

Electronic Supplementary Information (ESI)

Photophysical and Sensing Properties to Anions for Platinum(II) Terpyridyl Complexes with Phenolic Ethynyl Ligands

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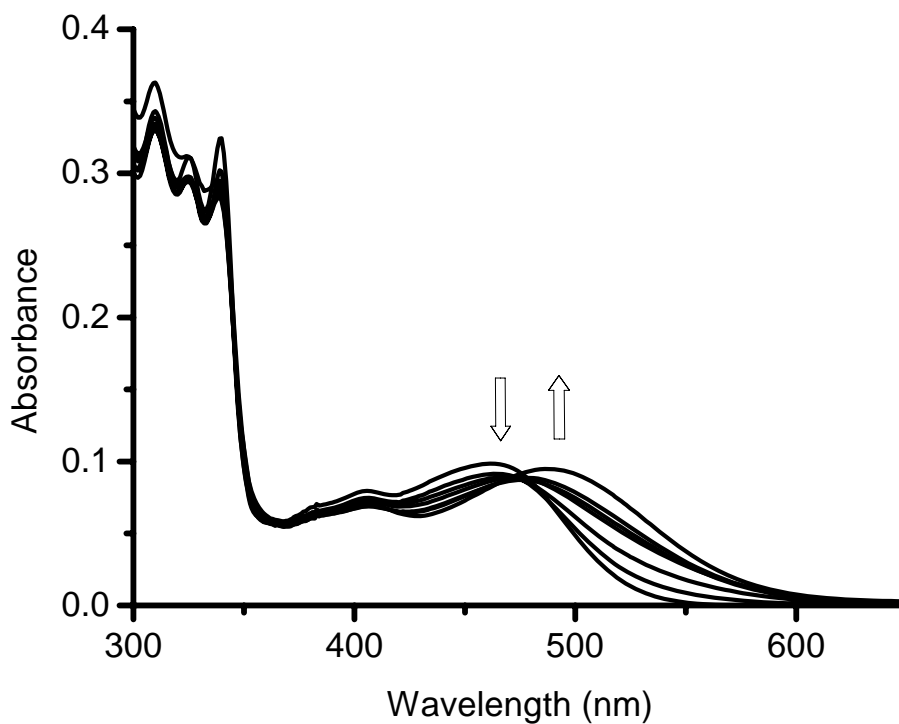
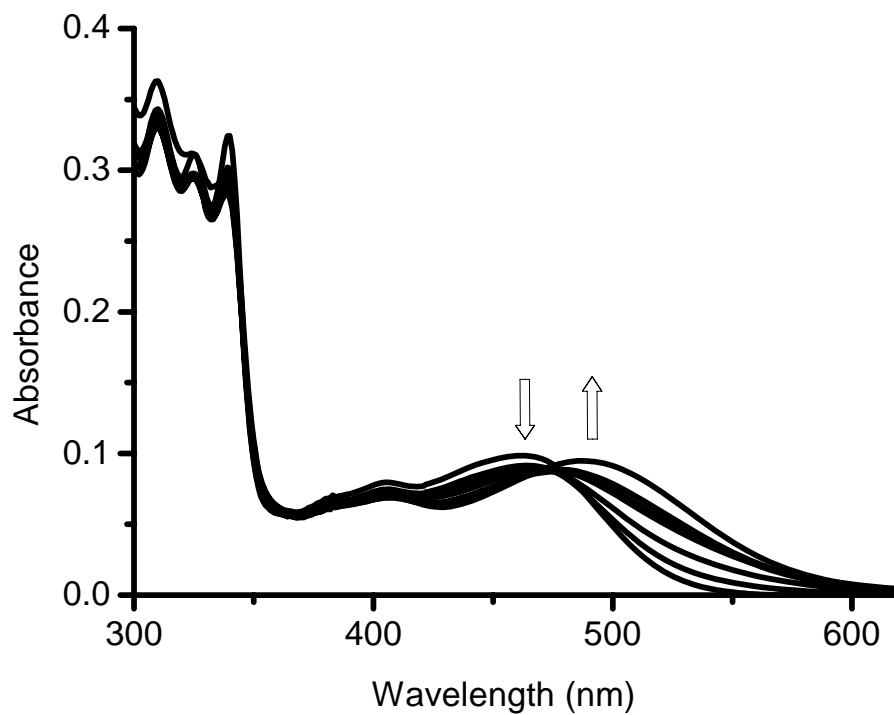


