Electronic Supplementary Material (ESI) for RSC Advances.

Selective Fluorescence Detection of Anilines and Fe^{3+} ions by Two Lanthanide Metal − Organic Frameworks

Keheng Xu[1], Fengqin Wang*[1], Shuo Huang[1], Zongchao Yu[1], Jianxin Zhang[1], Jianguo Yu[1], Haiyan Gao[2], Yiyuan Fu[1], Xiuyu Li[1], Yongnan Zhao[2]

[1]*College of Environment and Chemical Engineering & State Key Laboratory of Separation Membranes and Membrane Processes, Tianjin Polytechnic University, Tianjin 300387, China*

[2]*College of Materials and Engineering & Key Lab of Hollow Fiber Membrane Materials & Membrane Process, Tianjin Polytechnic University, Tianjin 300387, China*

E-mail: wangfengqin@tjpu.edu.cn Tel: (+86)-22-83955457

Supplementary materials

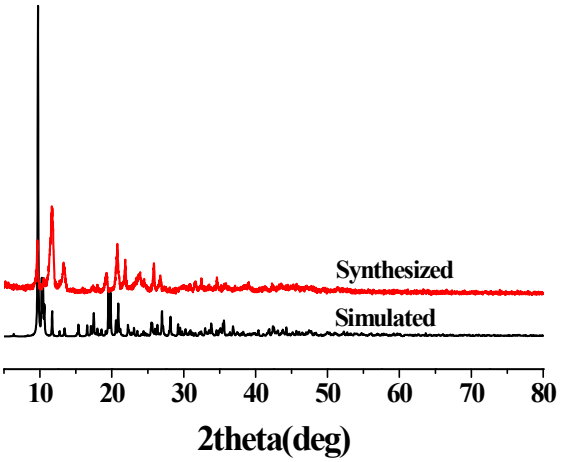

Fig. S1. The XRD patterns of **1** and the simulated.

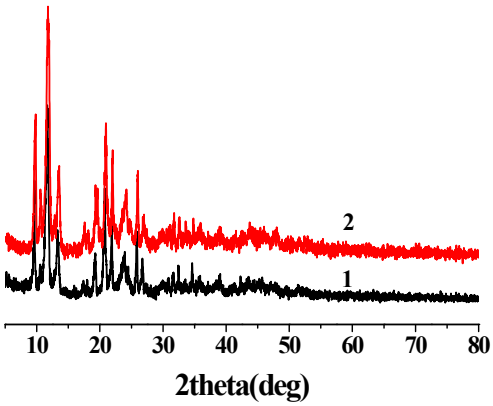

Fig. S2. The XRD patterns of **1** and **2**.

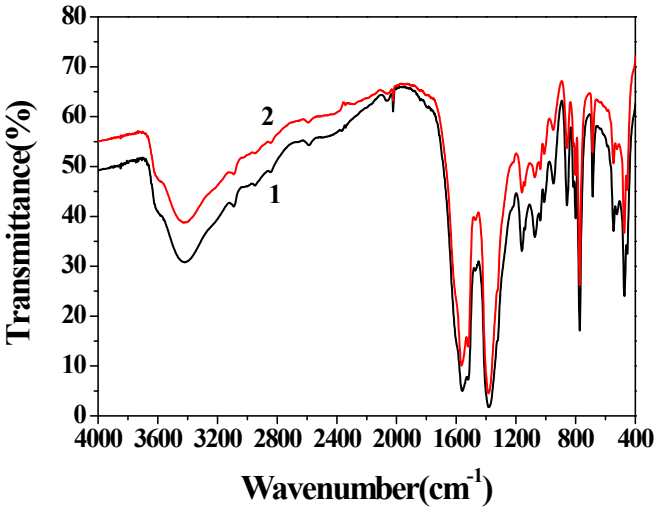

Fig. S3. IR spectra of **1** and **2**.

