

Figure S1. 2D full range excitation and emission profiles for A) Sensor A solution alone and B) Sensor A solution in the presence of 100 ppm Hg^{2+} solution at pH 5.

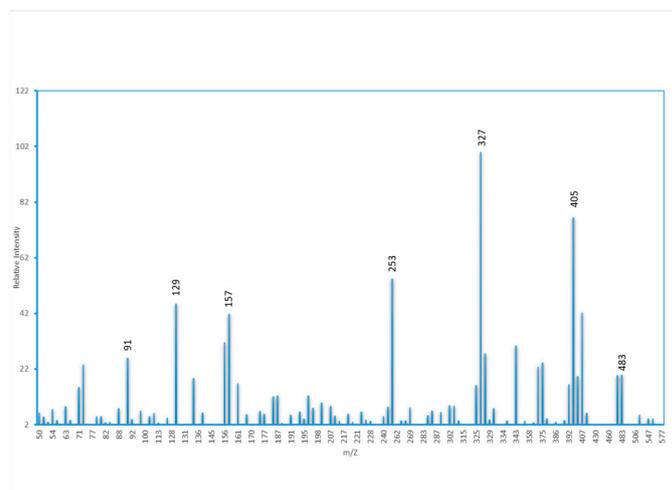


Figure S2. EI-Mass spectrum for Sensor A

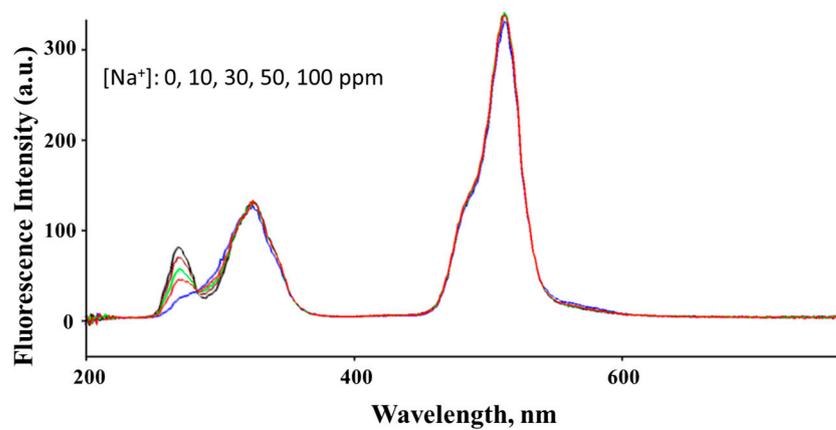


Figure S3: SLS of Sensor A before and after adding various concentrations of sodium ion.

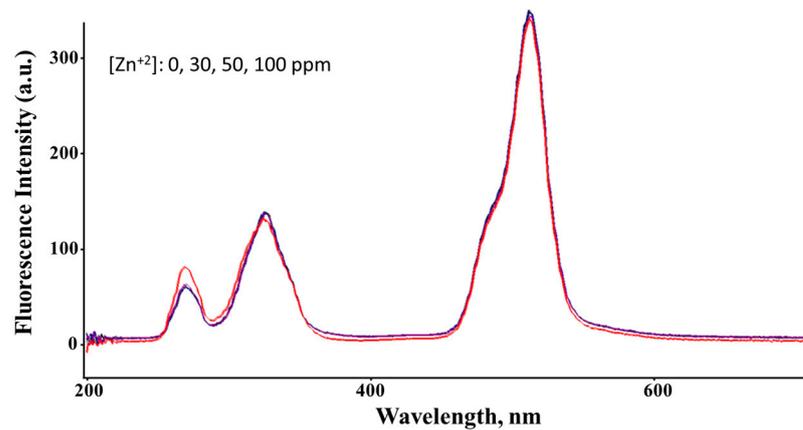


Figure S4: SLS of Sensor A before and after adding various concentrations of Zinc ion.

