Supporting Information

An AIE and PET fluorescent probe for effective Zn(Ⅱ) detection and imaging in living cells

Jin Wang[ac#], Lu Linxia[b#], Chun Wang[b], Tongming Sun[a*], Jianfeng Ju[a], Jinli Zhu[a*] and Minmin Wang[ac*]

a. School of Chemistry and Chemical Engineering, Nantong University, Nantong 226019, P.R. China

b. School of Textiles and Clothing, Nantong University, Nantong 226019, P. R. China

c. Nantong Key Laboratory of Intelligent and New Energy Materials and Devices

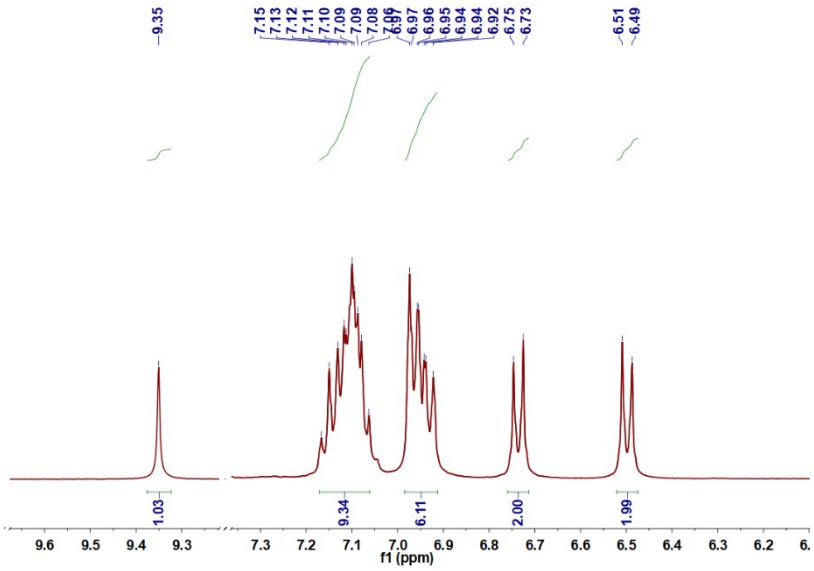

Figure S1.[1]H NMR of compound **1**.

