Electronic Supplementary Material (ESI) for RSC Advances.

A novel cyclometalated Ir(III) complex based luminescence intensity and lifetime sensor for Cu2+

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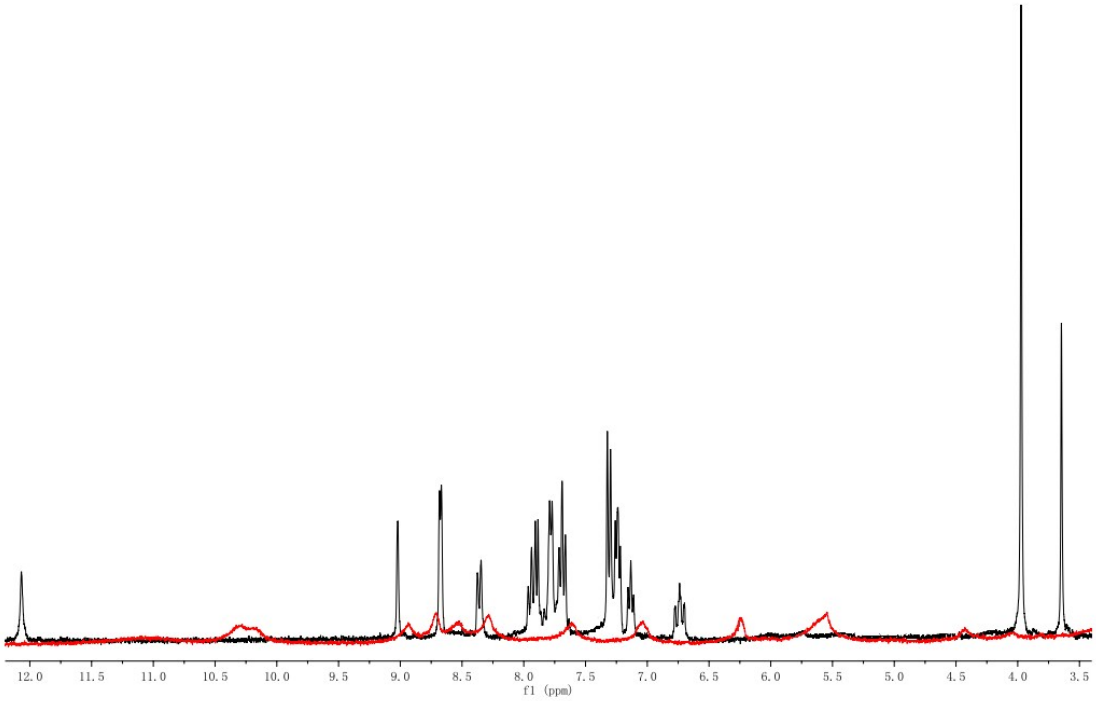


Fig. S1. The comparative trial of ^{1}H NMR spectra of **Ir-2** (black line) and **Ir-2** + 4.0 equiv. Cu^{2+} (red line) in MeCN-d_3 solution.