Fig. S1 UV-vis titration of **1** in acetonitrile solution (2.0×10^{-5} M) by addition $[\text{Bu}_4\text{N}]\text{AcO}$ and $[\text{Bu}_4\text{N}]\text{H}_2\text{PO}_4$. Top: addition of $[\text{Bu}_4\text{N}]\text{AcO}$ from 0 to 80×10^{-5} M. Bottom: Addition of $[\text{Bu}_4\text{N}]\text{H}_2\text{PO}_4$ from 0 to 80×10^{-5} M.

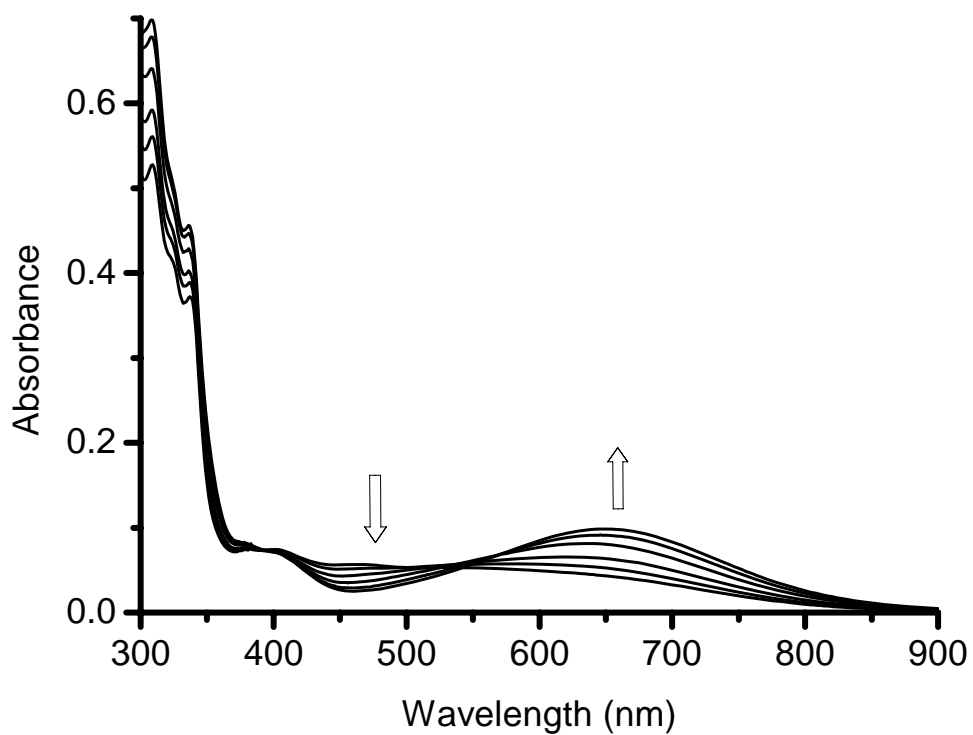
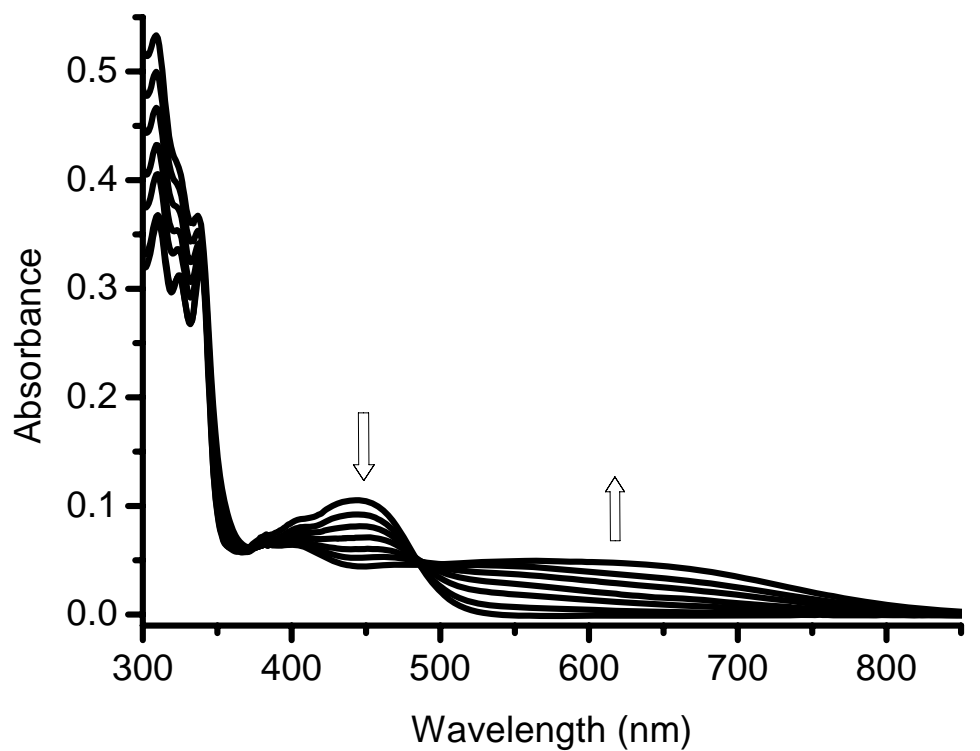