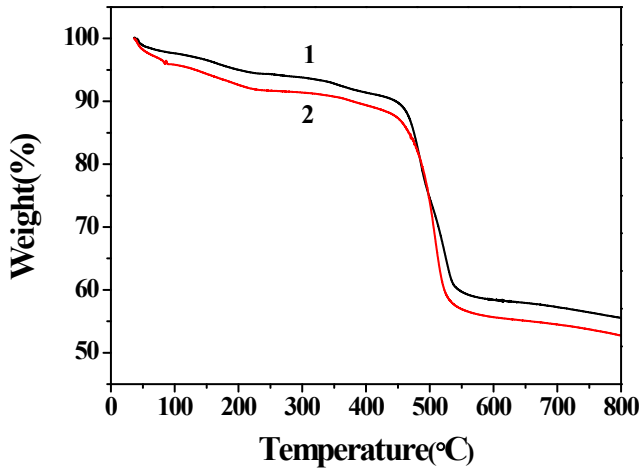

Fig. S4. TGA of **1** and **2**.

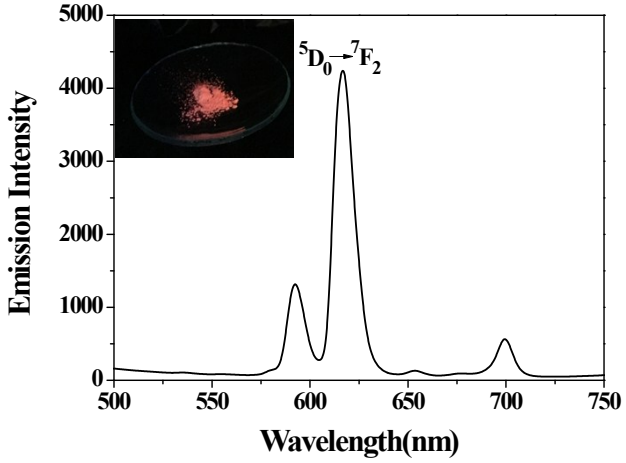

Fig. S5. The fluorescence spectra of **1** in the solid state.

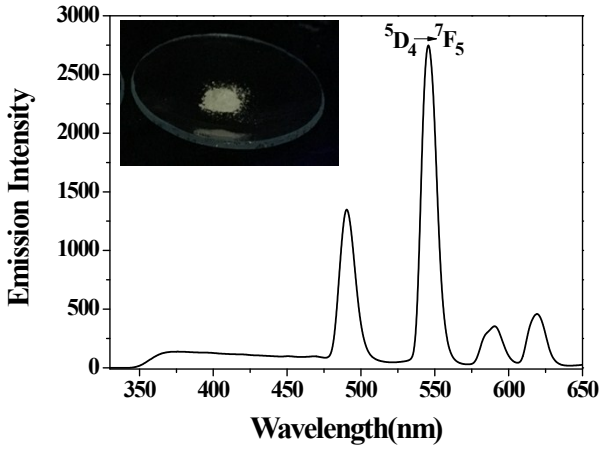

Fig. S6. The fluorescence spectra of **2** in the solid state.

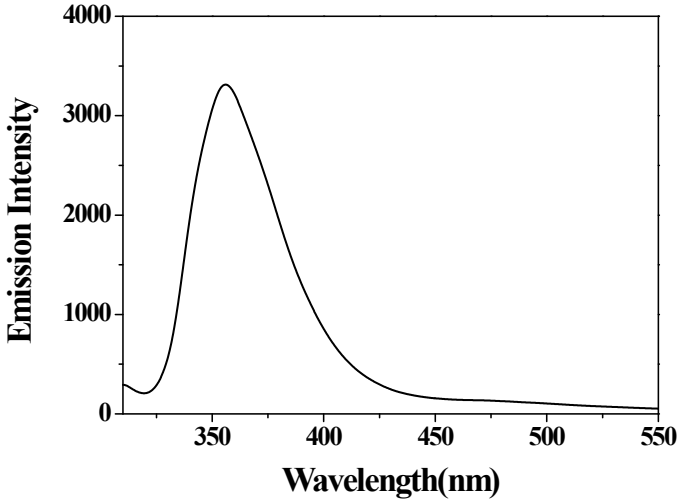

Fig. S7. The fluorescence spectra of L ligand in the solid state.