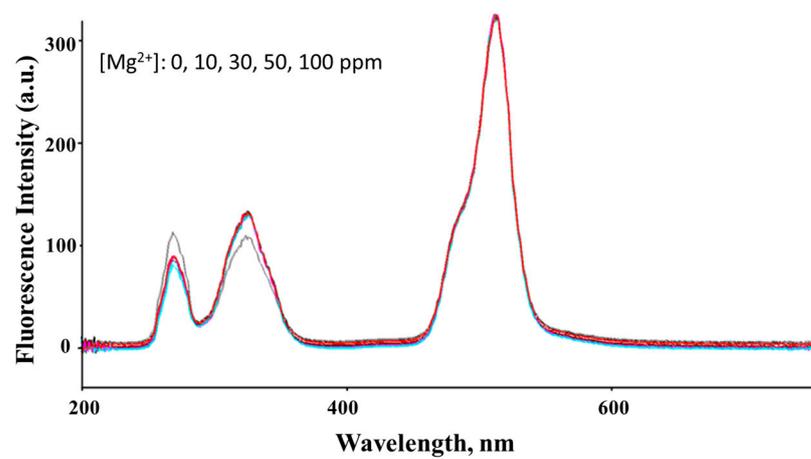


Figure S5: SLS of Sensor A before and after adding various concentrations of Magnesium ion.

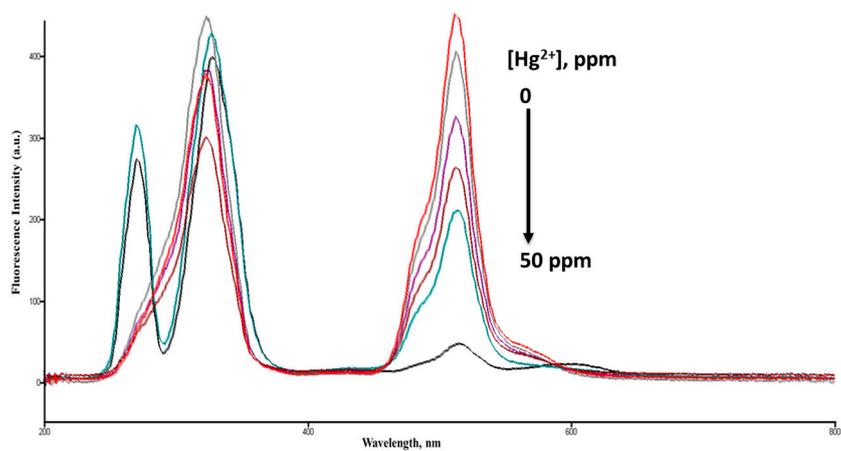


Figure S6. Synchronous Scan Luminescence Spectra of **Sensor A** before and after adding various concentrations of mercury ions recorded at $\Delta\lambda$ of 50 nm and at pH = 7.

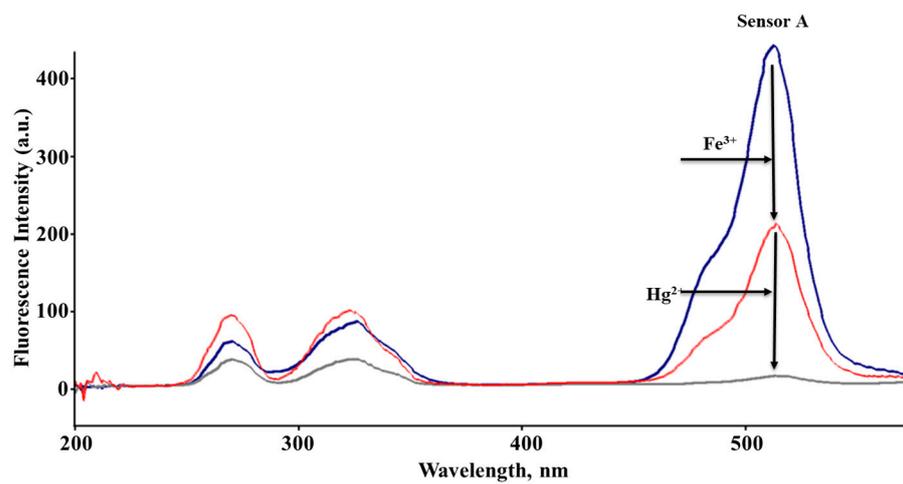


Figure S7: SSLS of **Sensor A** before and after sequential addition of 50 ppm ferric ion and mercuric ion solutions spiked into tap water samples at pH 7.