Fig. S2 UV-vis titration of **2** in acetonitrile solution ($2. \times 10^{-5}$ M) by addition of [Bu₄N]F. Top, addition of [Bu₄N]F from 0 to 3×10^{-5} M. Bottom, addition of [Bu₄N]F from 3×10^{-5} to 8×10^{-5} M.

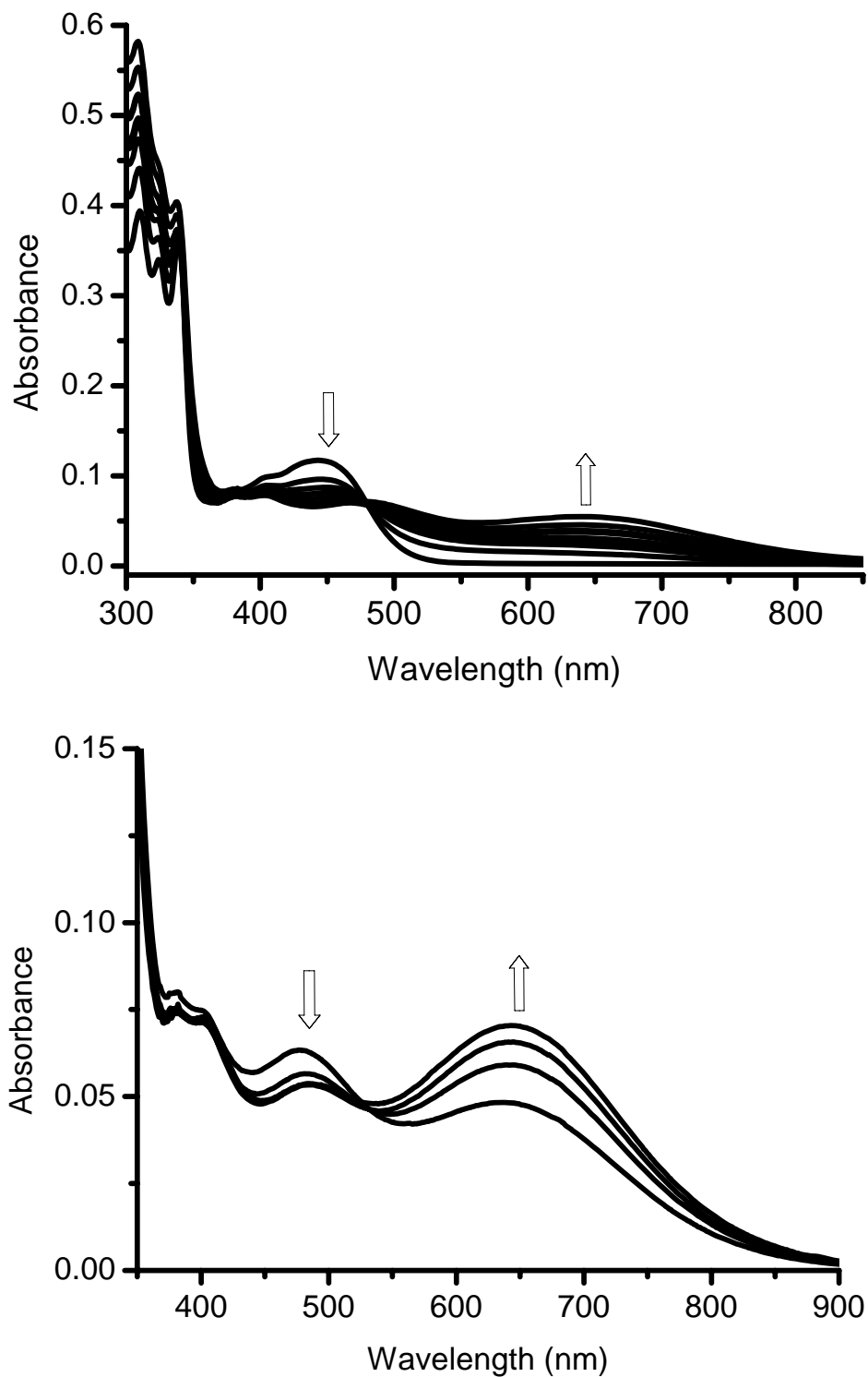


Fig. S3 UV-vis titration of **2** in acetonitrile solution (2×10^{-5} M) by addition of $[\text{Bu}_4\text{N}]\text{AcO}$. Top, addition of $[\text{Bu}_4\text{N}]\text{AcO}$ from 0 to 20×10^{-5} M. Bottom, addition of $[\text{Bu}_4\text{N}]\text{AcO}$ from 20×10^{-5} to 200×10^{-5} M.