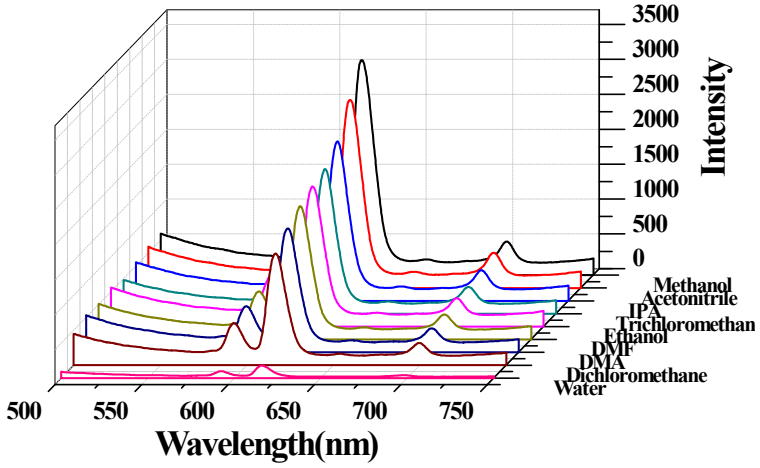

Fig. S8. Emission spectra of **1** in different organic solvent at room temperature.

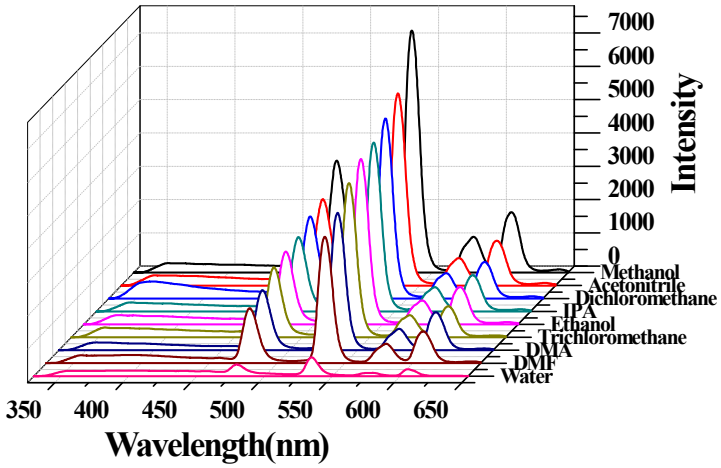

Fig. S9. Emission spectra of **2** in different organic solvent at room temperature.

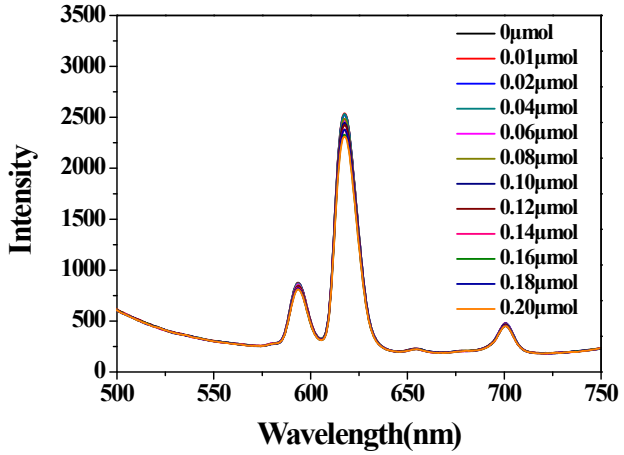

Fig. S10. Fluorescence titration of **1** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of aniline.

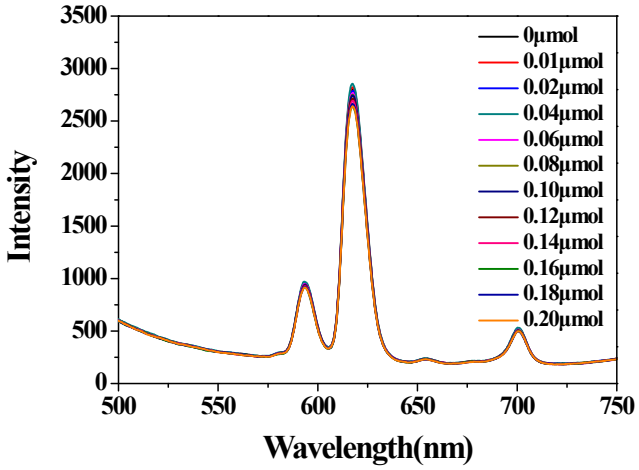

Fig. S11. Fluorescence titration of **1** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of *p*-methylaniline.

