

New selective "on-off" fluorescence chemosensor based on carbazole Schiff base for Fe³⁺ detection

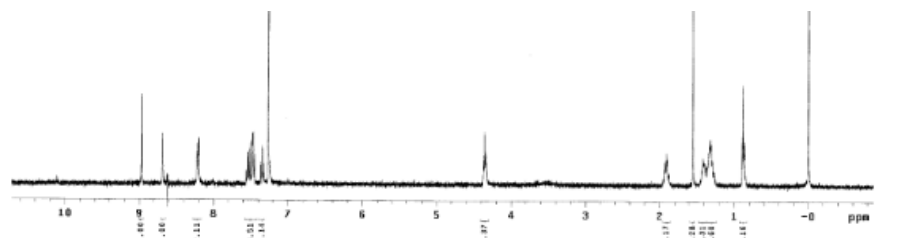
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SUPPLEMENTARY INFORMATION

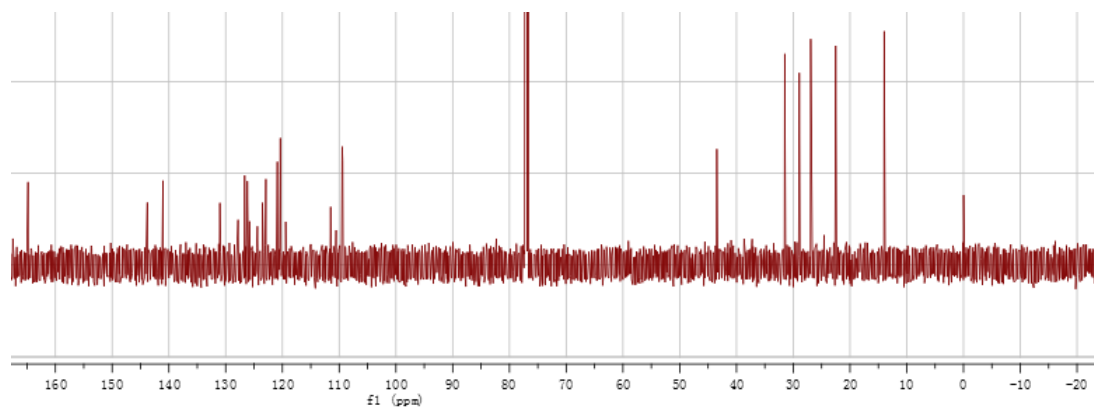
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^1H spectrum



^{13}C NMR spectrum



mass spectrum

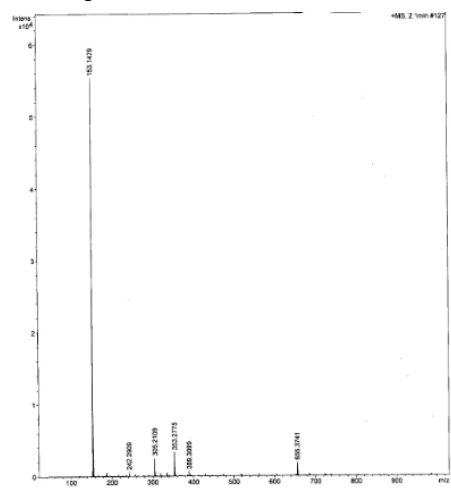


Fig.S1 Characterization of sensor 1

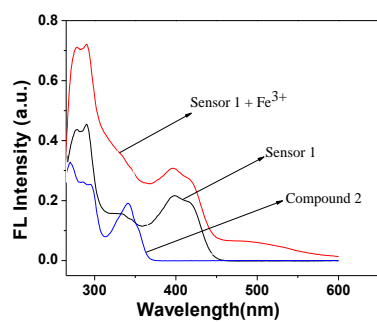


Fig S2 the emission spectra of sensor 1, aldehyde-carbazole (compound 2) and sensor 1+Fe³⁺ in DMF.

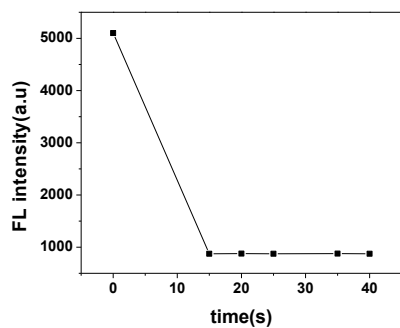


Fig. S3 Changes of fluorescence intensity at 372 nm of sensor 1 in DMF with time after the addition of Fe³⁺.

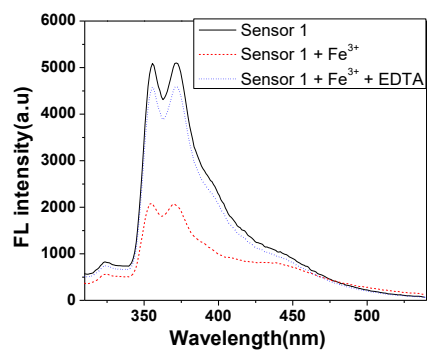


Fig. S4 Fluorescence spectra of sensor **1** (1.0×10^{-5} M), sensor **1** with 10 equiv. of Fe^{3+} , sensor **1** with 10 equiv. of Fe^{3+} and 10 equiv. of EDTA in DMF solutions.

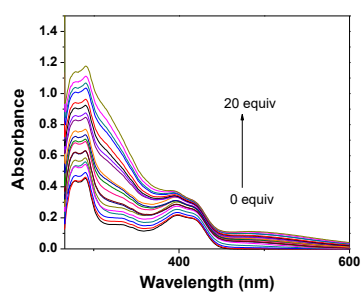


Fig. S5 The titration spectra of sensor **1** in DMF (1.0×10^{-5} M) with Fe^{3+} (0 ~ 20 equiv).