

Supporting Information for Dalton Transactions

SUPPORTING INFORMATION

Sulfur-free iridium(III) complex for highly selective and multi-signaling mercury(II)-chemosensor

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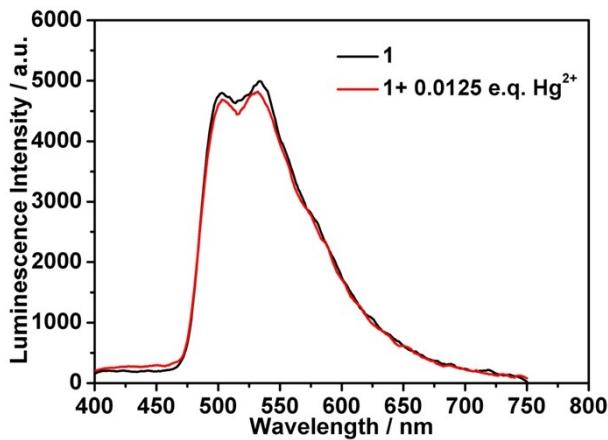


Fig. S1. Changes in the PL spectra of complex **1** (20 μM) in CH_3CN upon titration of 0.0 and 0.0125 e.q. $\text{Hg}(\text{II})$ ions.

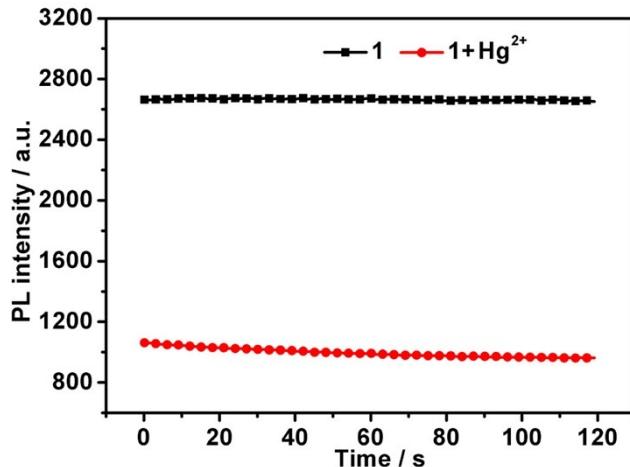


Fig. S2. PL intensity at 502 nm of complex **1** (20 μM) in CH_3CN solution before and after addition of $\text{Hg}(\text{II})$ ions within 2 minutes.

