

Supplementary materials

An anionic chromogenic chemosensor based on 4-(4-nitrobenzylideneamine)-2,6-diphenylphenol for selective detection of cyanide in acetonitrile–water mixtures

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Table of Contents

- | | |
|---|----|
| 1. Figure S1. UV-vis spectra and titration curve for the behavior of 3a in acetonitrile with 1.0% of water and the addition of increasing amounts of F ⁻ | S2 |
| 2. Figure S2. UV-vis spectra and titration curve for the behavior of 3a in acetonitrile with the addition of increasing amounts of CN ⁻ | S3 |
| 3. Figure S3. IR spectrum of compound 3a | S4 |
| 4. Figure S4. ¹ H NMR spectrum of compound 3a (400 MHz, CDCl ₃) | S5 |
| 5. Figure S5. ¹³ C NMR spectrum of compound 3a (100.6 MHz, CDCl ₃) | S6 |
| 6. Figure S6. APT spectrum of compound 3a (100.6 MHz, CDCl ₃) | S7 |

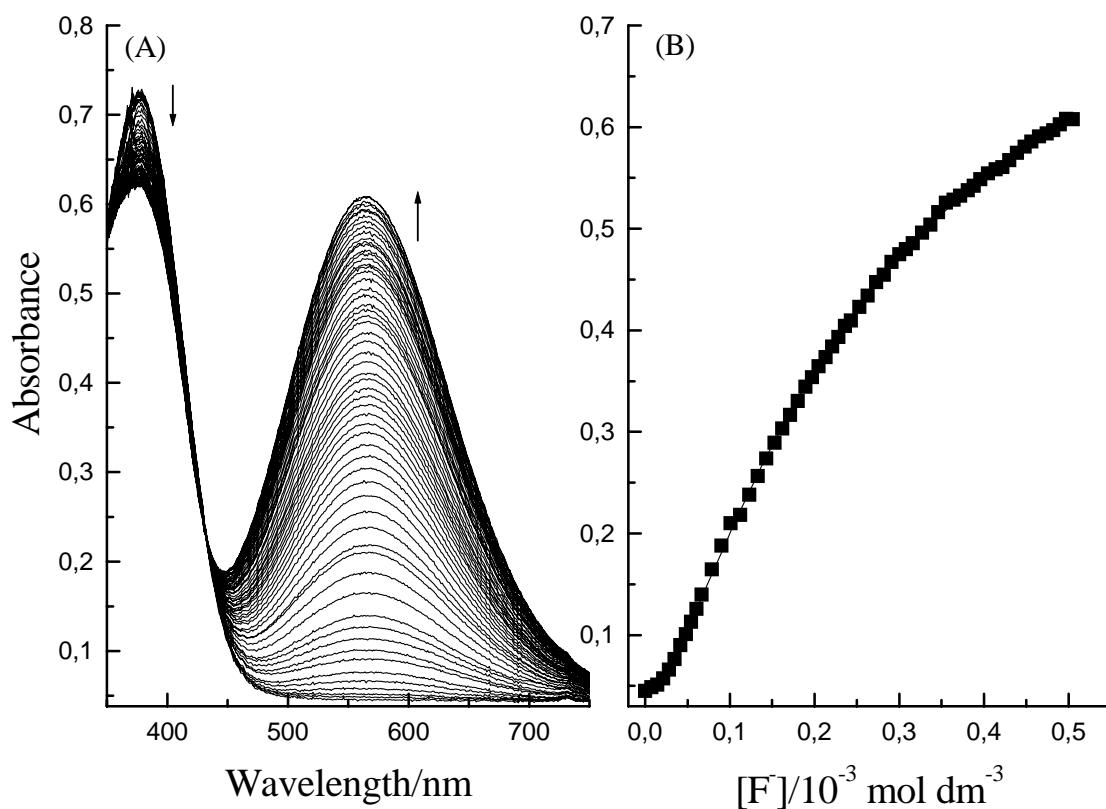


Figure S1. (A) UV-vis spectra at 25°C for the behavior of **3a** (5.9×10^{-5} mol dm⁻³) in acetonitrile with 1.0% of water and the addition of increasing amounts of F⁻. (B) Titration curve for compound **3a** with F⁻. The final concentration of F⁻ was 5.2×10^{-4} mol dm⁻³ and the absorbance values were collected at 565 nm.

