

Electronic Supplementary Information

**Simple, Selective, and Sensitive Colorimetric and Ratiometric
Fluorescence/Phosphorescence Probes for Platinum(II) Based on
Salen-type Schiff Bases**

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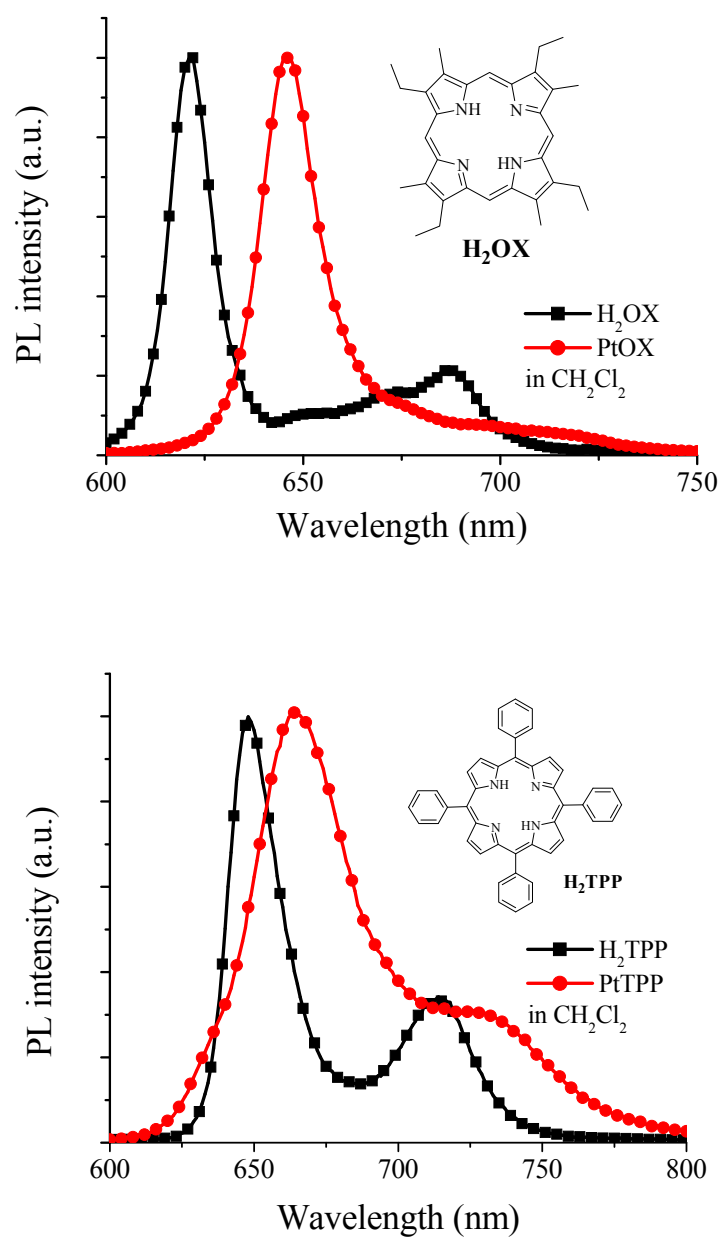


Fig. S1 Emission spectra of porphyrins and in their Pt(II) complexes.