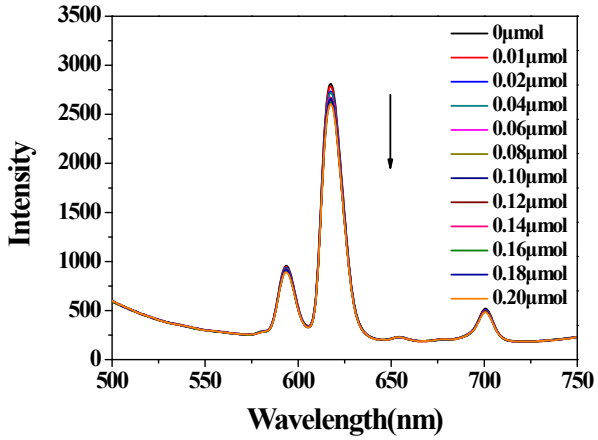

Fig. S12. Fluorescence titration of **1** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of diphenylamine.

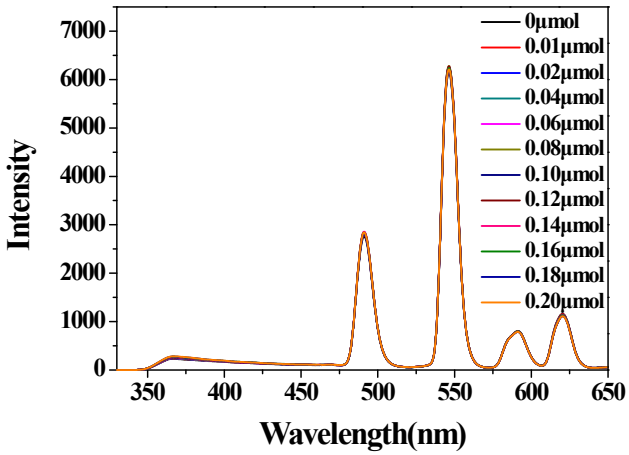

Fig. S13. Fluorescence titration of **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of aniline.

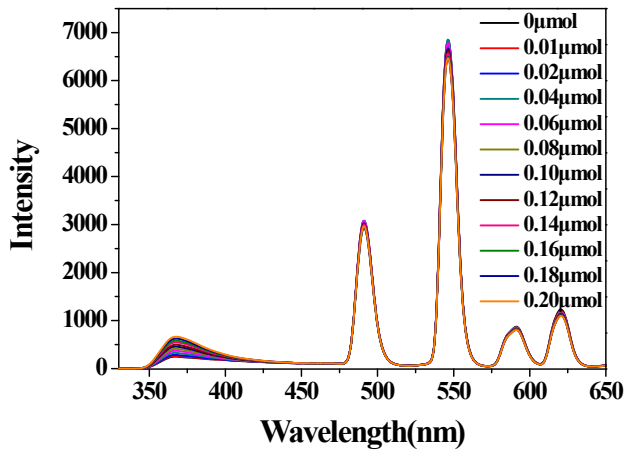

Fig. S14. Fluorescence titration of **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of *p*-methylaniline.

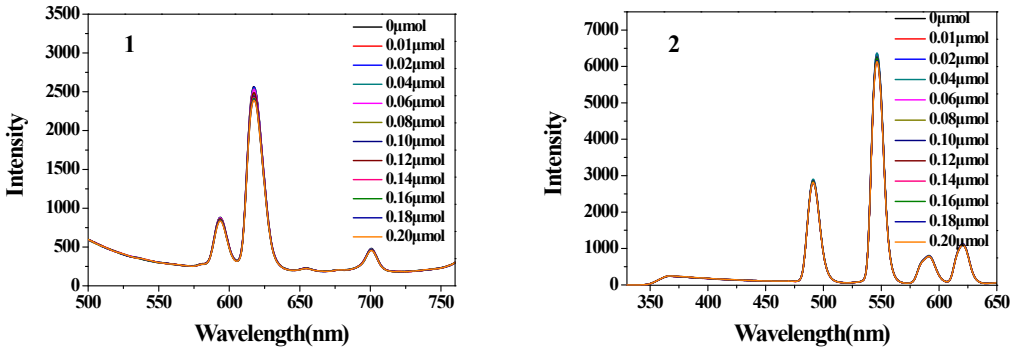

Fig. S15. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution of triethylamine.

