

# Light Harvesting Nanoprobe for Trace Detection of Hg<sup>2+</sup> in Water

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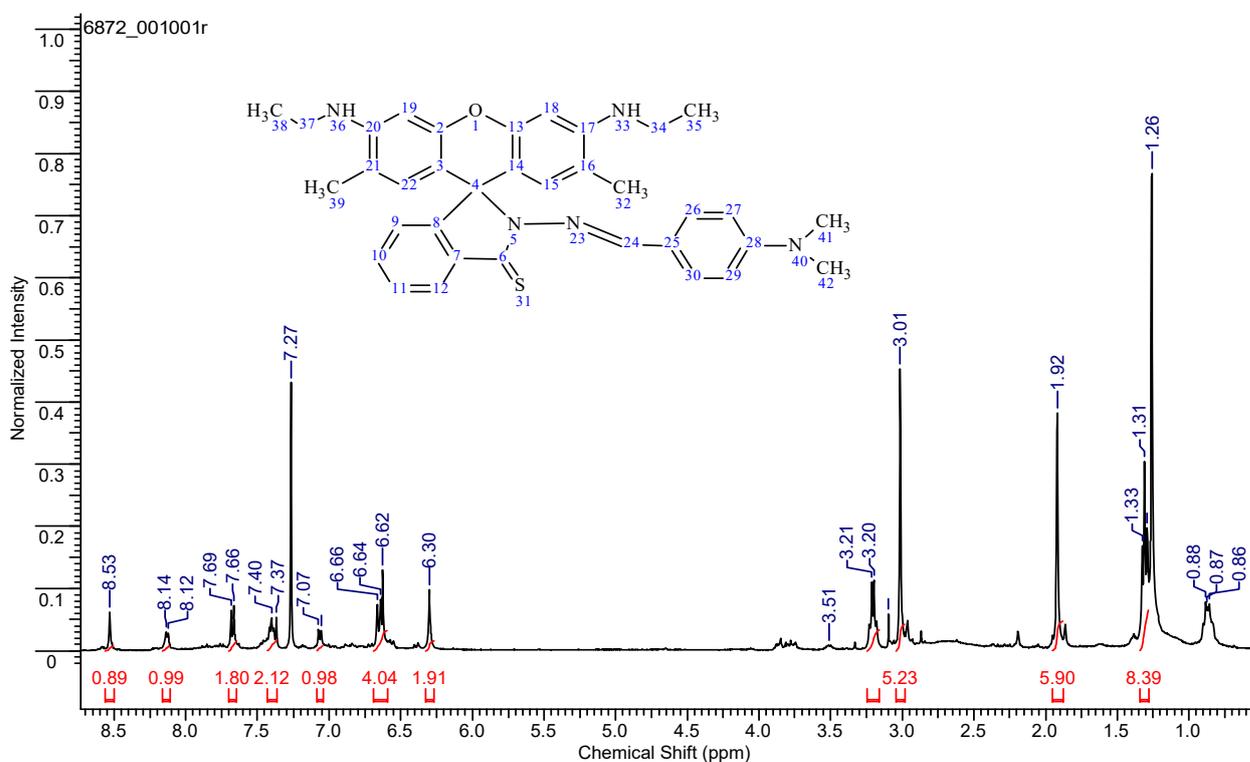
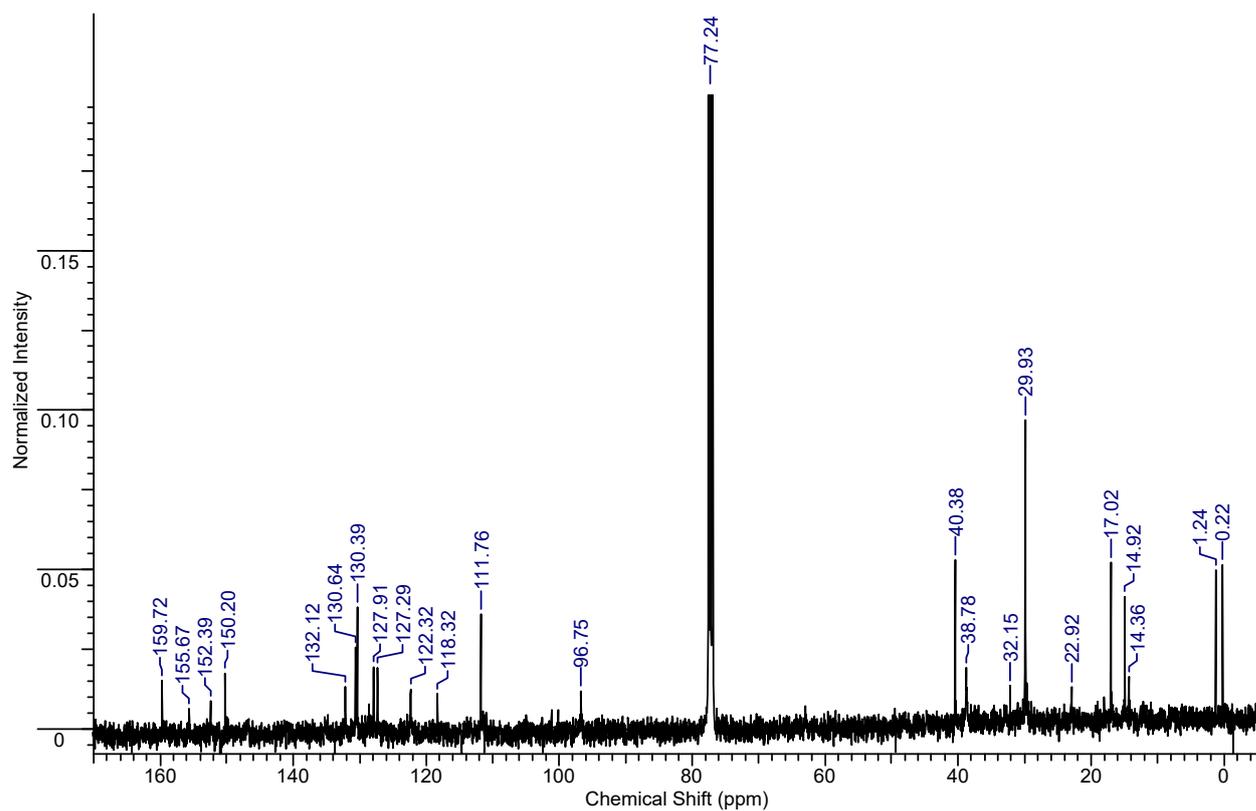
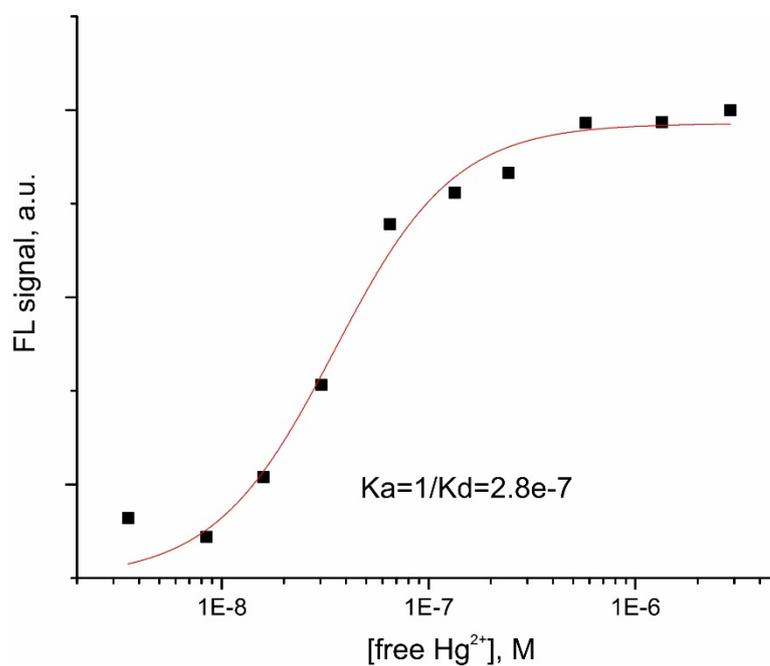