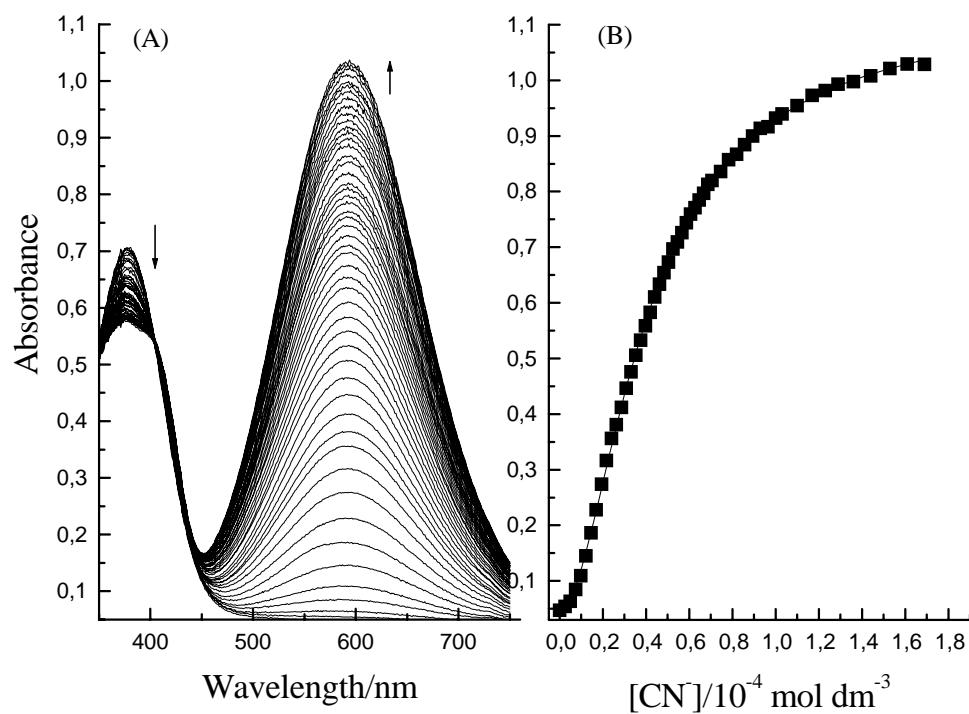


Figure S2. (A) UV-vis spectra at 25°C for the behavior of **3a** (5.9×10^{-5} mol dm $^{-3}$) in acetonitrile with the addition of increasing amounts of CN $^-$. (B) Titration curve for compound **3a** with CN $^-$. The final concentration of CN $^-$ was 1.6×10^{-4} mol dm $^{-3}$ and the absorbance values were collected at 592 nm.