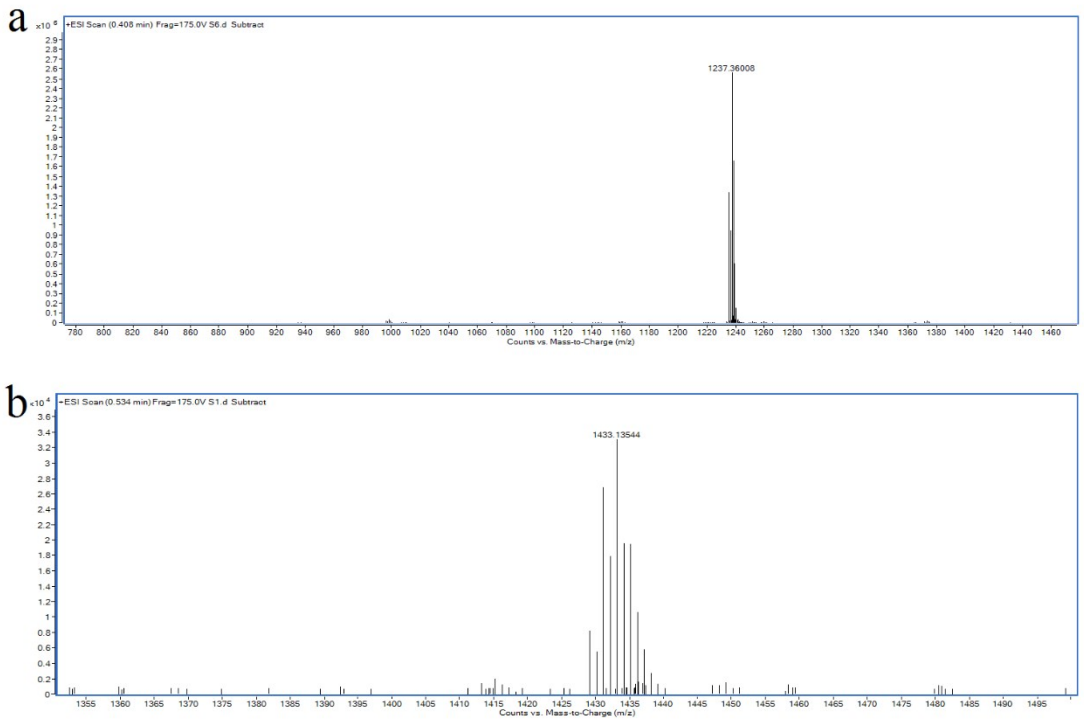
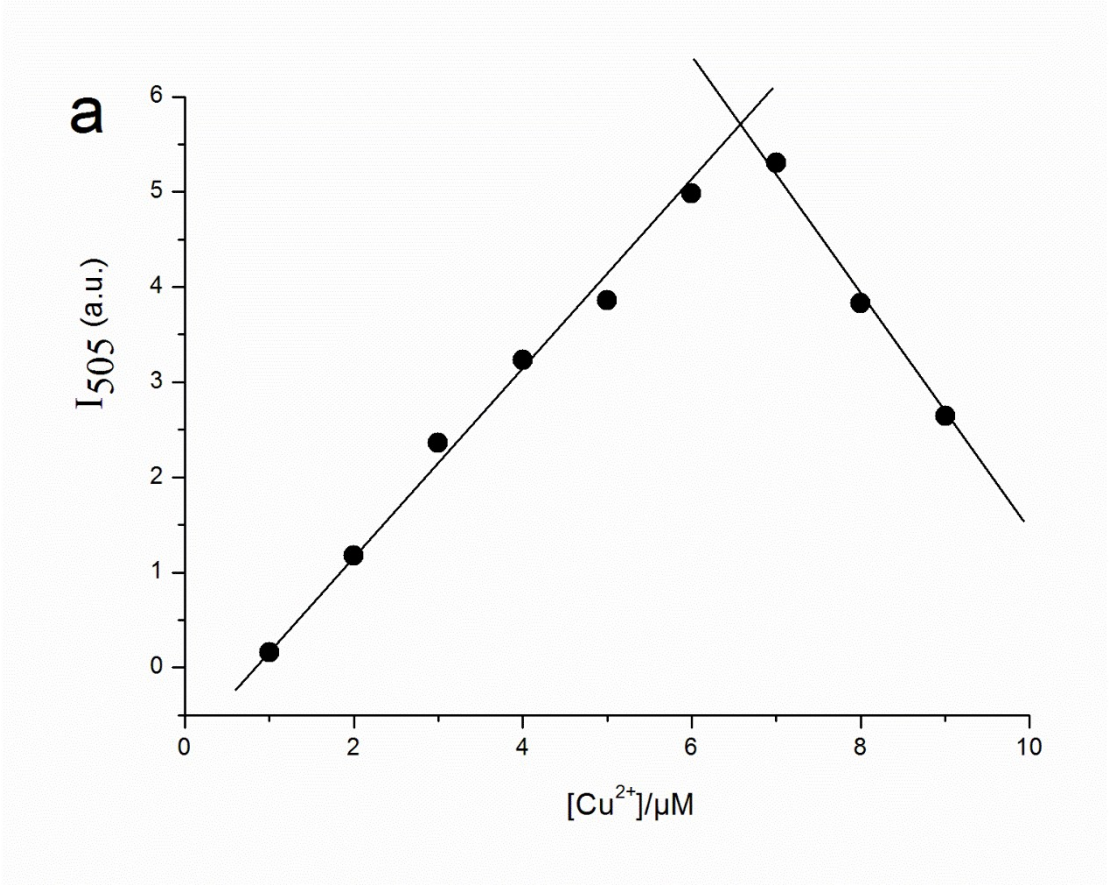