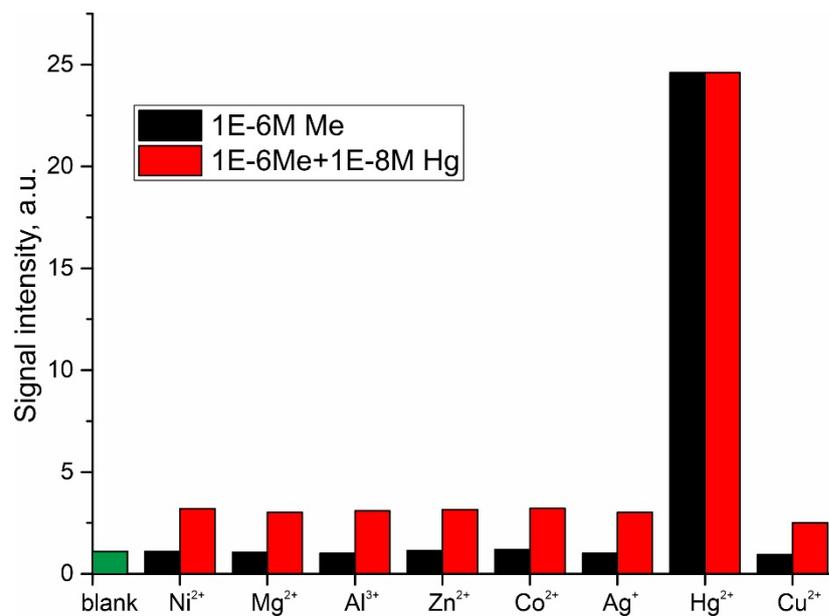
Figure S1. <sup>1</sup>H NMR spectrum of d114 recorded in CDCl<sub>3</sub>.



**Figure S2.**  $^{13}\text{C}$  NMR spectrum of d114 recorded in  $\text{CDCl}_3$ .



**Figure S3.** Fluorescence intensity of d114 solution versus free ligand concentration,  $[\text{free Hg}^{2+}]$  calculated according to the law of mass action.



**Figure S4.** Influence of the interfering metal ions ( $10^{-6}$  M) on response value of **d114/C30/F12** 0.001/1/2 NPs in the presence of  $10^{-8}$  M  $\text{Hg}^{2+}$