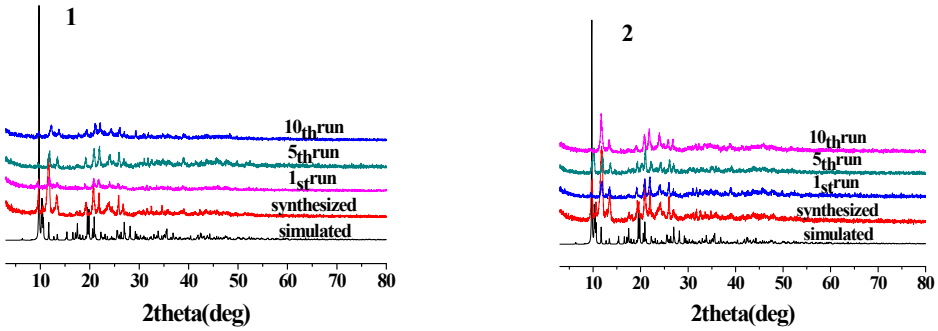

Fig. S16. The powder X-ray diffraction of **1** and **2** before and after the fluorescence titration.

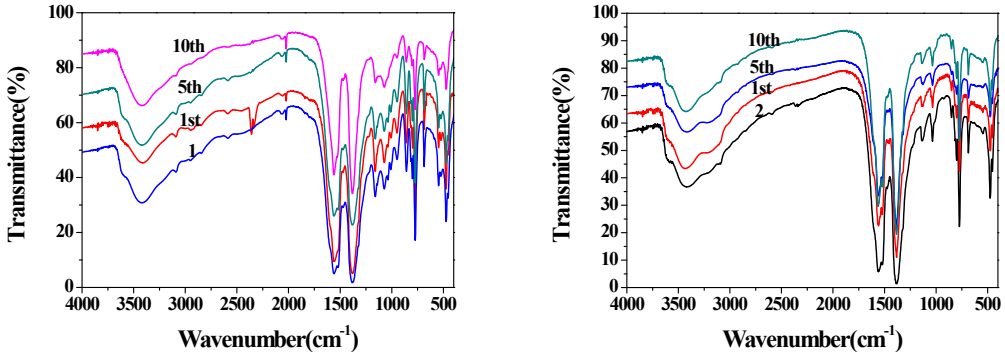

Fig. S17. IR spectra of **1** and **2** before and after the fluorescence titration.

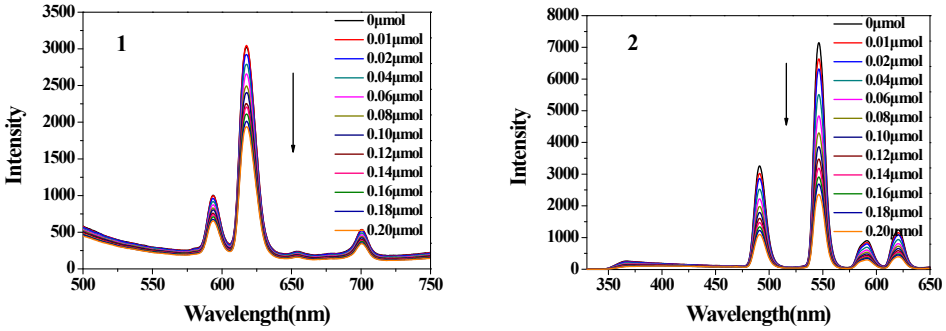

Fig. S18. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Fe^{3+}. The slit widths for excitation and emission were both 5 nm.

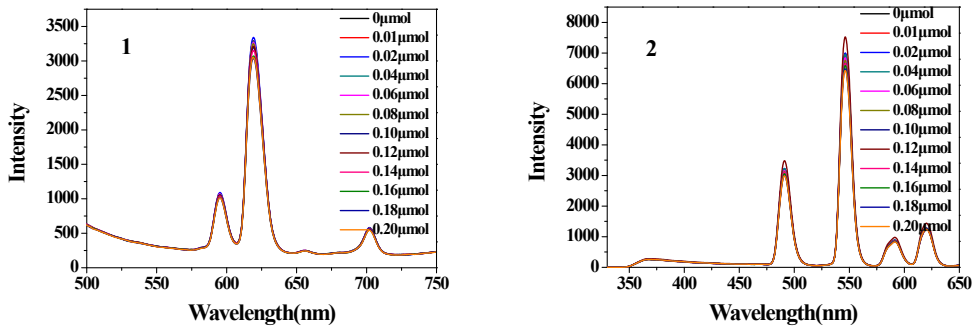

Fig. S19. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Ag^{+}.