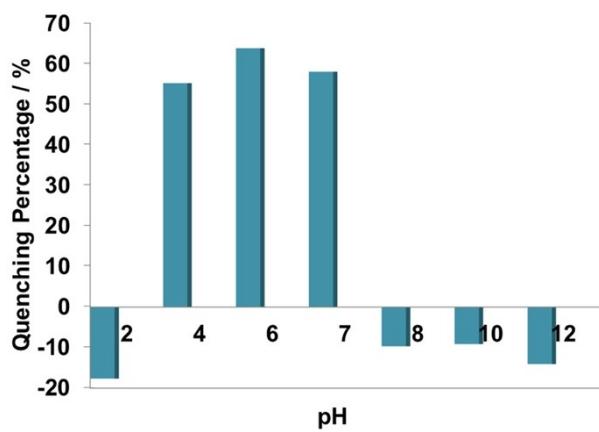
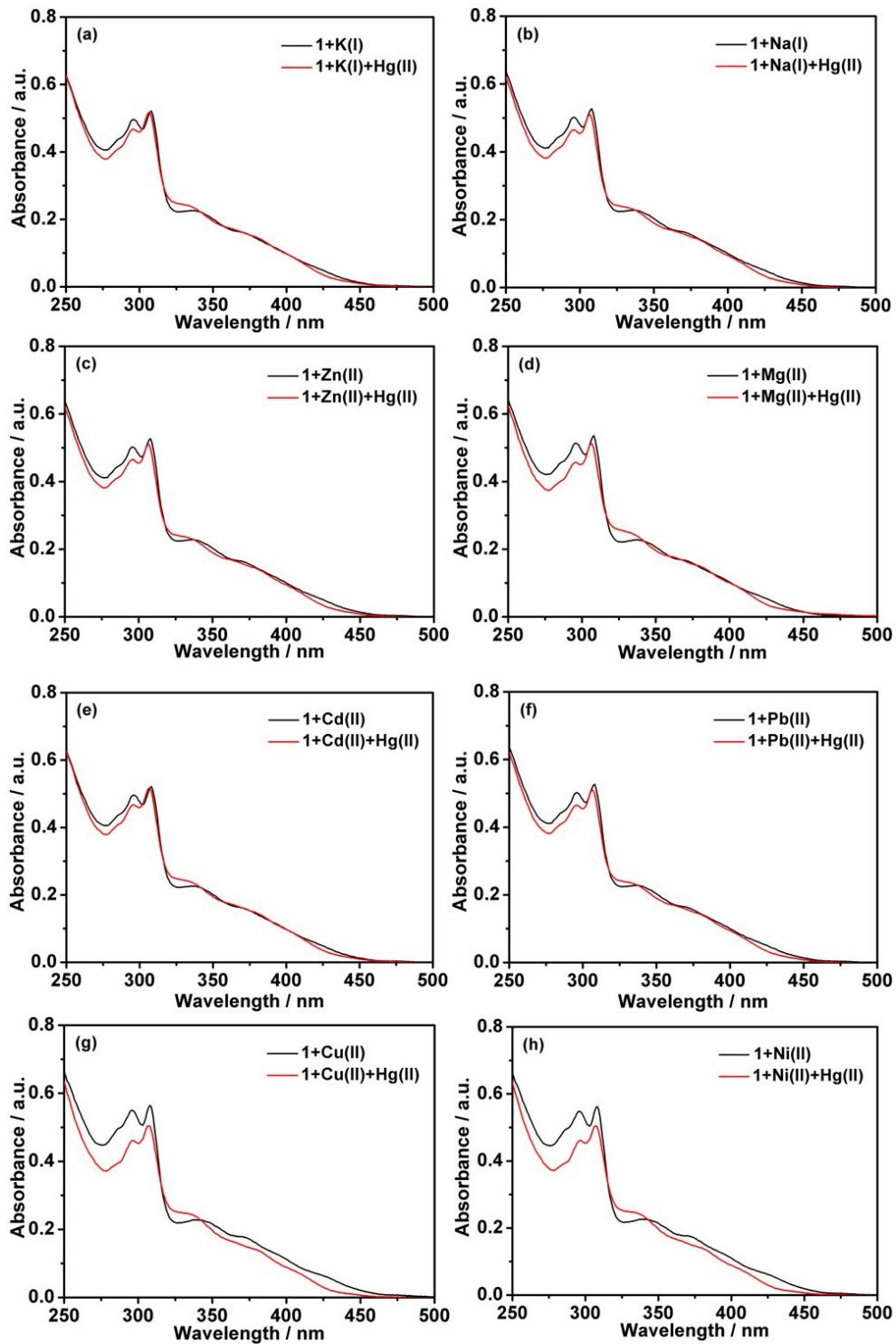


Fig. S3. The effect of pH on emission quenching of complex **1** upon addition of $\text{Hg}(\text{II})$ ions.

