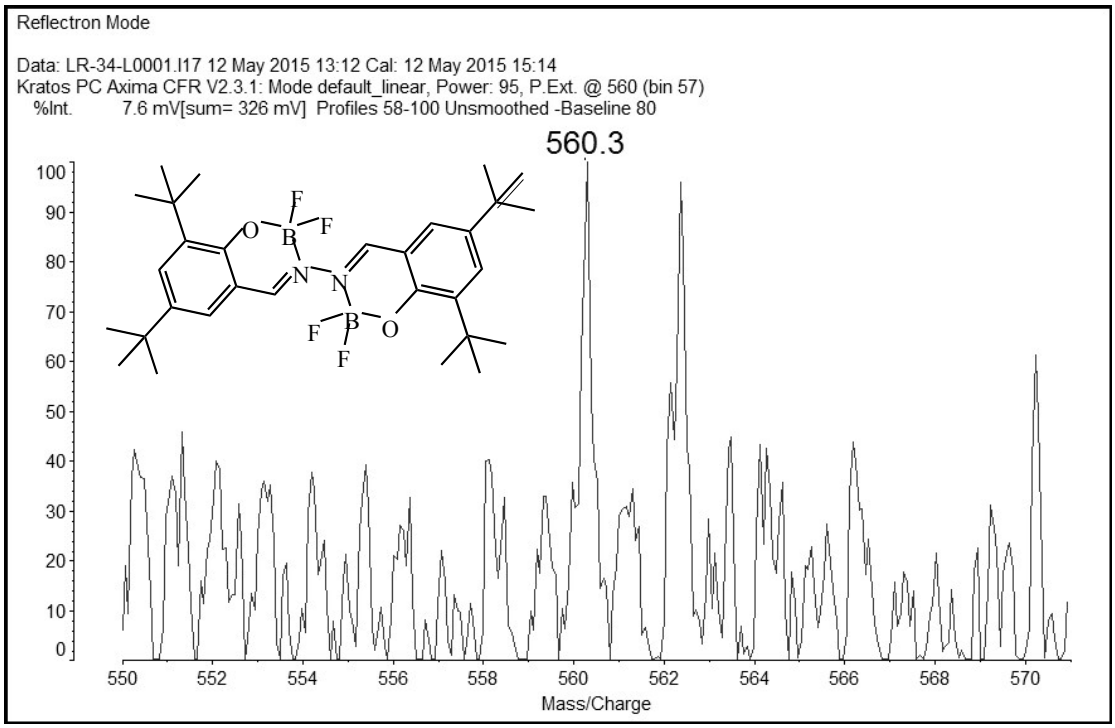

Figure S9 MALDI/TOF MS spectrum of **1B**.

