

Supporting Information

For

**A Thioether-Rich Crown-Based Highly Selective Fluorescent
Sensor for Hg²⁺ and Ag⁺ in Aqueous Solution**

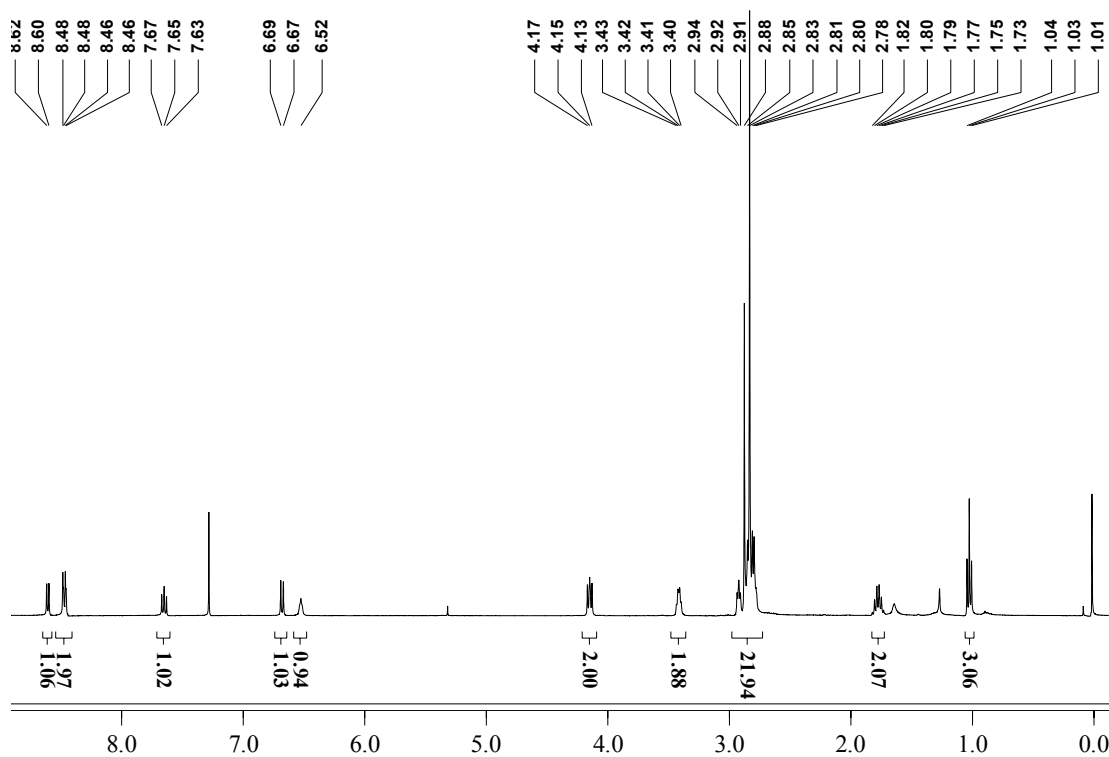
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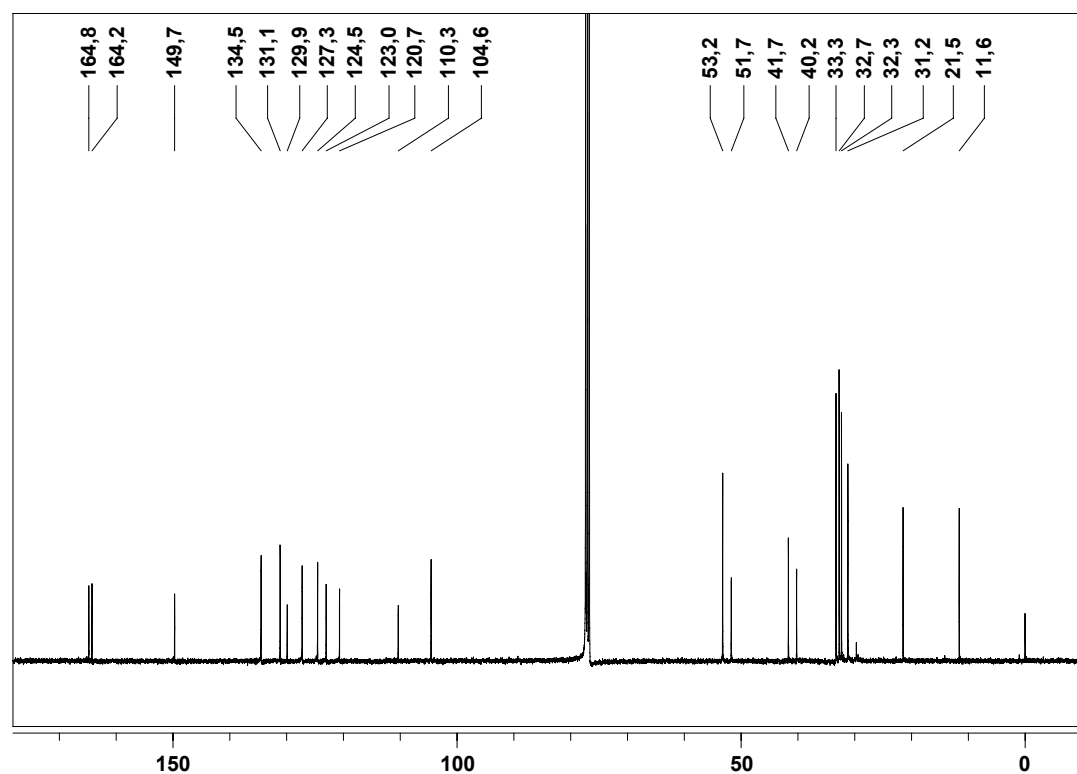
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1. The characterization data of sensor 1