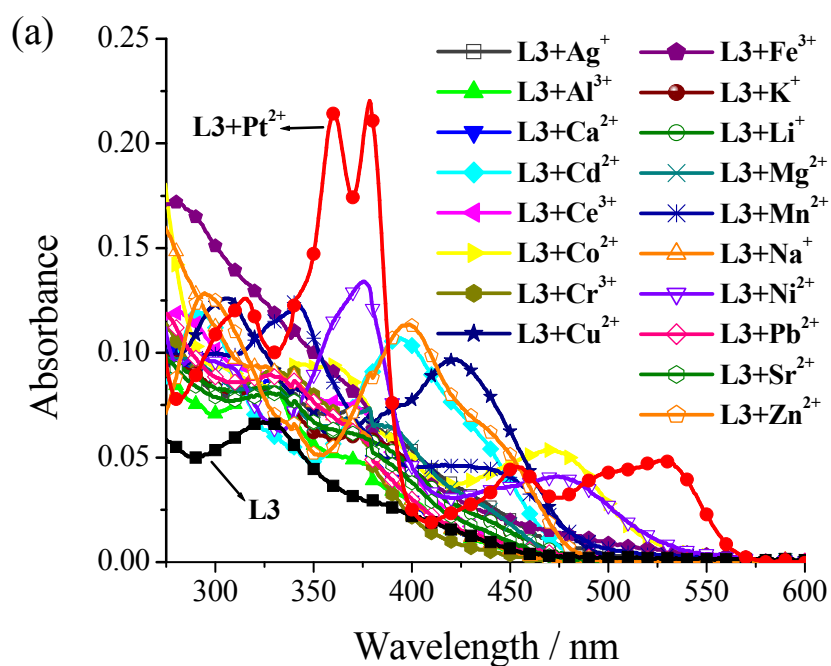


Fig. S2 Absorption spectra of **L3** (1.0×10^{-5} mol dm $^{-3}$ in air-saturated DMF) upon addition 2 equiv. of different metal ions.

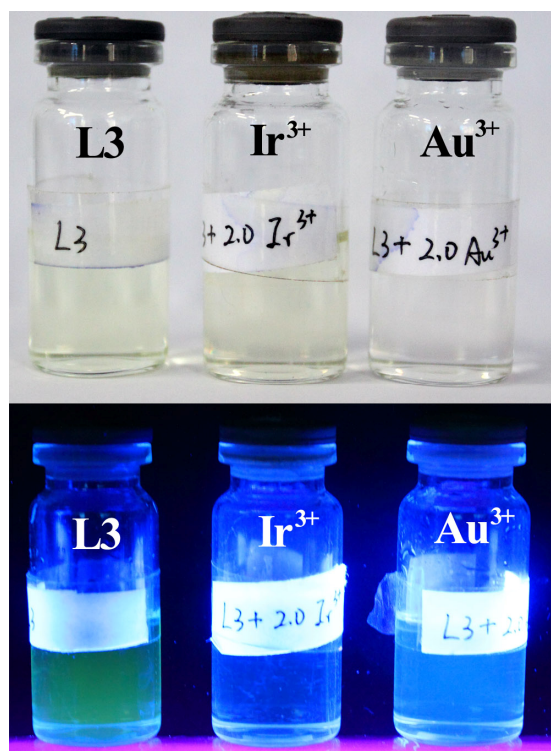


Fig. S3 Photographs (top: under sunlight; bottom: under 360 nm UV light) of **L3** (1.0×10^{-5} mol dm $^{-3}$ in air-saturated DMF) upon addition 2 equiv. of Ir $^{3+}$ (IrCl $_3$) and Au $^{3+}$ (AuCl $_3$).