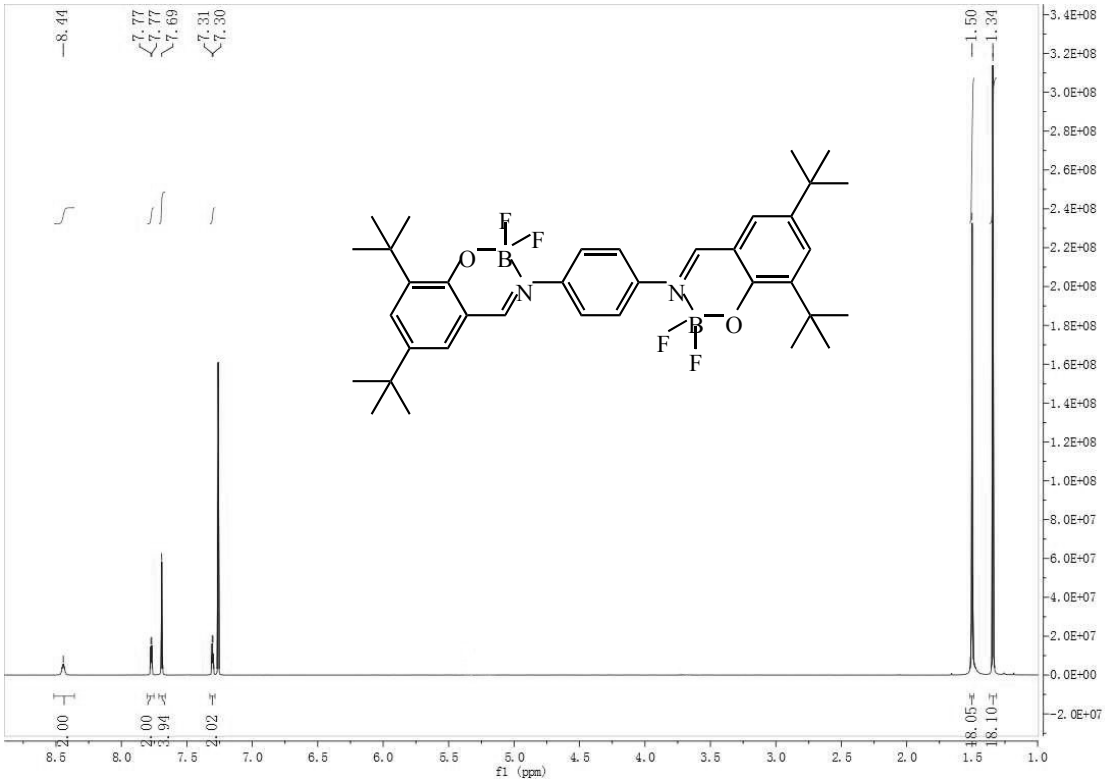

Figure S10 ^{1}H NMR (400 MHz, $CDCl_3$) spectrum of **2B**.

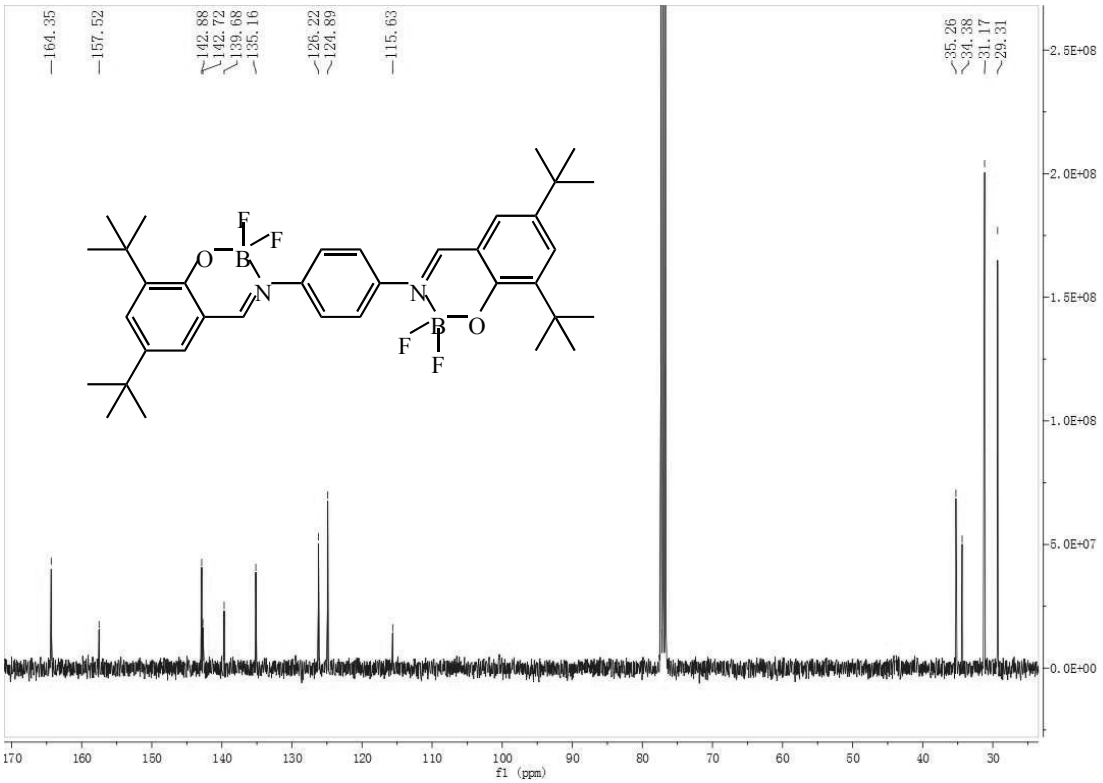

Figure S11 ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of **2B**.