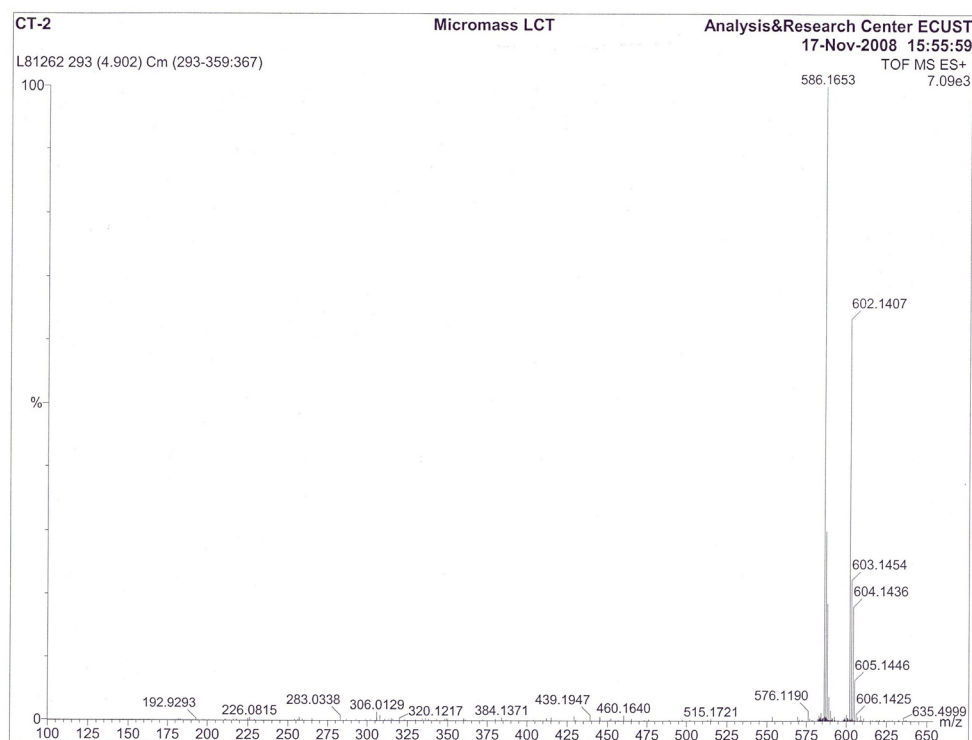
$^1\text{H-NMR}$ spectrum of sensor 1



$^{13}\text{C NMR}$ spectrum of sensor 1



HRMS spectrum of sensor 1



