

Supplementary Material (ESI) for New Journal of Chemistry

Supporting Information

Highly Selective Ratiometric Fluorescent Chemosensor for Ag⁺ Based on Rhodanineacetic Acid-Pyrene Derivative

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1.¹H NMR & ¹³C NMR spectrum of RAAP

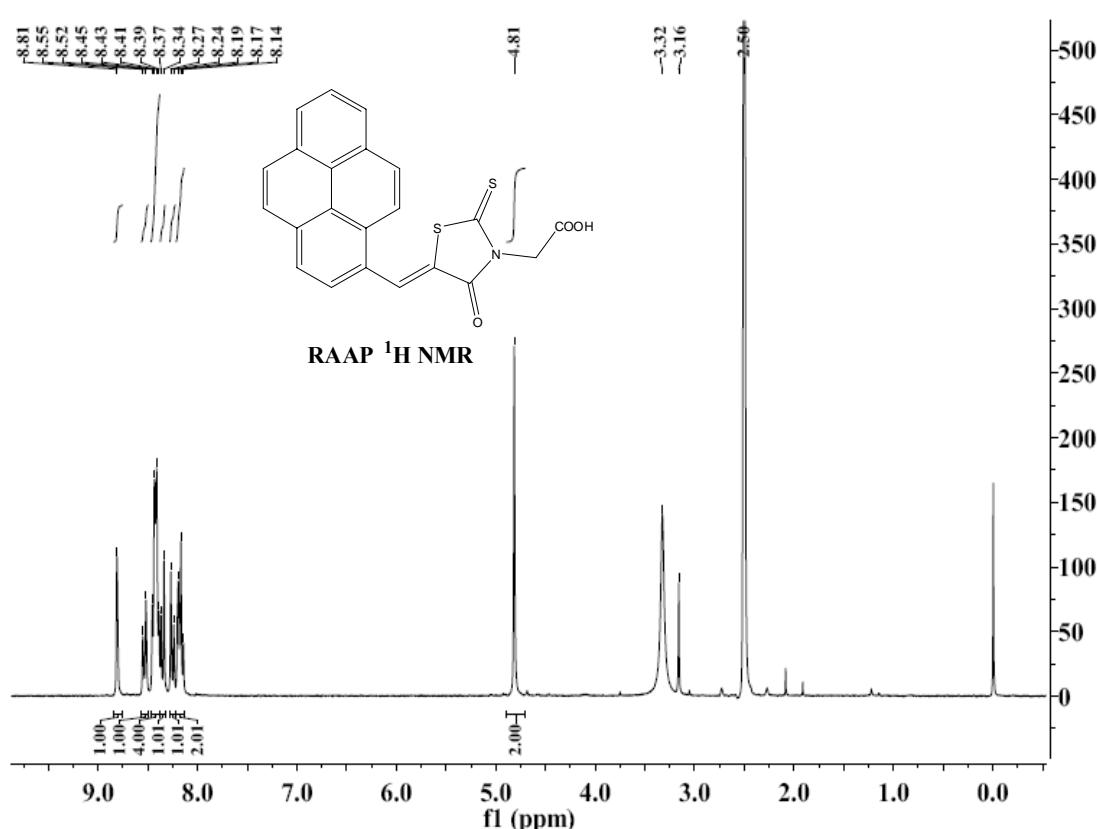


Fig. S1: ¹H NMR spectrum of RAAP

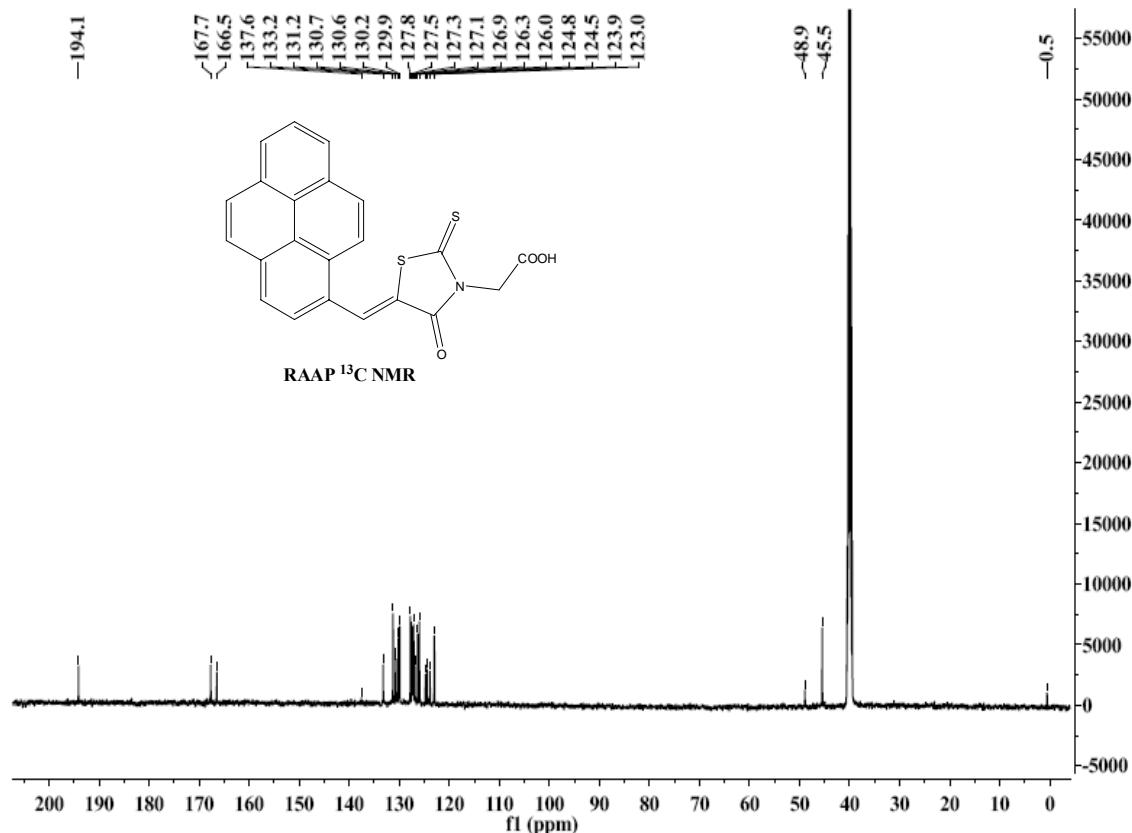


Fig. S2: ^{13}C NMR spectrum of RAAP

2. IR spectrum of RAAP

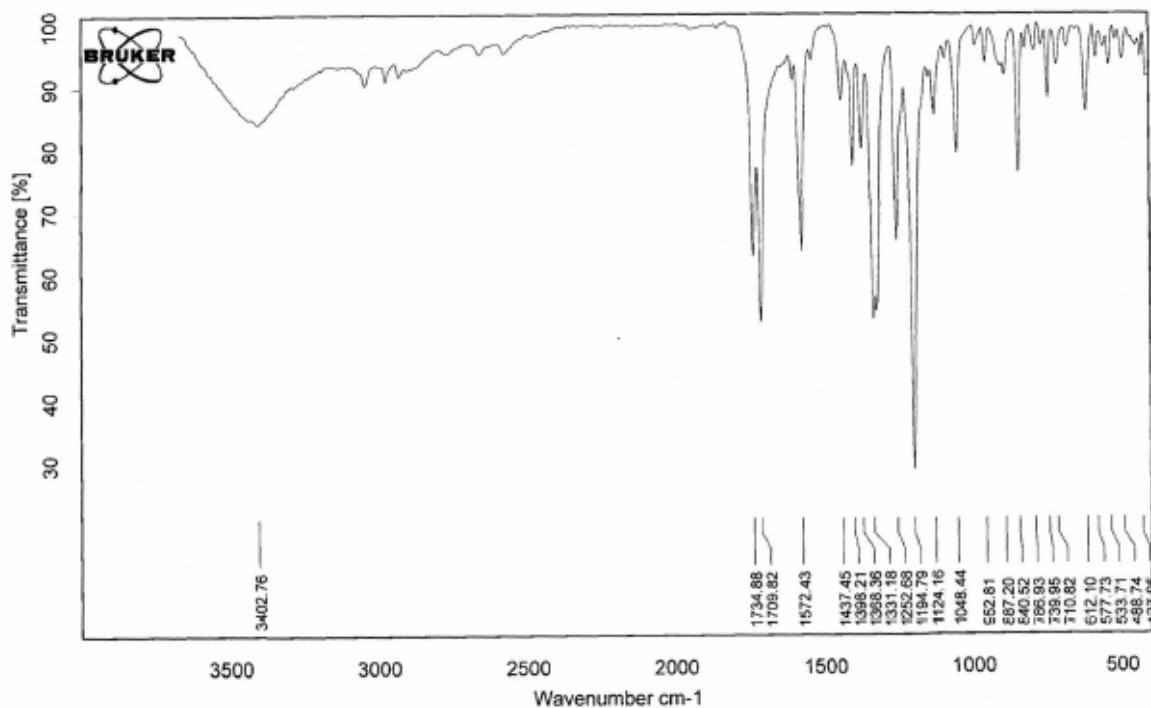


Fig. S3: IR spectrum of RAAP

3. ESI-MS spectrum of RAAP

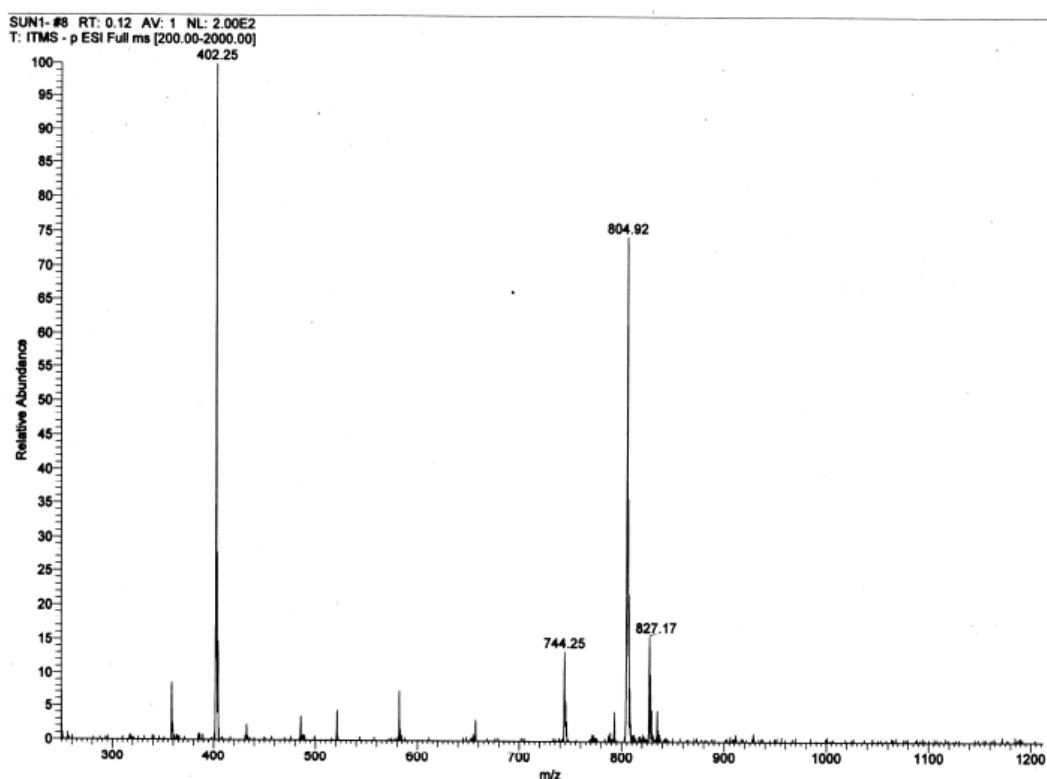