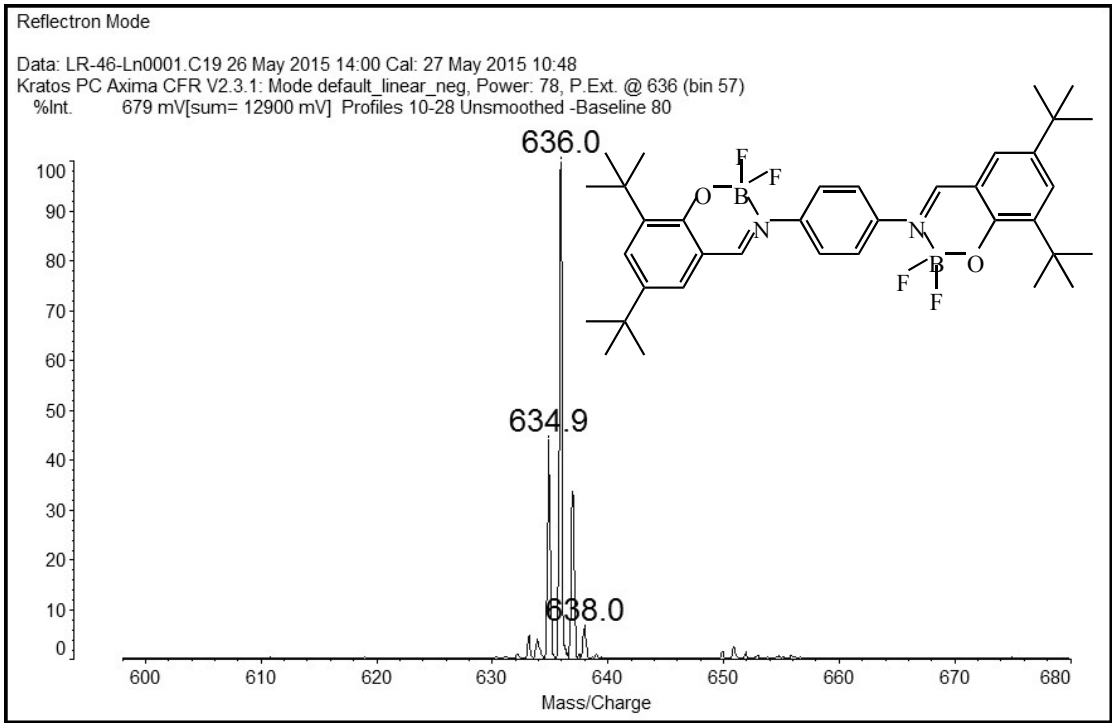

Figure S12 MALDI/TOF MS spectrum of **2B**.