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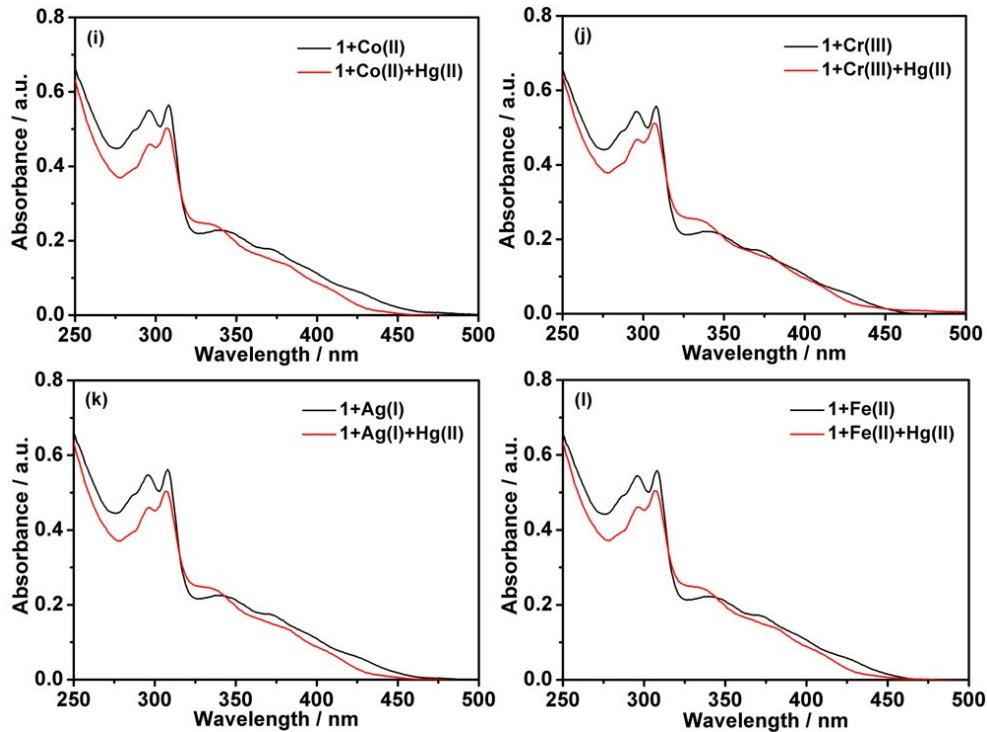
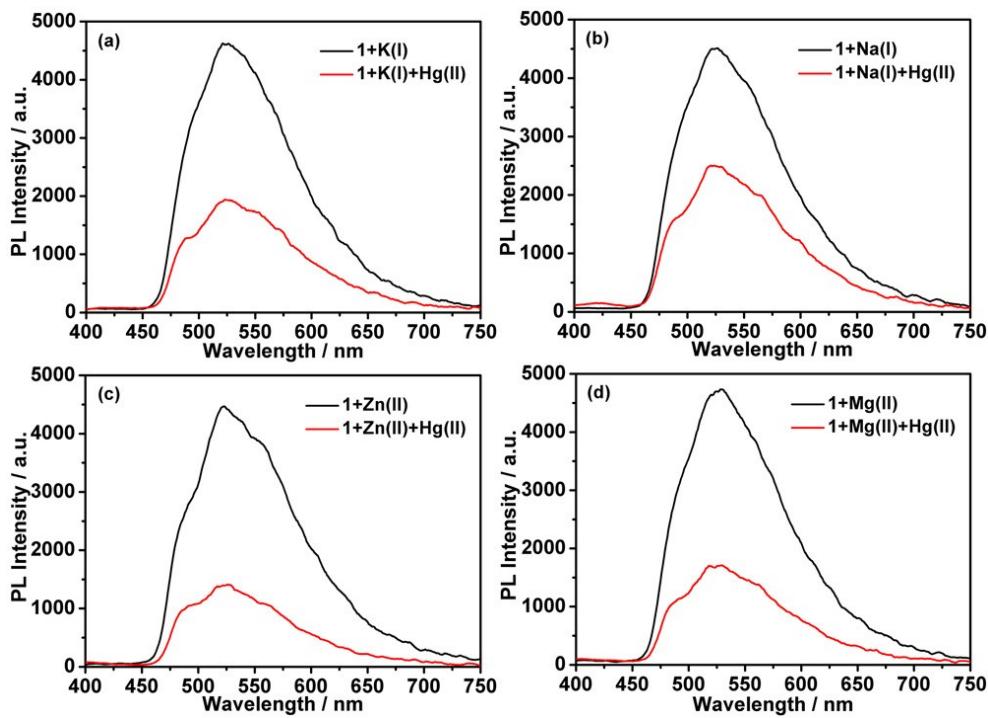


Fig. S4. The UV-vis absorption spectra of complex **1** (20 μ M) in CH_3CN with 1 e.q. of various metal cations and addition of 1 e.q. $\text{Hg}(\text{II})$ ions into above solutions.