2. Absorption and Emission Spectra of **1** vs. Ag^+

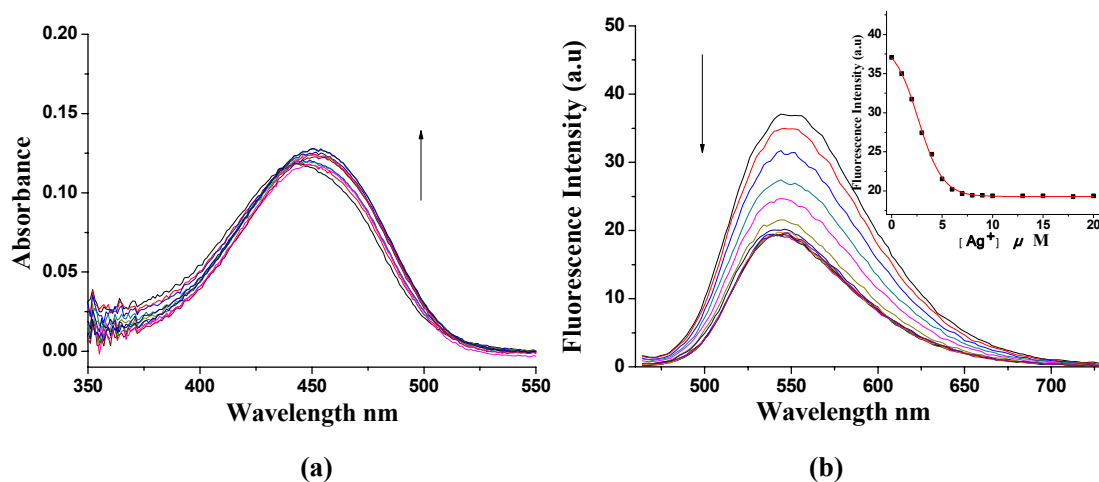
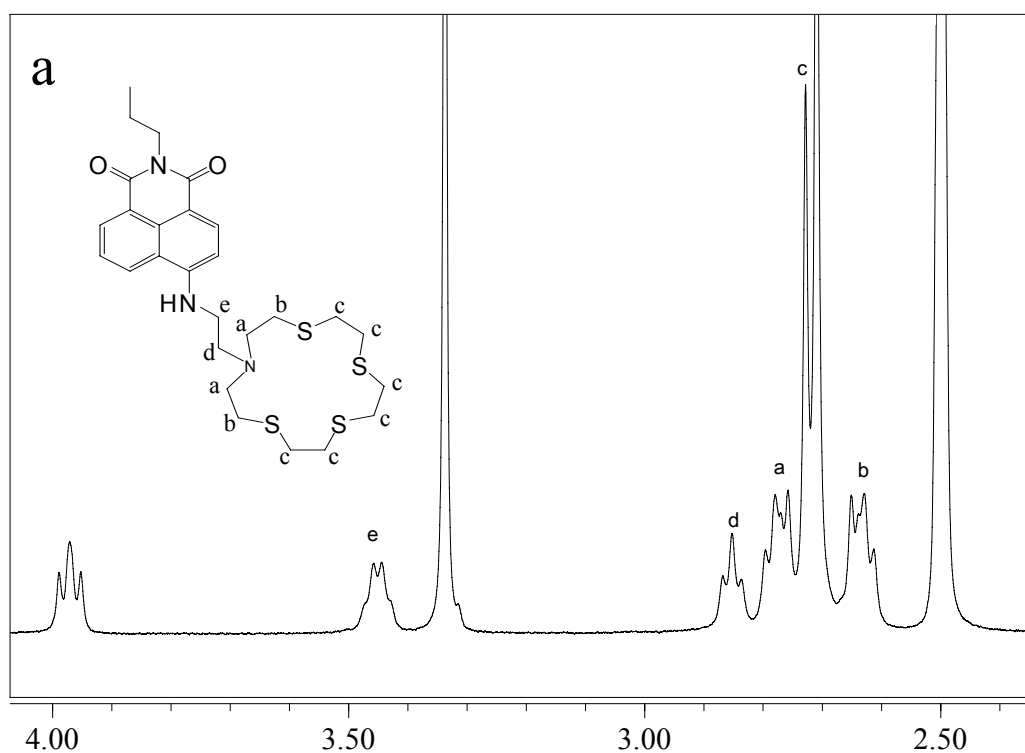