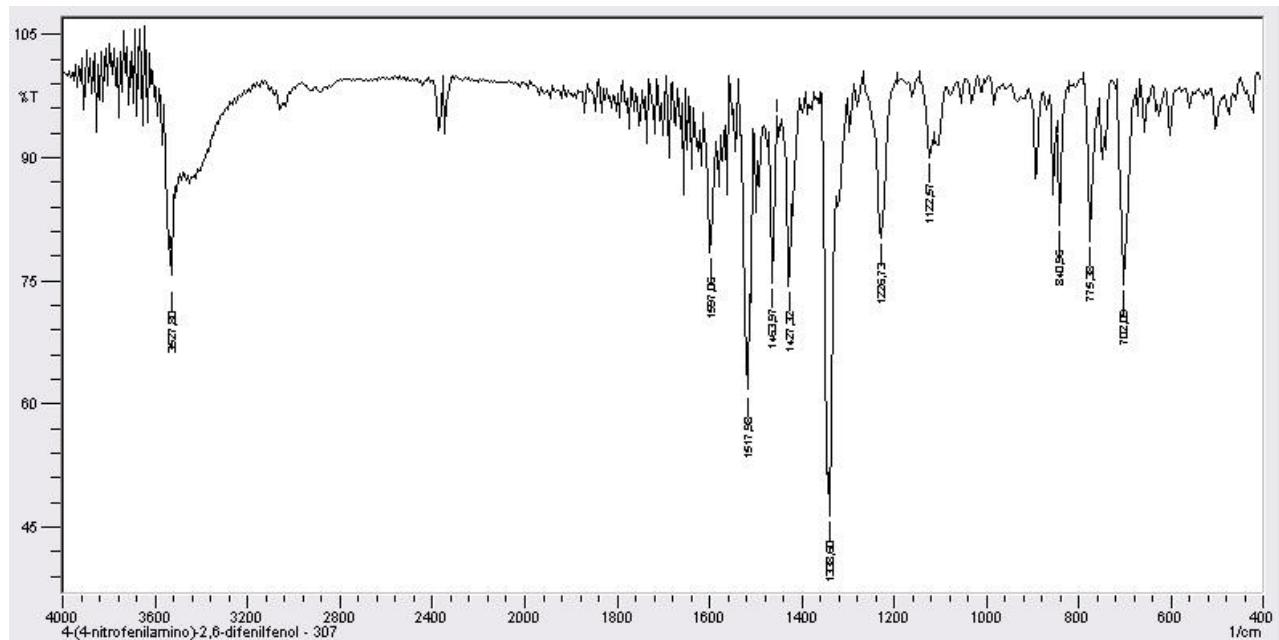


Figure S3. IR spectrum of compound 3a.

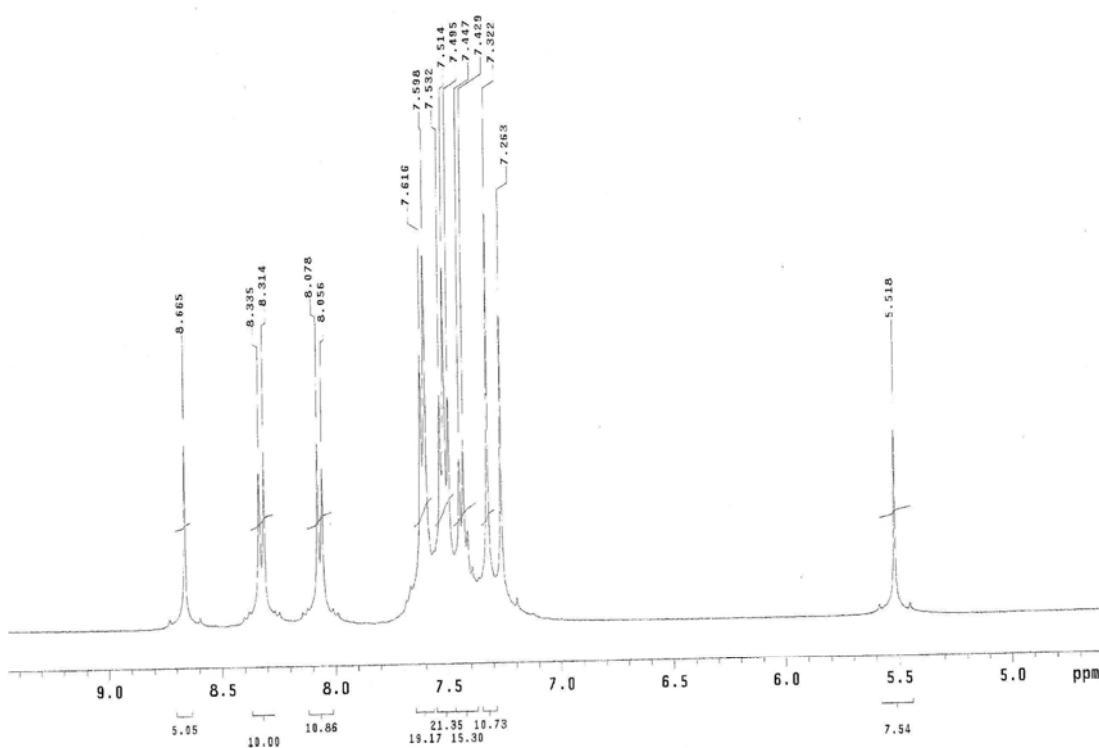


Figure S4. ^1H NMR spectrum of compound **3a** (400 MHz, CDCl_3).