Fig. S2. The comparative trial of ESI^{+}–HRMS spectra of **Ir-2**(a) and **Ir-2** + 4.0 equiv. Cu^{2+} (b).



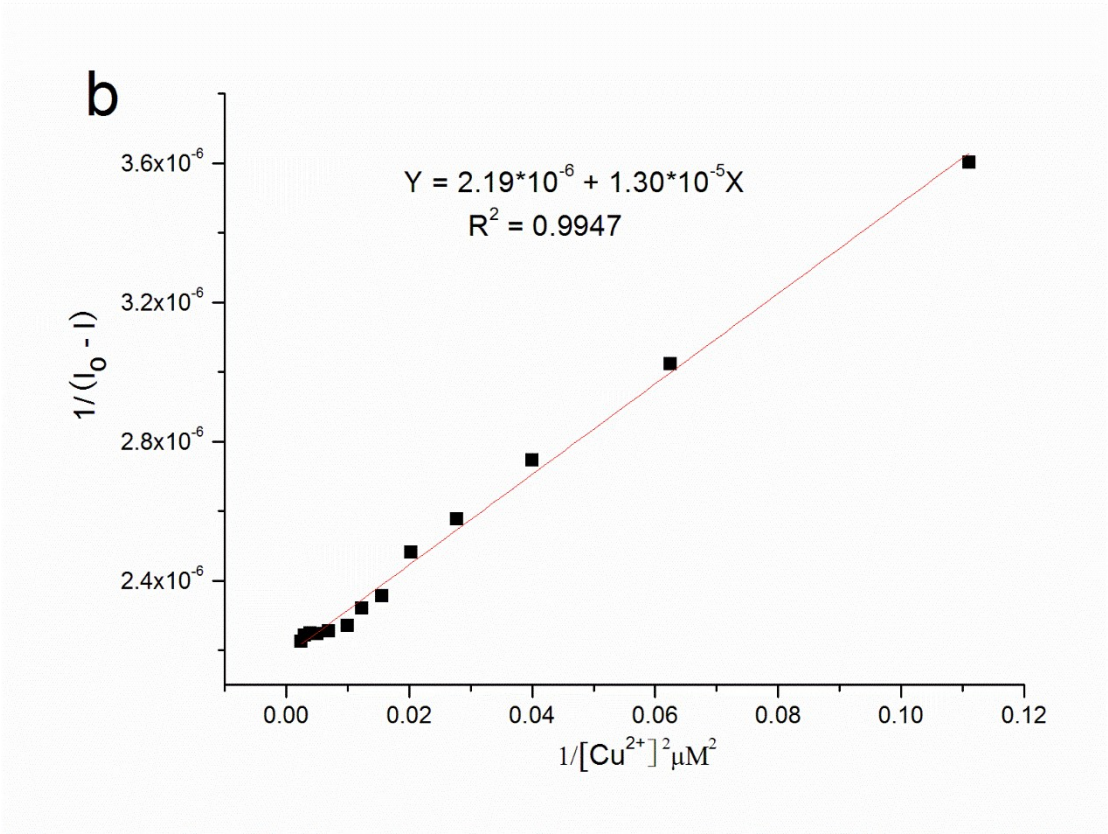


Fig. S3. (a) Job's plot of **Ir-2** with Cu^{2+} according to the method of continuous variations. The total concentrations of **Ir-2** and Cu^{2+} were kept constant at 10 μM. The PL intensity was recorded in a aqueous solution. (b) Benesi–Hildebrand linear analysis plot of **Ir-2** at different Cu^{2+} concentrations.