Fig. S1 (a) UV spectra of **1** upon addition of Ag^+ . (d) Fluorescence spectra of compound **1** upon addition of Ag^+ . Condition: **1** ($10 \mu\text{M}$) in 0.01 M Tris-HCl solution (ethanol:water = 20:80, v/v, pH 7.14)

3. ^1H -NMR studies



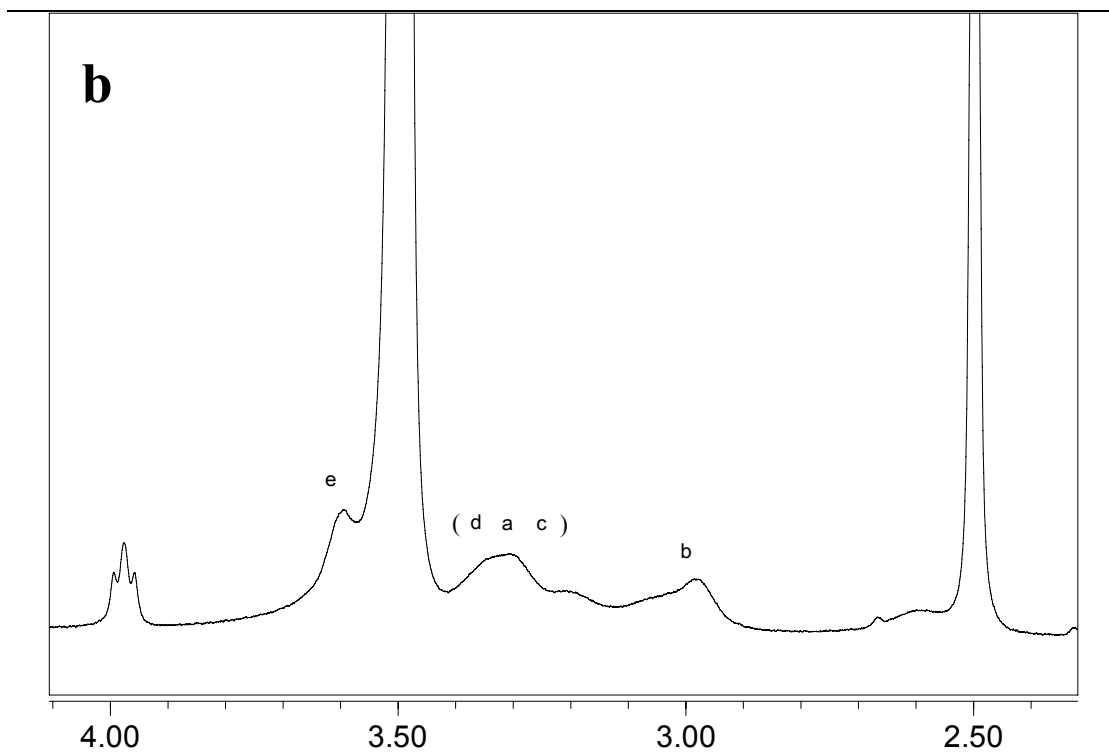


Fig. S2 Partial ¹H-NMR spectra of **1** (400 MHz, in DMSO-*d*₆) before (a) and after (b) the addition of 10 equiv of Hg(ClO₄)₂