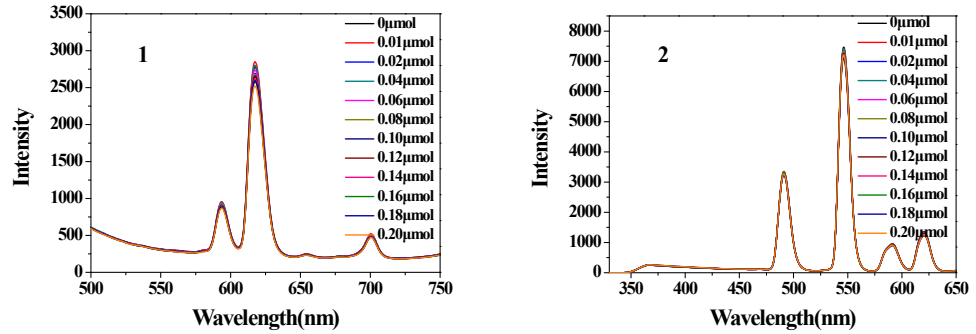

Fig. S20. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Al^{3+}.

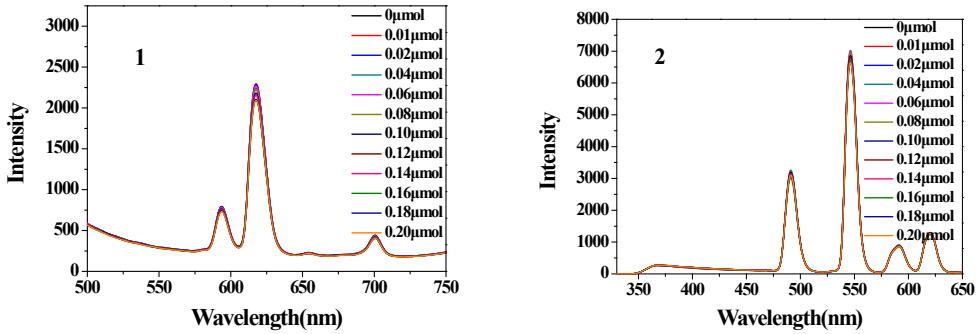

Fig. S21. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Ba^{2+}.

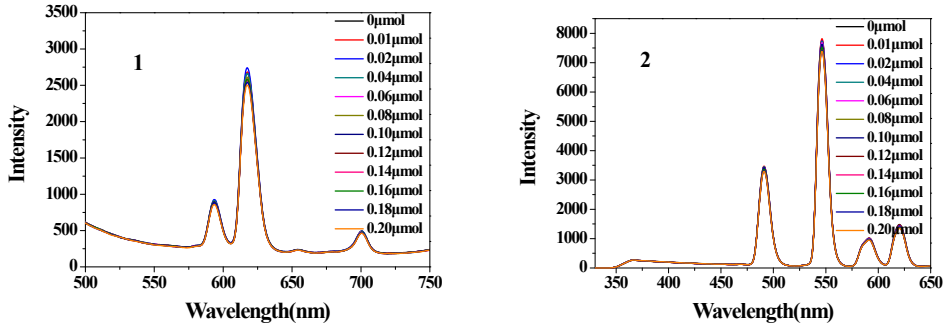

Fig. S22. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Zn^{2+}.

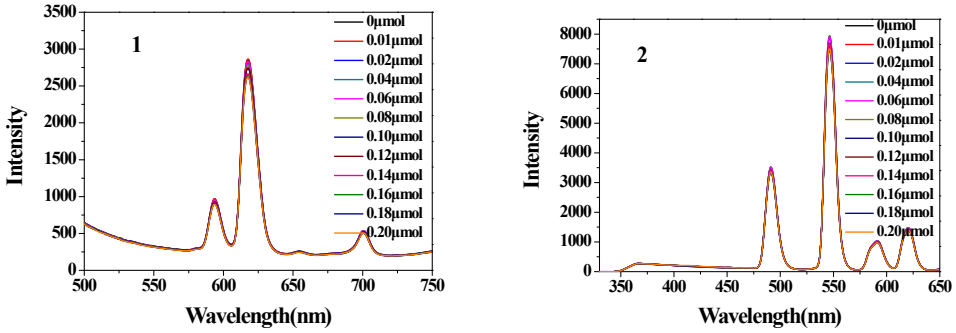

Fig. S23. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Ca^{2+}.