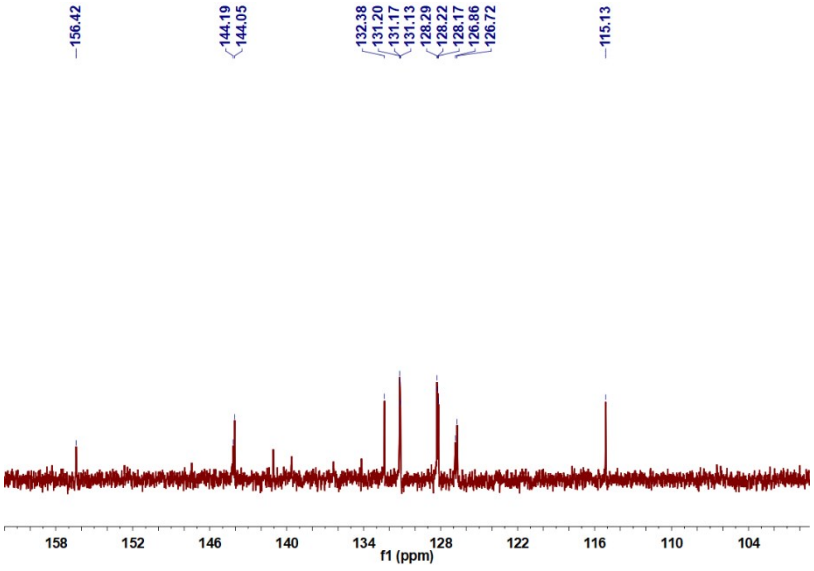

Figure S2. [13]C NMR of compound **1**

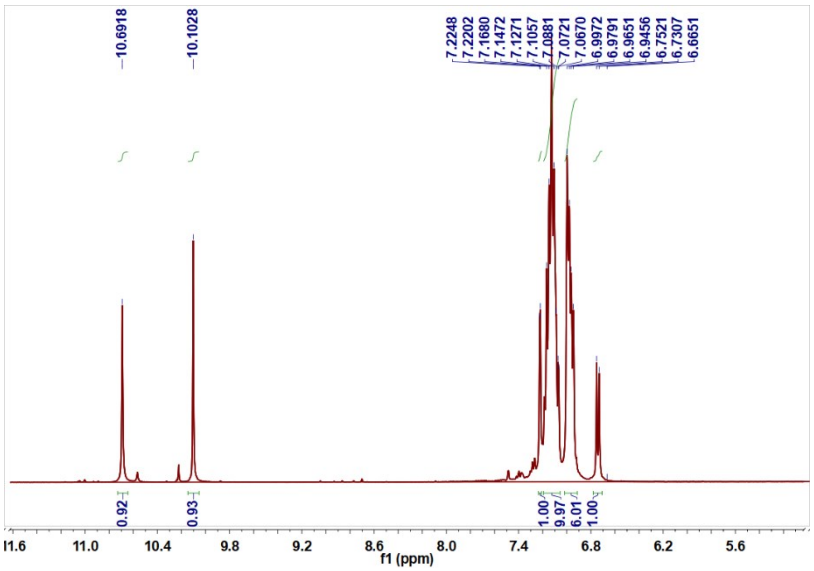

Figure S3. ^{1}H NMR of compound **2**.

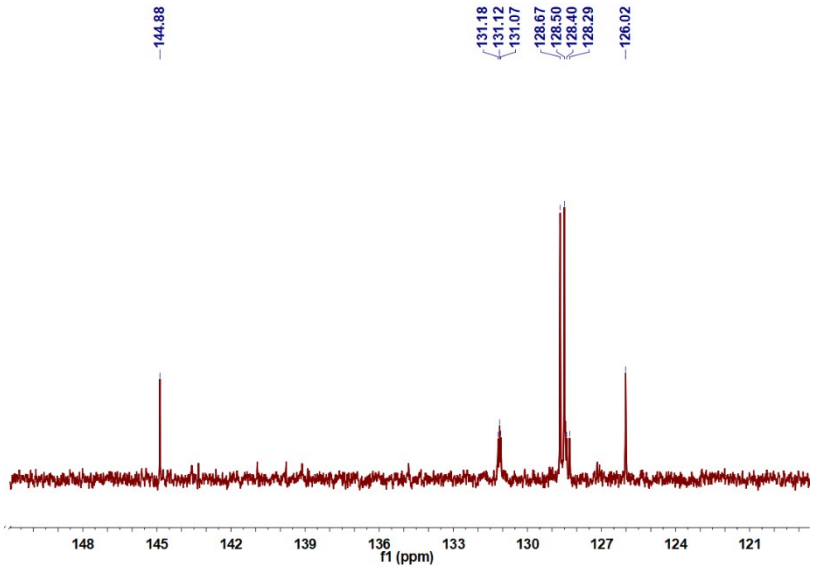

Figure S4. ^{13}C NMR of compound **2**.

