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Supplementary Materials

Selective sensing of citrate by supramolecular ensemble formed by phenazine copper(I) complex and perylene diimide derivative

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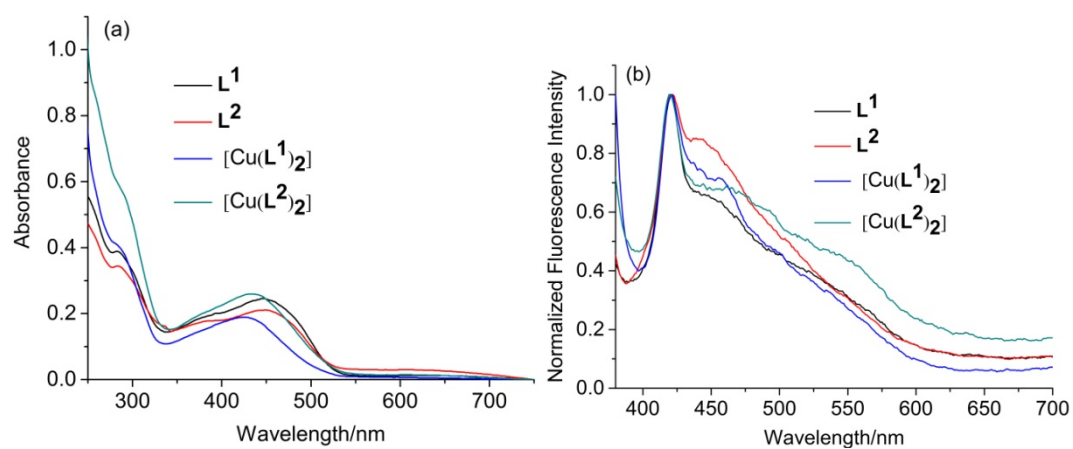


Fig. S1. (a) Absorption and (b) normalized fluorescence emission spectra of **L¹**, **L²**, **[Cu(L¹)₂]** and **[Cu(L²)₂]** in Tris-HCl (10 mM, pH 7.4) ($\lambda_{\text{ex}} = 365 \text{ nm}$). The concentration for **L¹**, **L²**, **[Cu(L¹)₂]** or **[Cu(L²)₂]** is 20 μM .

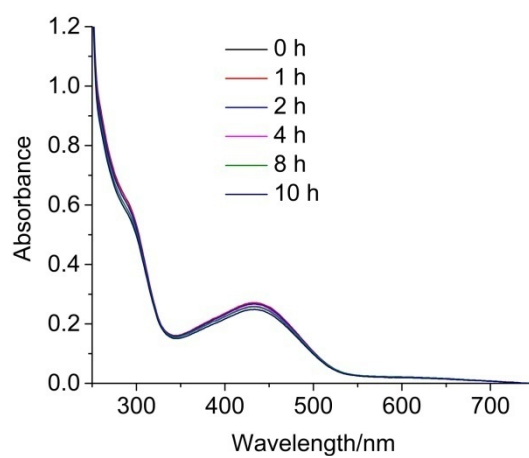


Fig. S2 UV-vis absorption spectral changes of **[Cu(L²)₂]** (20 μM) in Tris-HCl buffer (10 mM, pH 7.4) incubated in air and under indoor light.

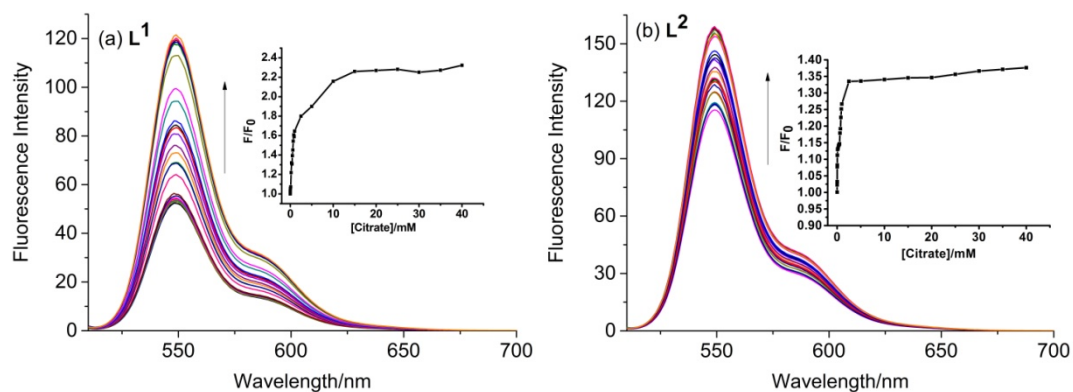


Fig. S3 Changes in fluorescence emission spectra of PASP ($4\ \mu\text{M}$) in Tris-HCl buffer in the presence of (a) L^1 ($36\ \mu\text{M}$) and (b) L^2 ($16\ \mu\text{M}$) upon addition of citrate. [citrate] = 0, 0.0025, 0.005, 0.01, 0.02, 0.03, 0.05, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 2.5, 5.0, 10, 15, 20, 25, 30, 35, 40 mM.

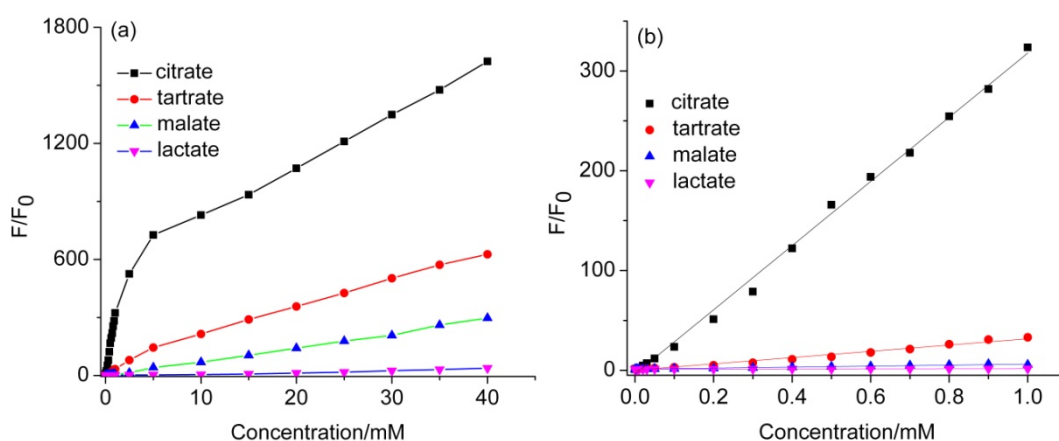


Fig. S4 Relative fluorescence intensity (F/F_0) of PASP ($4\ \mu\text{M}$) in the presence of $[\text{Cu}(\text{L}^1)_2]$ ($18\ \mu\text{M}$) plotted as a function of α -hydroxycarboxylates concentration. Concentration ranges in (a) 0–40 mM and (b) 0–1 mM.