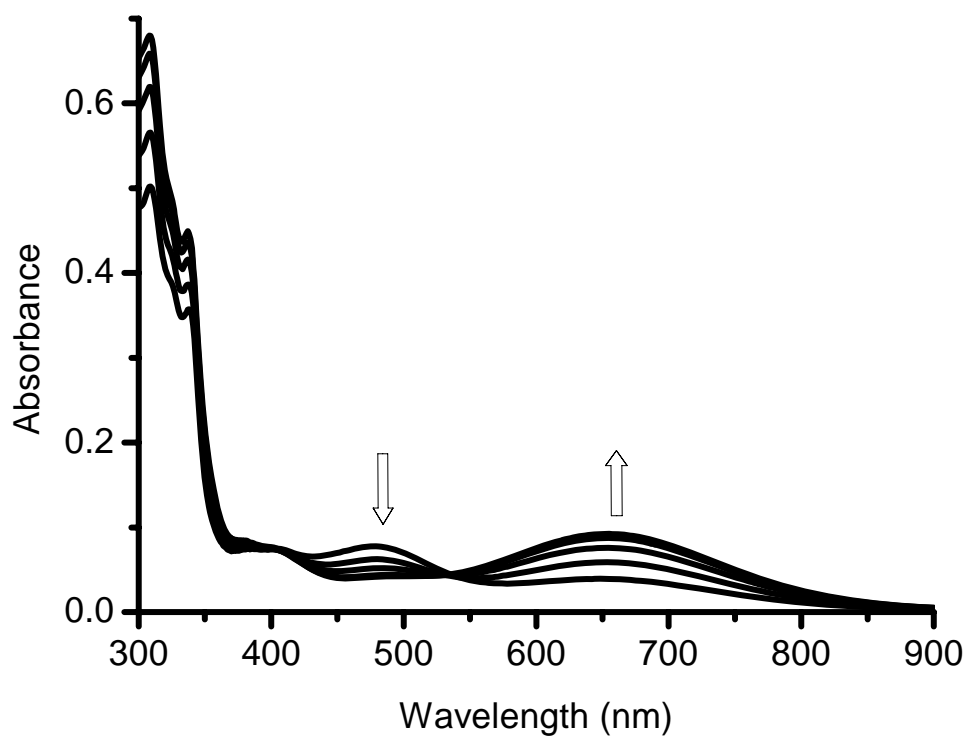
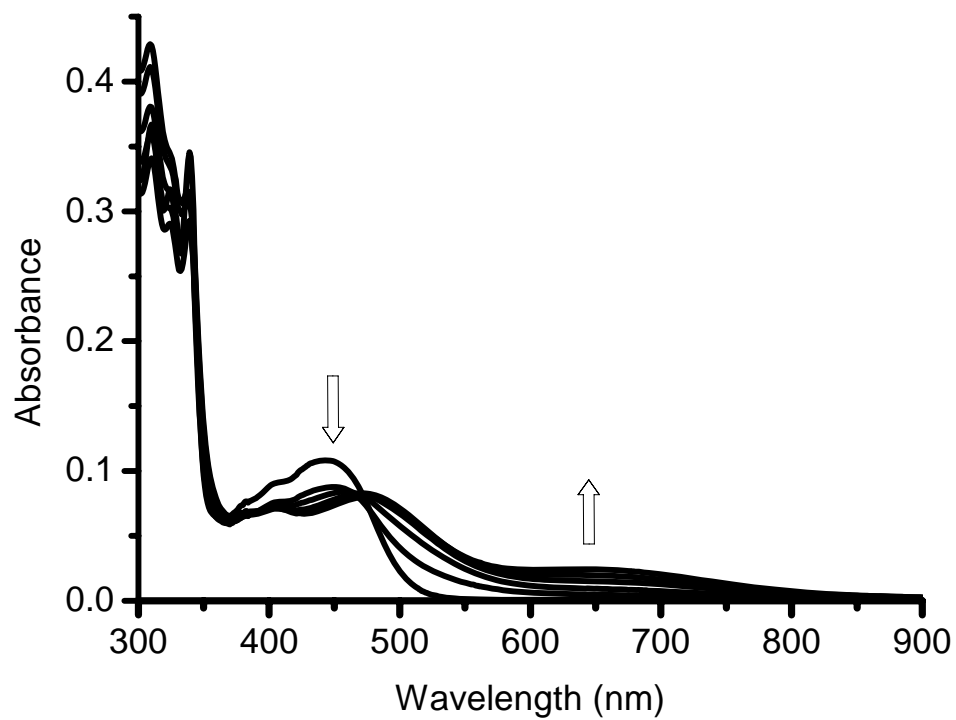


Fig. S4 UV-vis titration of **2** in an acetonitrile solution (2×10^{-5} M) by addition of [Bu₄N]H₂PO₄. Top, addition of [Bu₄N]H₂PO₄ from 0 to 40×10^{-5} M. Bottom, addition of [Bu₄N]H₂PO₄ from 40×10^{-5} to 200×10^{-5} M.