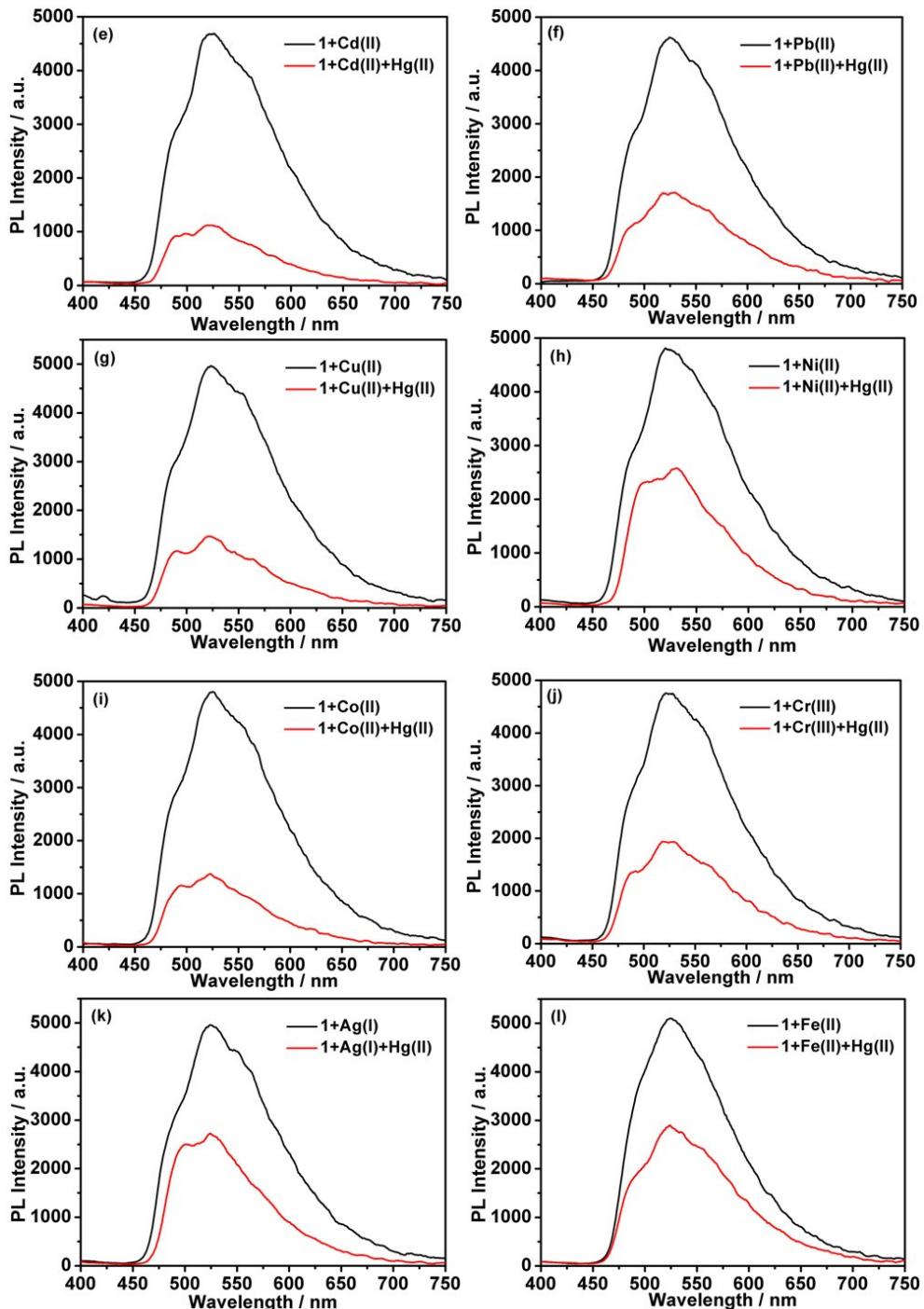


Fig. S5. The PL spectra of complex **1** (20 μM) in CH_3CN with 1 e.q. of various metal cations and addition of 1 e.q. $\text{Hg}(\text{II})$ ions into above solutions.