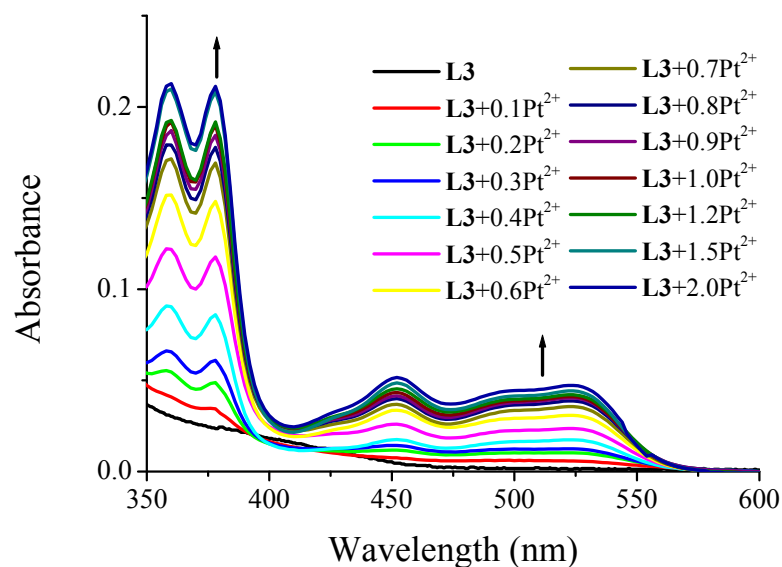


Fig. S4 Absorption spectra of **L3** (1.0×10^{-5} mol dm⁻³) in DMF upon addition 2 equiv. of Pt²⁺.

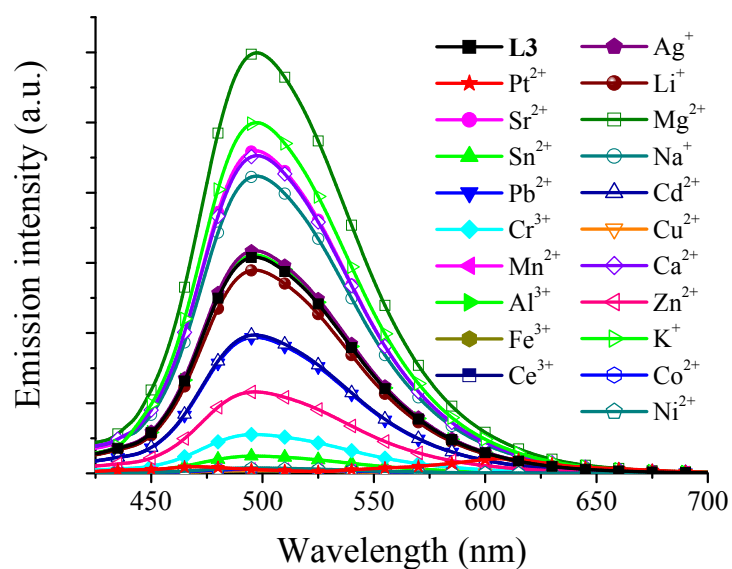


Fig. S5 Emission spectra (excited at 400 nm) of **L3** (1.0×10^{-5} mol dm⁻³) in air-saturated DMF upon addition of 2.0 equiv. of metal ions.