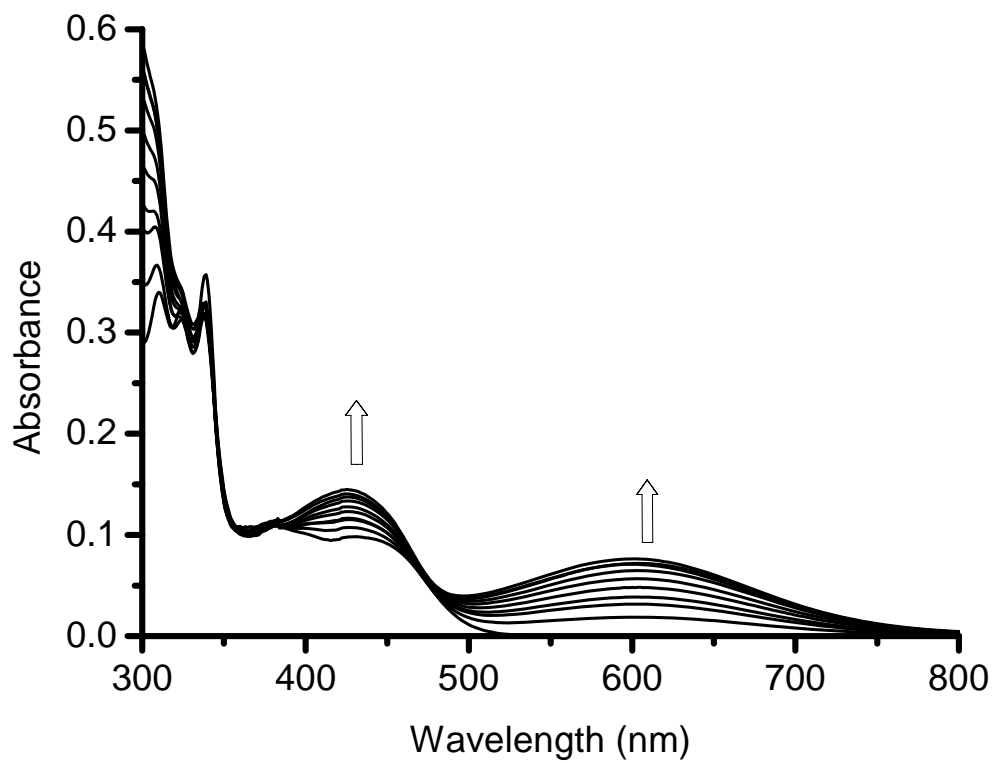


Fig. S5 UV-vis titration of **3** in acetonitrile solution (2×10^{-5} M) by addition of [Bu₄N]AcO from 0 to 20×10^{-5} M.