Fig. S4: ESI-MS spectrum of RAAP

4. The fluorescence spectra of RAAP in the presence of various metal ions

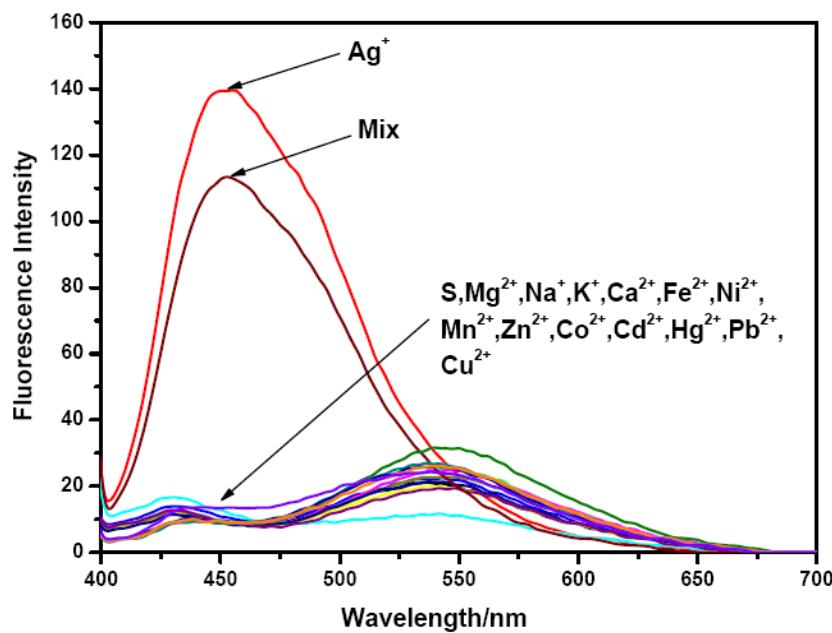


Fig. S5: The fluorescence spectra of RAAP (1×10^{-5} M in CH₃OH) induced by 2 equiv of various metal ions, $\lambda_{\text{ex}} = 381$ nm.