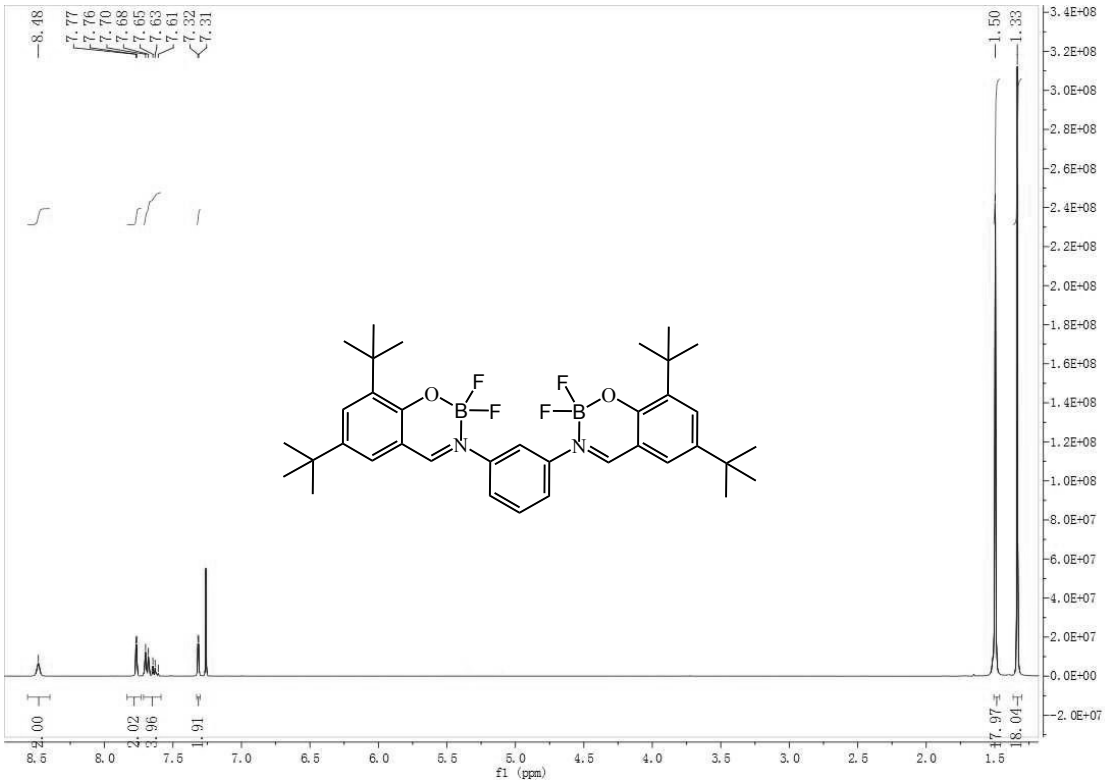

Figure S13 ^{1}H NMR (400 MHz, $CDCl_3$) spectrum of **3B**.