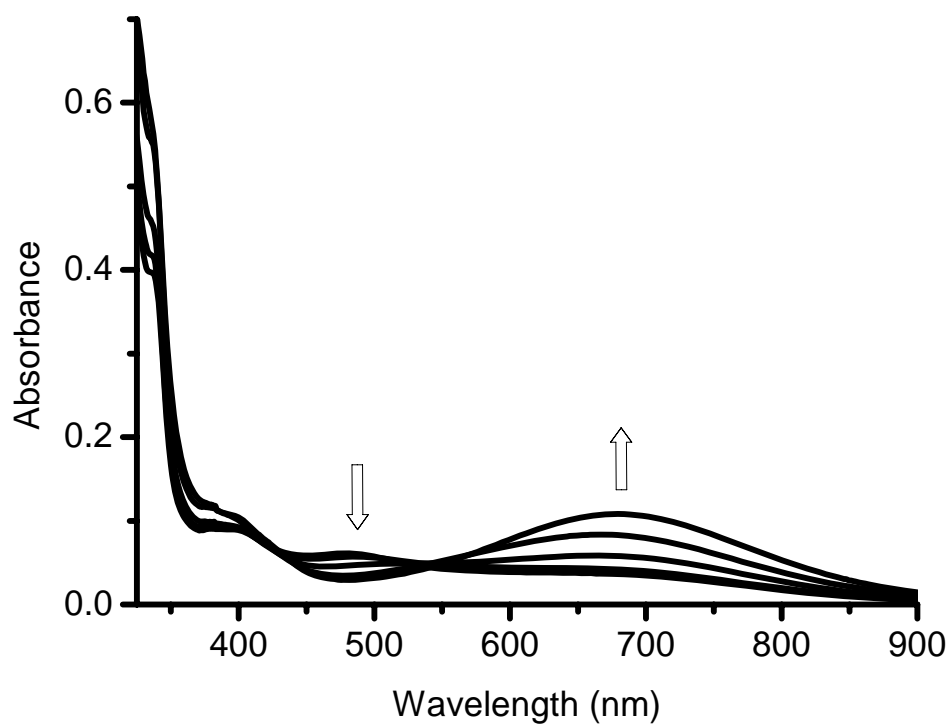
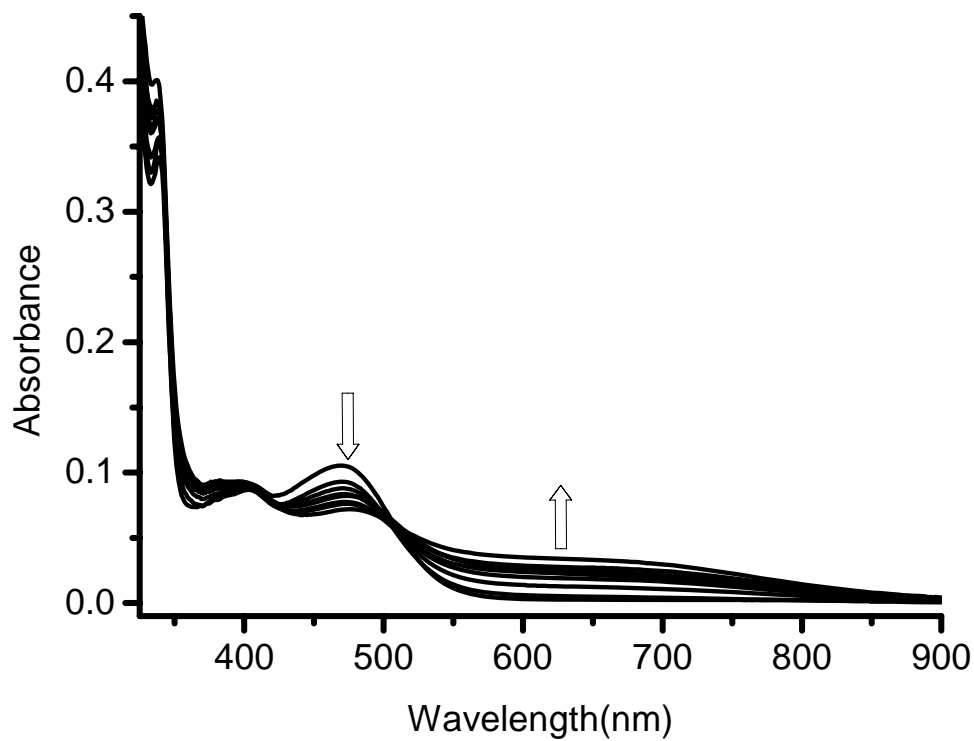


Fig. S6 UV-vis titration of **4** in acetonitrile solution (2×10^{-5} M) by addition of $[\text{Bu}_4\text{N}]\text{F}$. Top: addition of $[\text{Bu}_4\text{N}]\text{F}$ from 0 to 16×10^{-5} M. Bottom: addition of $[\text{Bu}_4\text{N}]\text{F}$ from 16×10^{-5} to 100×10^{-5} M.