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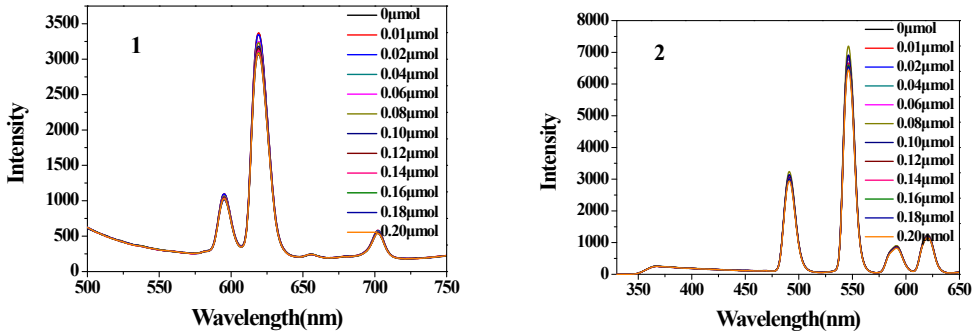

Fig. S24. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Co^{2+}.

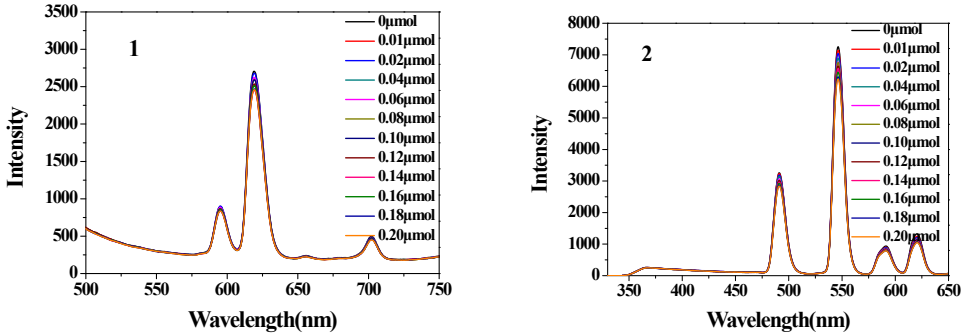

Fig. S25. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Cu^{2+}.

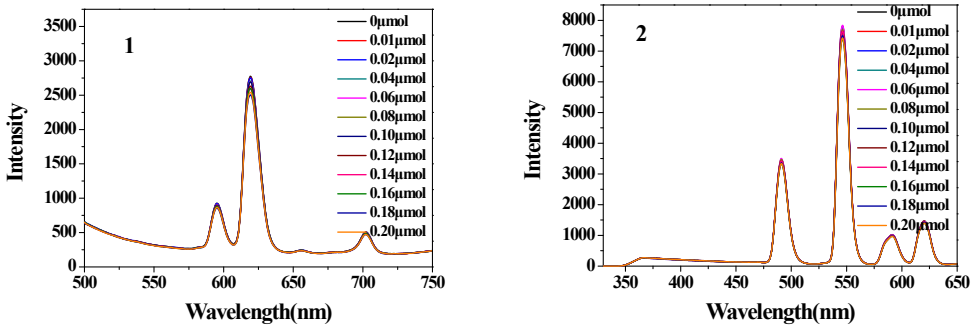

Fig. S26. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Li^{+}.