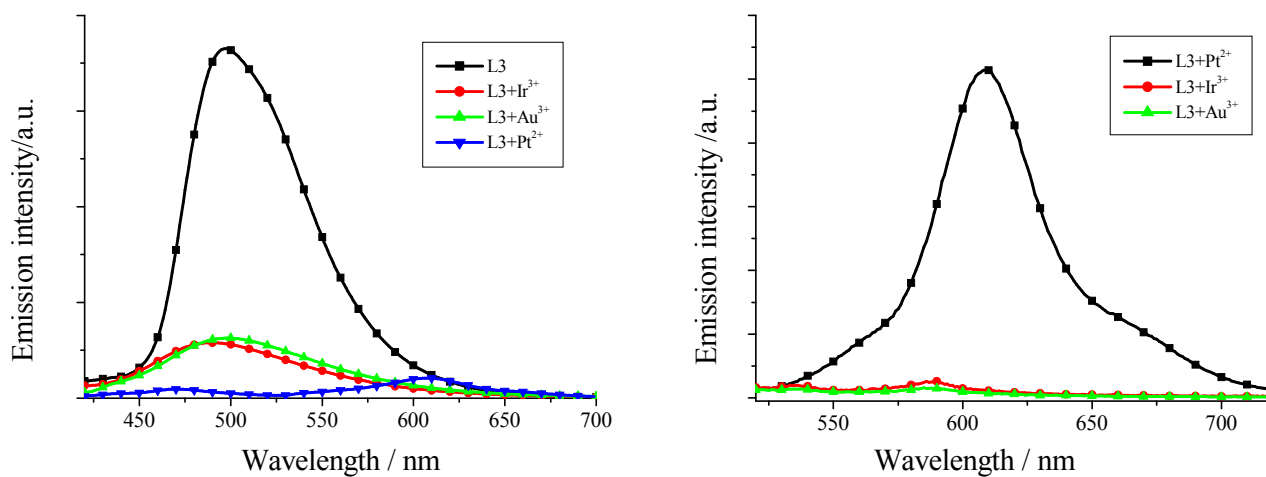


Fig. S6 Emission spectra (left: excited at 400 nm; right: excited at 525 nm) of L3 (1.0×10^{-5} mol dm⁻³ in air-saturated DMF) upon addition 2 equiv. of Pt²⁺, Ir³⁺ and Au³⁺.