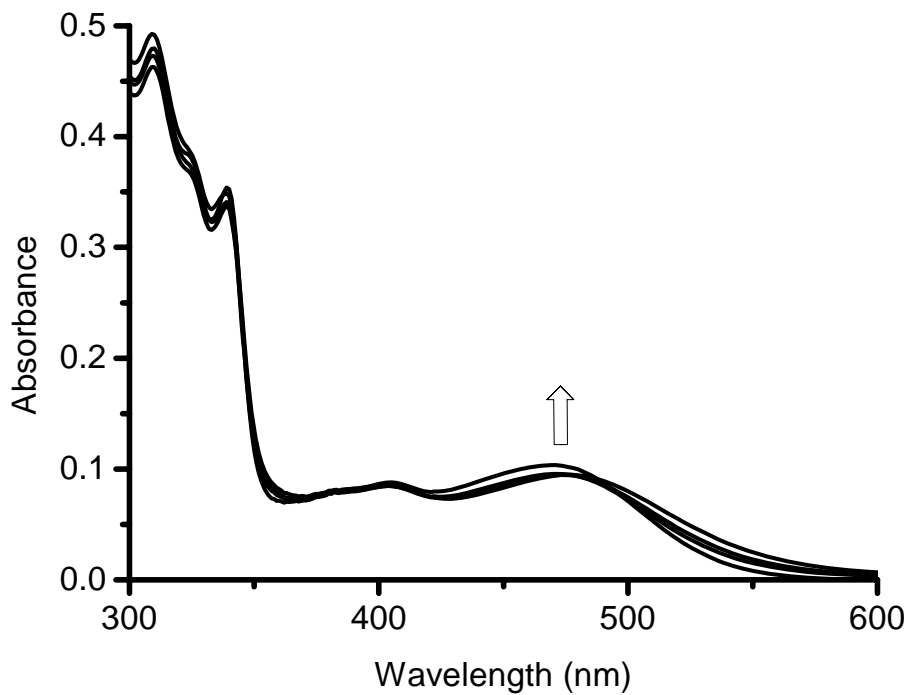


Fig. S7 UV-vis titration of **4** in acetonitrile solution (2×10^{-5} M) by addition of $[\text{Bu}_4\text{N}]\text{AcO}$ from 0 to 100×10^{-5} M.

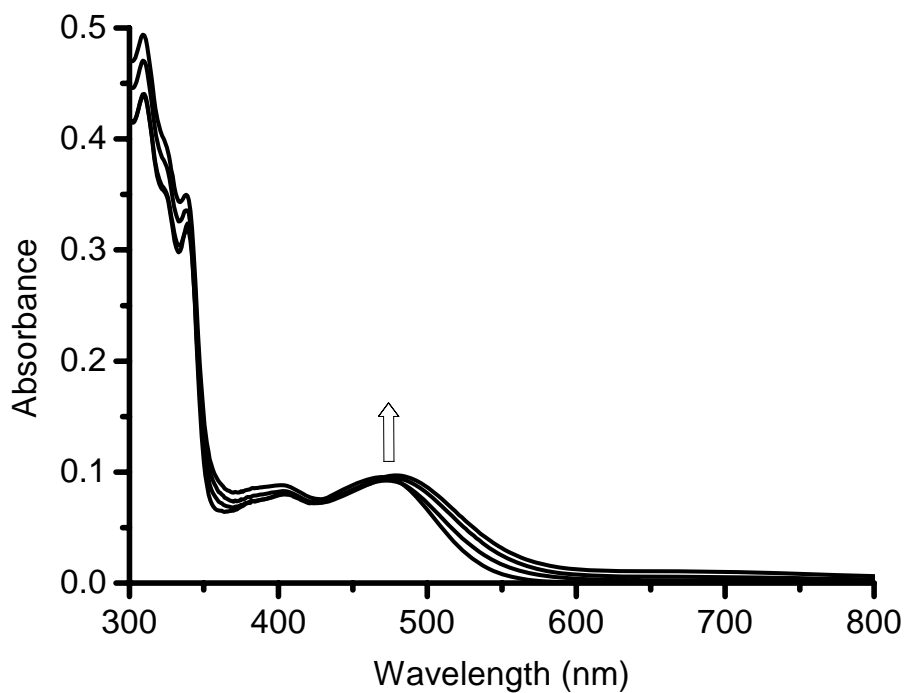


Fig. S8 UV-vis titration of **4** in acetonitrile solution (2.0×10^{-5} M) by addition of $[\text{Bu}_4\text{N}]\text{H}_2\text{PO}_4$ from 0 to 160×10^{-5} M.