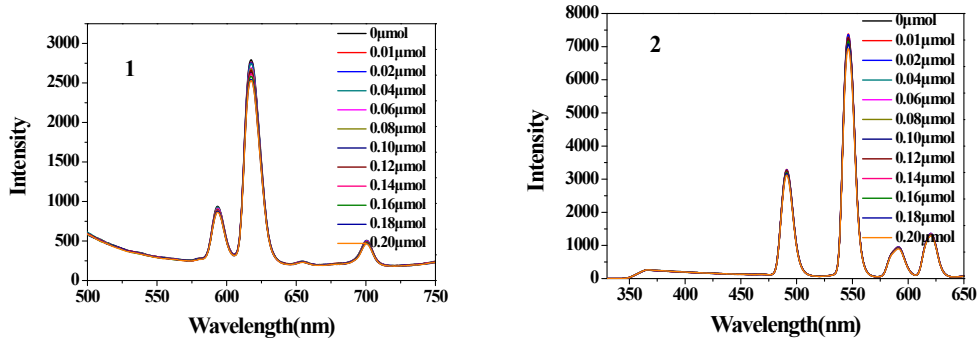

Fig. S27. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Mg^{2+}.

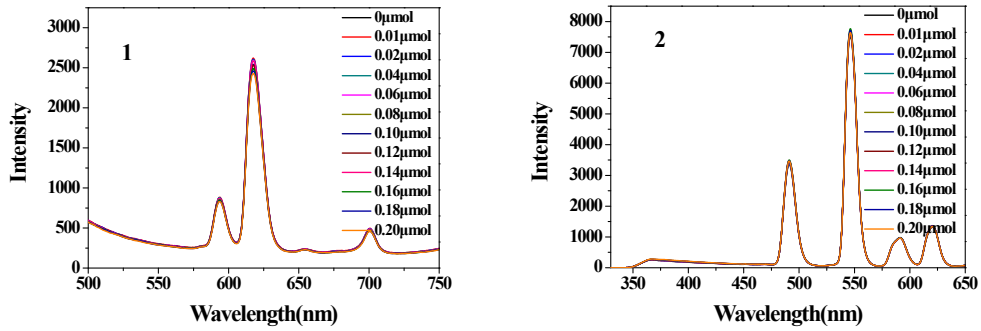

Fig. S28. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Na^{+}.

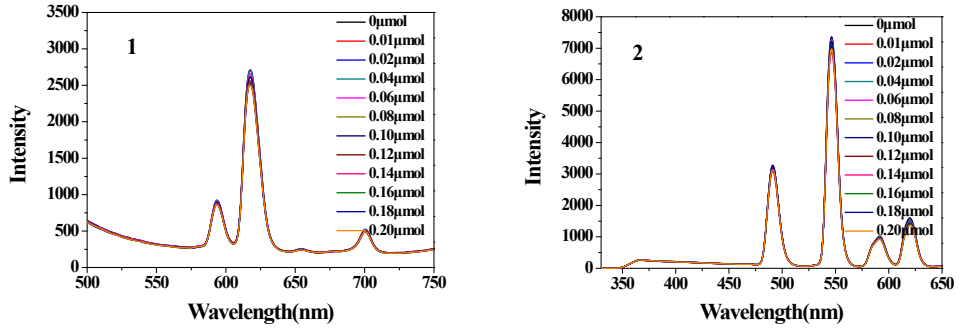

Fig. S29. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Ni^{2+}.

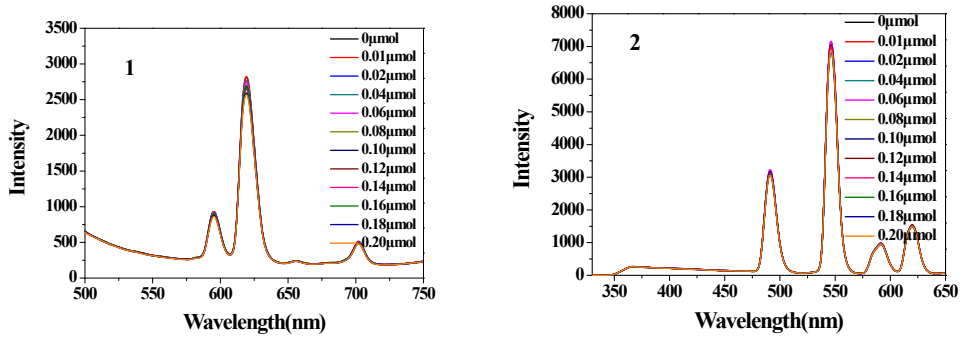

Fig. S30. Fluorescence titration of **1** and **2** dispersed in methanol with the addition of different volumes of 10^{-3} M methanol solution containing Pb^{2+}.