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

Li Zhou, Yan Feng, Jinghui Cheng, Nan Sun, Xiangge Zhou and Haifeng Xiang*

Institute of Homogeneous Catalysis, College of Chemistry
Sichuan University, Chengdu, 610041, China
Fax: (+86) 28-8541-2291
E-mail: xianghaifeng@scu.edu.cn
**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 Ir³⁺ (IrCl₃) and Au³⁺ (AuCl₃).
**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 Pt^{2+}, Ir^{3+} and Au^{3+}. 

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Fig. S7 Emission spectra of \textbf{L1}, \textbf{L2}, and \textbf{L4} \((1.0 \times 10^{-5} \text{ mol dm}^{-3}\) in air-saturated DMF, DMF, and water, respectively) upon addition different equiv. of Pt\textsuperscript{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 × 10⁻⁵ mol dm⁻³ in air-saturated water) with addition of Pt²⁺. Bottom: job plot of L4 with addition of Pt²⁺.
**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 Pt^{2+}. 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 Pt^{2+}. 