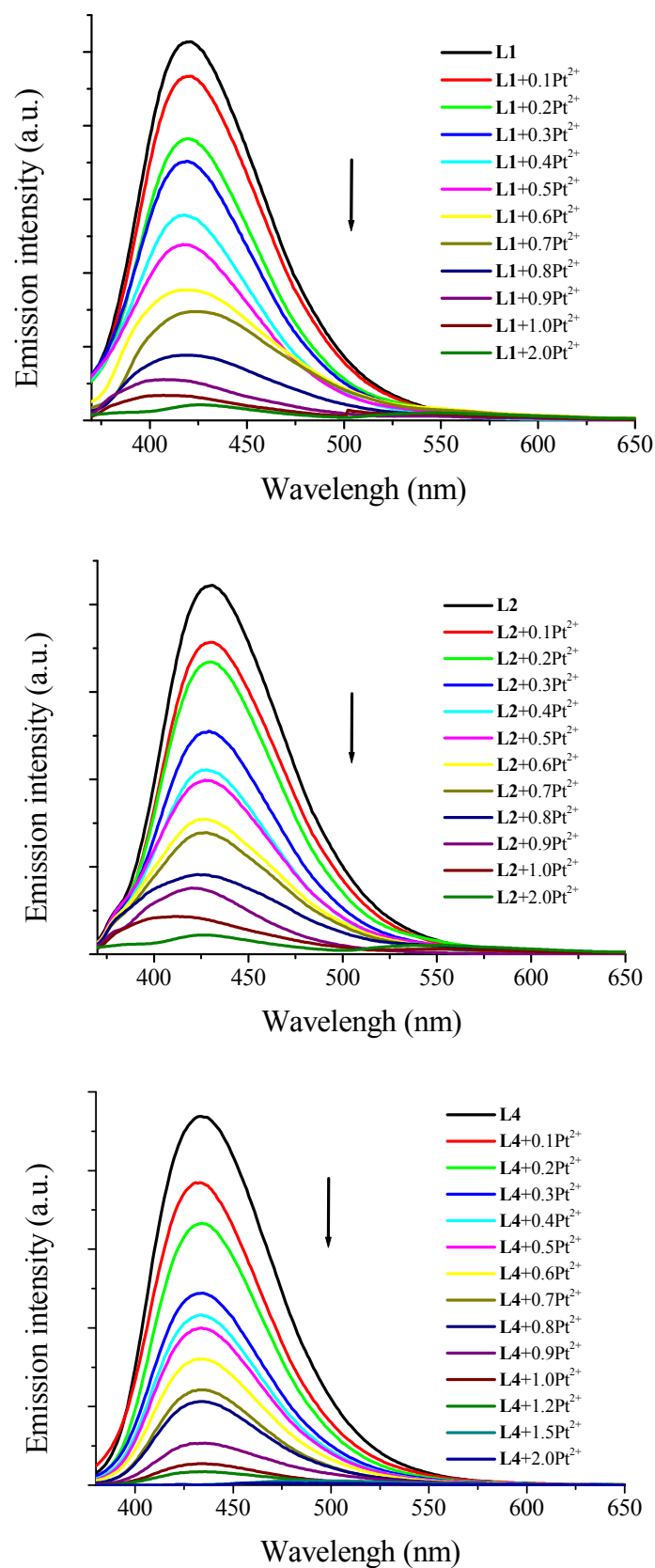


Fig. S7 Emission spectra of L1, L2, and L4 (1.0×10^{-5} mol dm^{-3} in air-saturated DMF, DMF, and water, respectively) upon addition different equiv. of Pt^{2+} excited at 315, 315, and 365 nm, respectively.

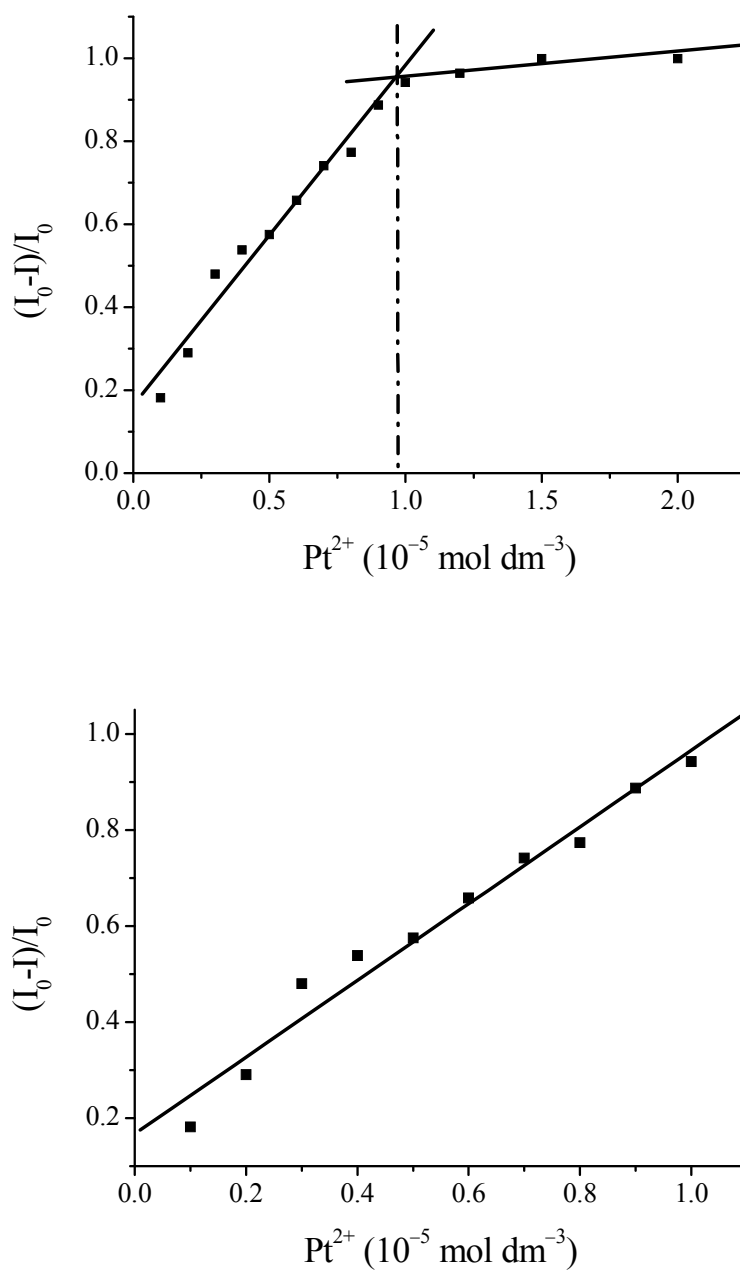


Fig. S8 Top: titration curves (fluorescence was excited at 365 nm and measured at 435 nm) of **L4** ($1.0 \times 10^{-5} \text{ mol dm}^{-3}$ in air-saturated water) with addition of Pt^{2+} . Bottom: job plot of **L4** with addition of Pt^{2+} .