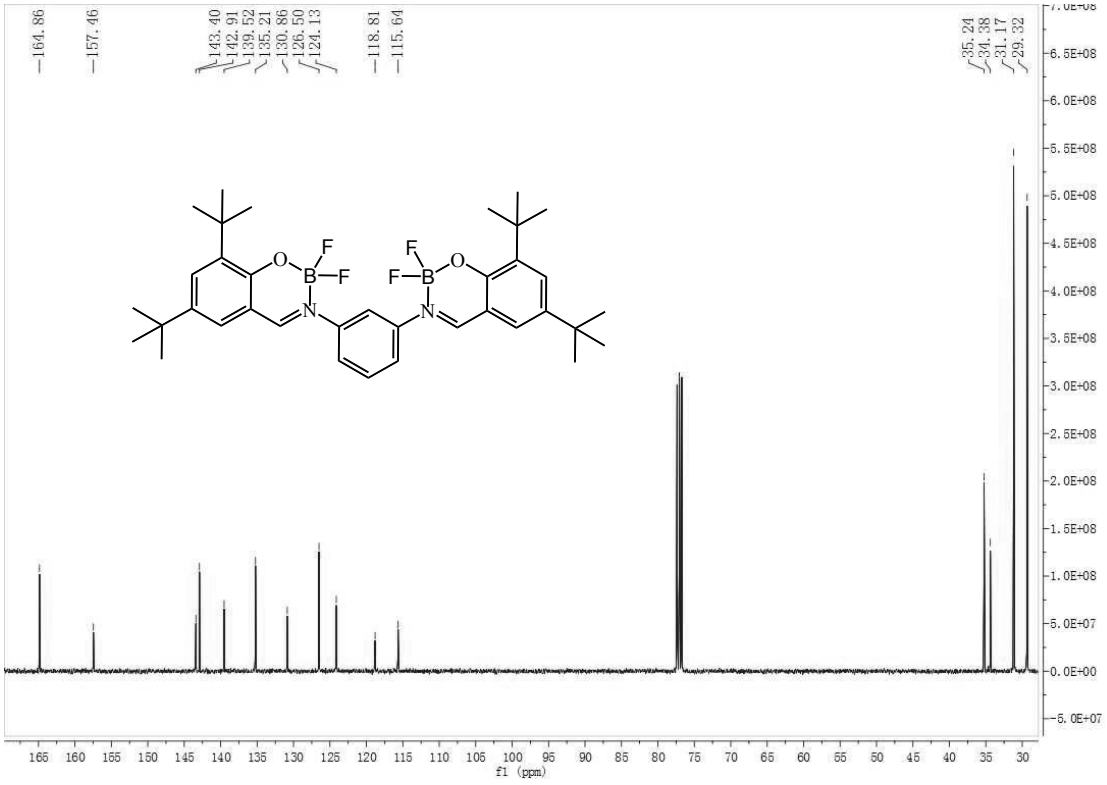

Figure S14 ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of **3B**.

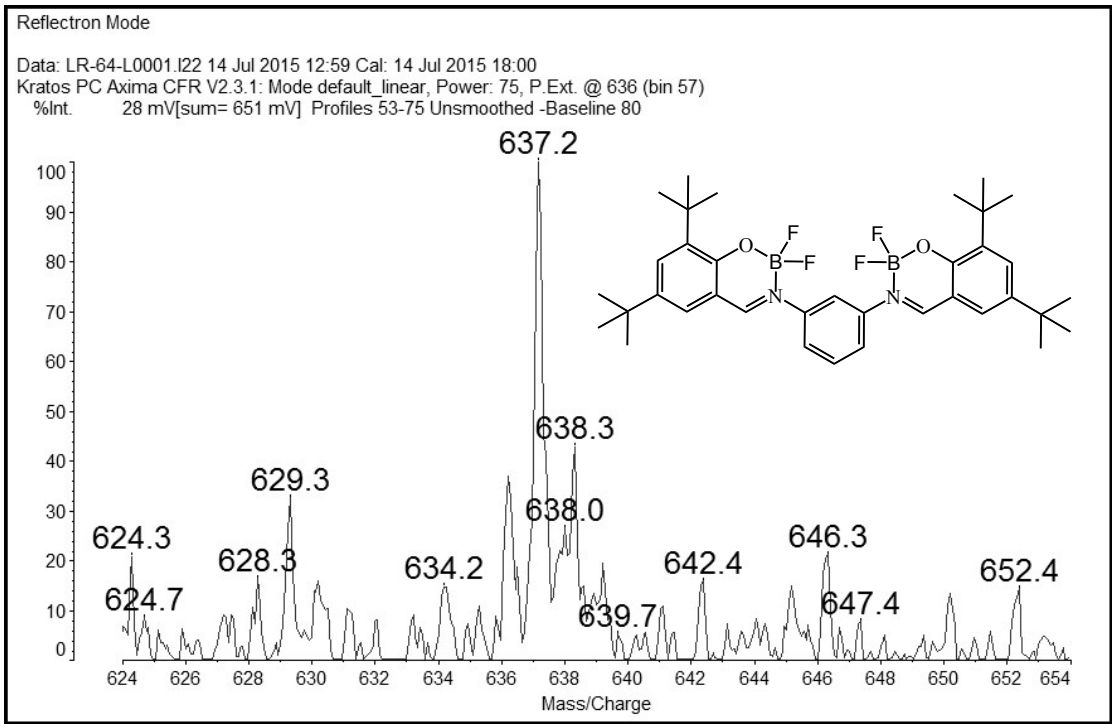

Figure S15 MALDI/TOF MS spectrum of **3B**.