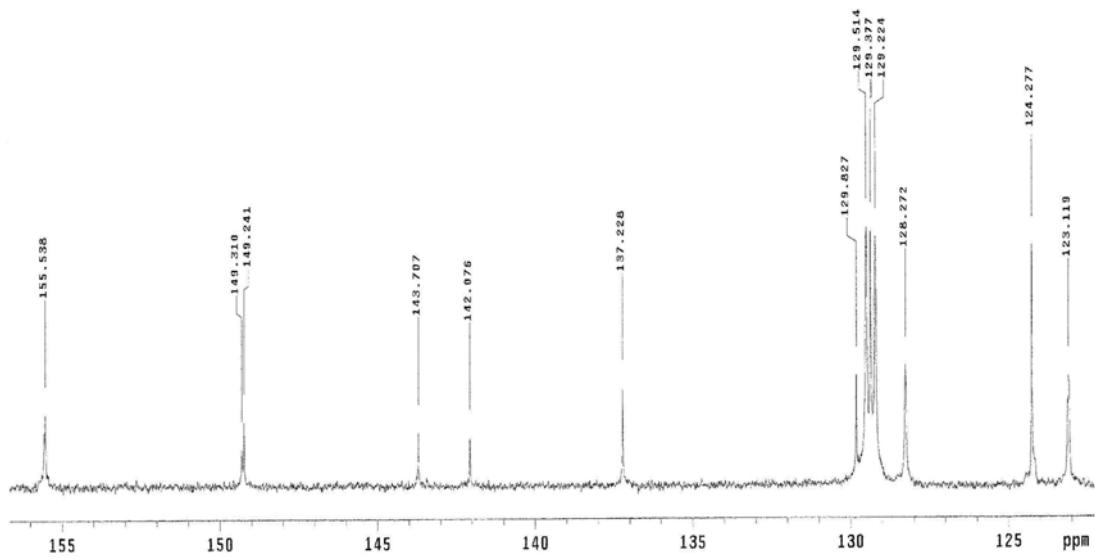


Figure S5. ^{13}C NMR spectrum of compound **3a** (100.6 MHz, CDCl_3).

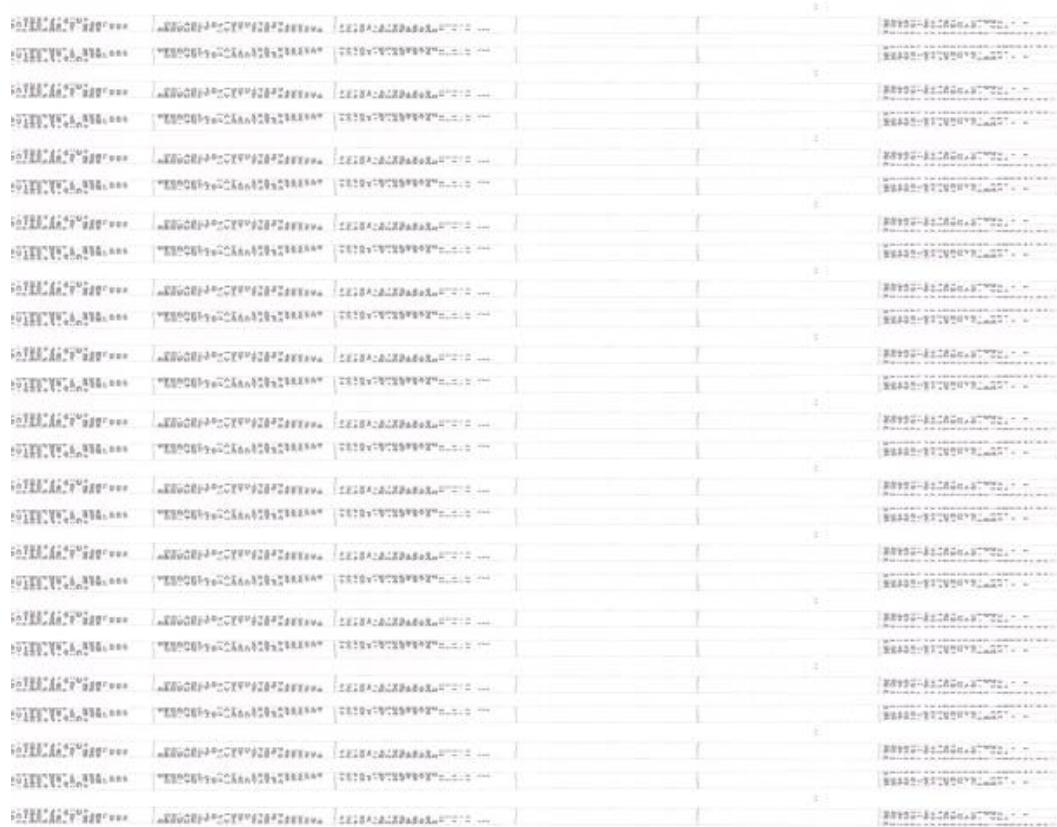


Figure S6. APT spectrum of compound **3a** (100.6 MHz, CDCl₃).