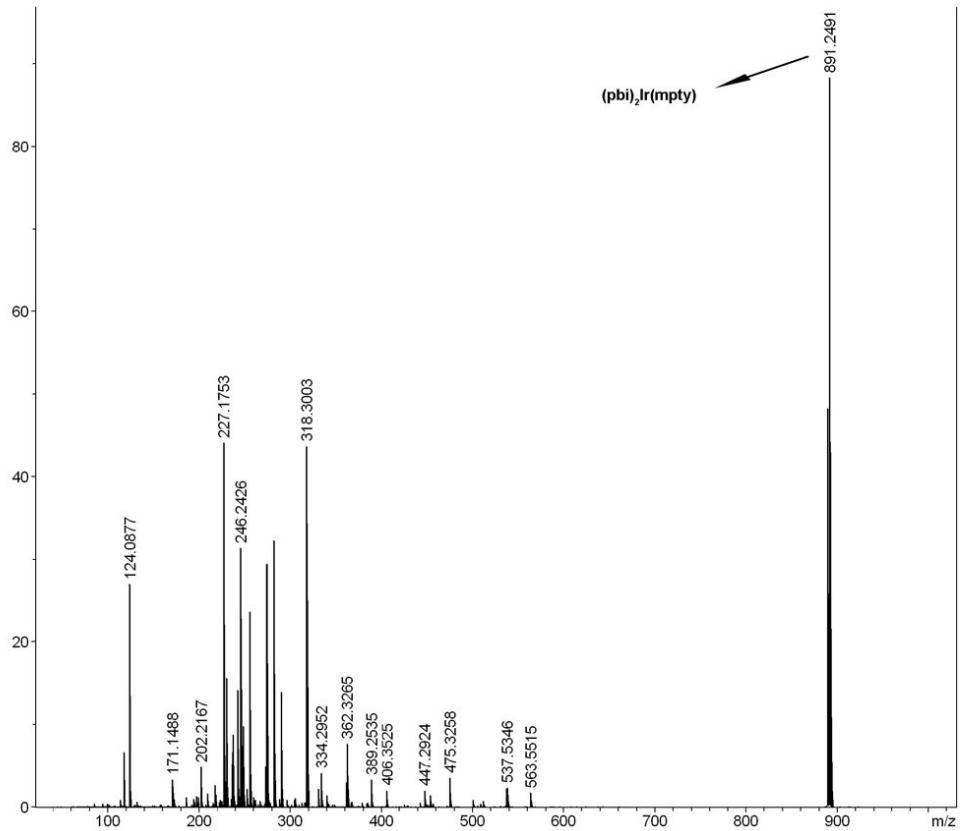


Fig. S6. ESI-MS spectrum of complex **1** in CH_3CN solution.

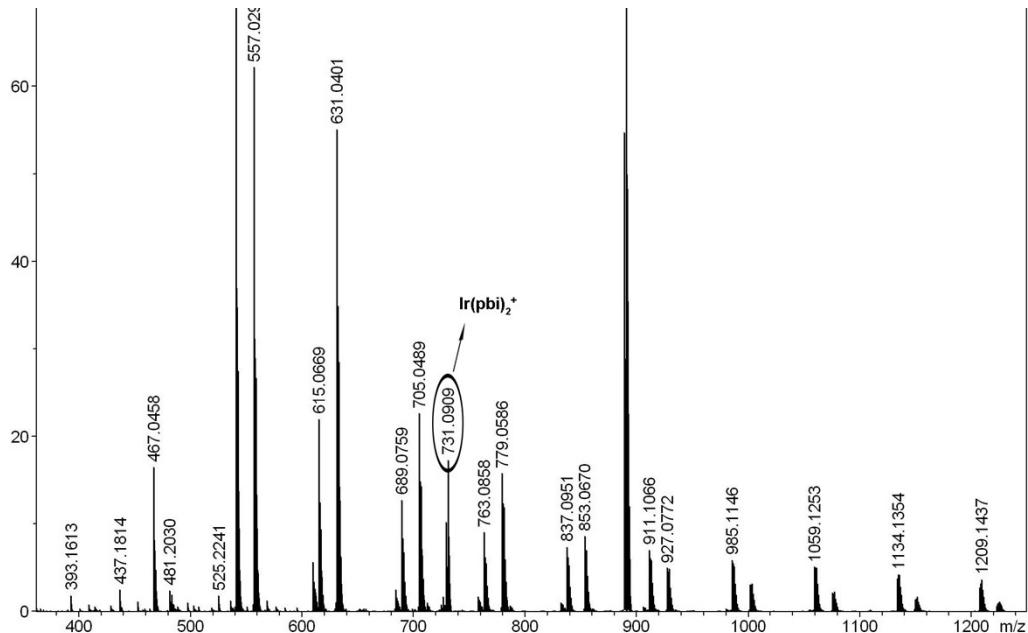


Fig. S7. ESI-MS spectrum of complex **1** in CH_3CN solution with 1.0 e.q. of $\text{Hg}(\text{II})$.