5. The influence of time on the fluorescence intensity of pyrene excimer emission.

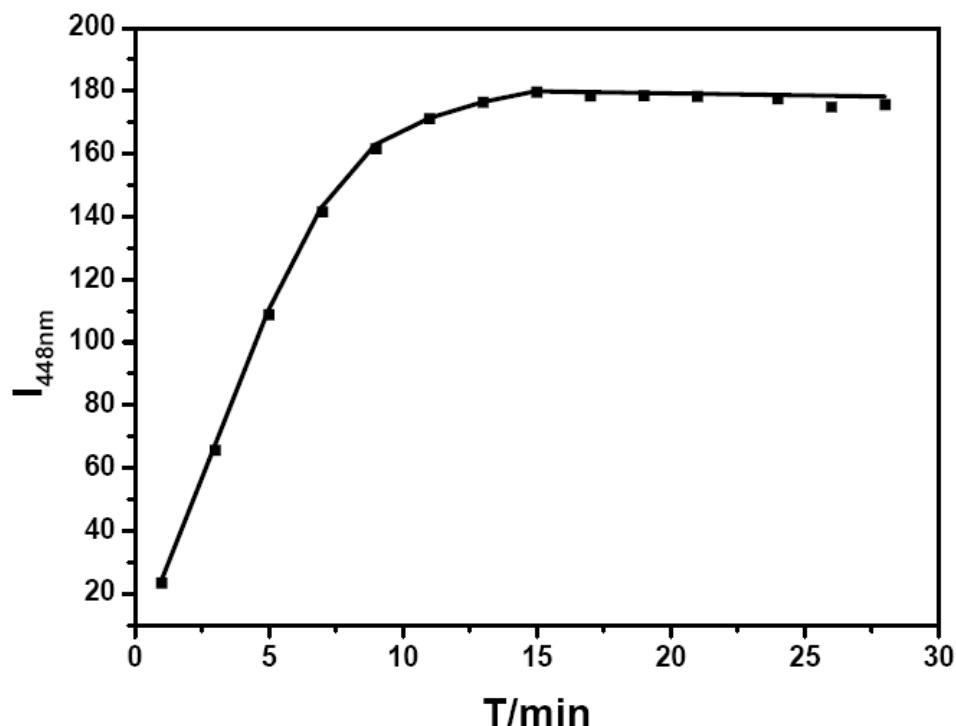


Fig. S6: The changes of fluorescence intensity at 448 nm as time went on, $\lambda_{\text{ex}} = 381$ nm.

6. UV-vis screening against other cations.

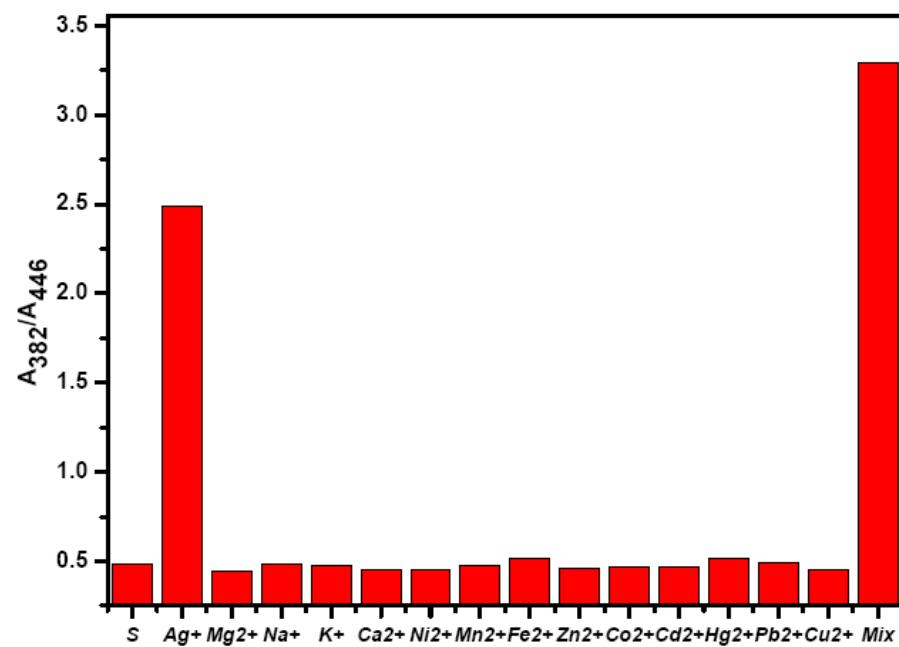


Fig. S7: UV-vis screening against other cations. $[RAAP] = 1 \times 10^{-5}$ M, $[M^{n+}] = 2 \times 10^{-5}$ M.