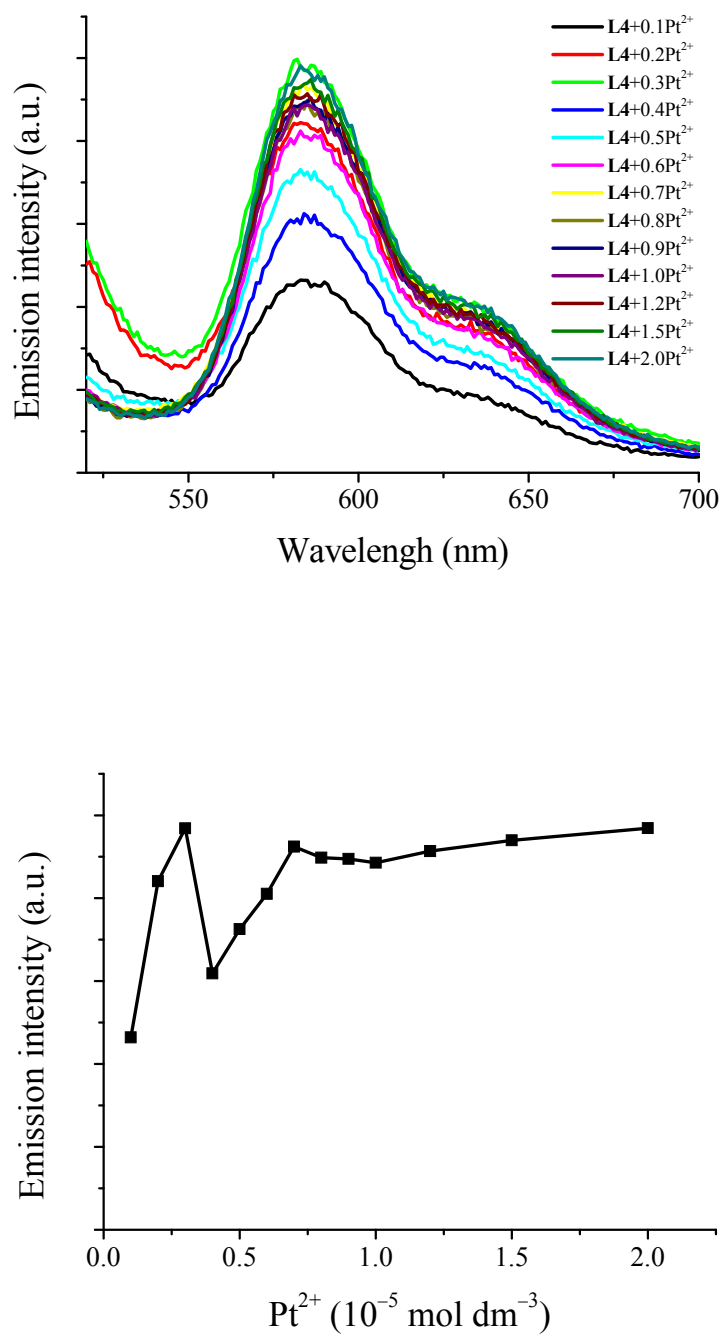


Fig. S9 Emission (excited at 480 nm) spectra (top) of **L4** (1.0×10^{-5} mol dm⁻³ in air-saturated water) upon addition different equiv. of Pt²⁺. Titration curves (bottom, phosphorescence was excited at 480 nm and measured at 585 nm) of **L4** (1.0×10^{-5} mol dm⁻³ in air-saturated water) with addition of Pt²⁺.