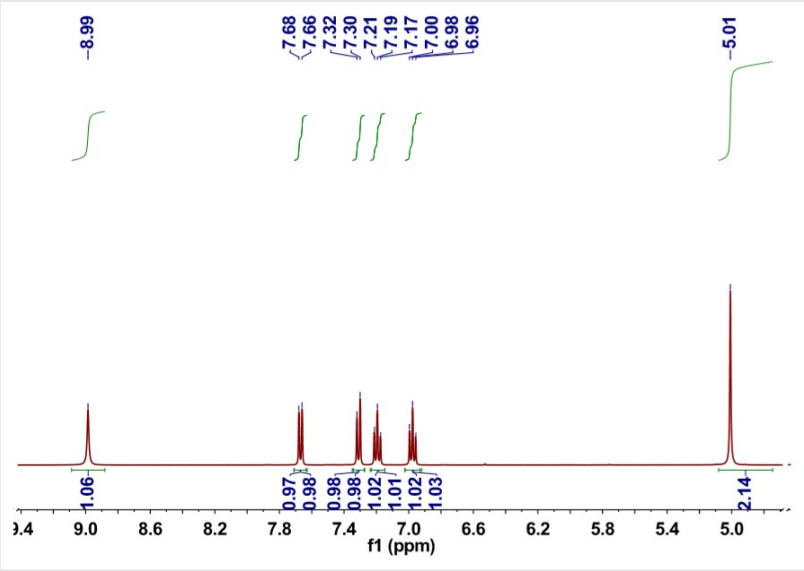

Figure S5. ^{1}H NMR of compound **3**.

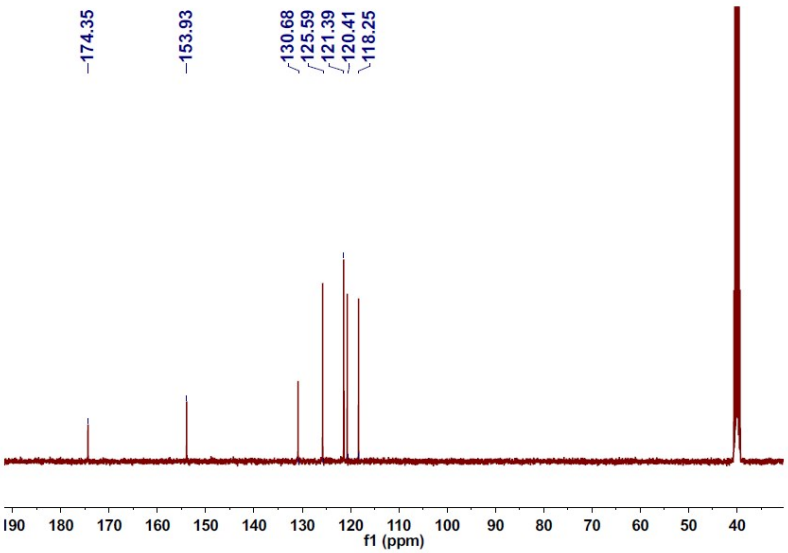

Figure S6. ^{13}C NMR of compound **3**.

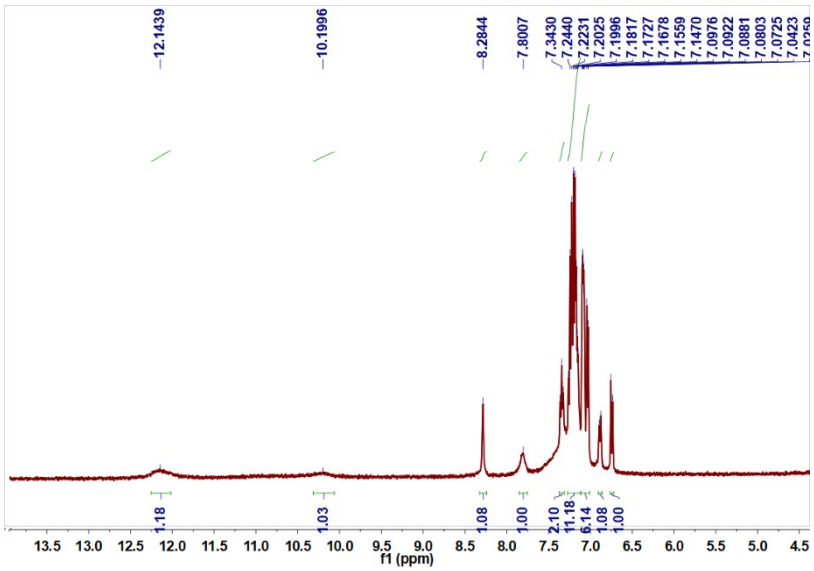

Figure S7. ^{1}H NMR of probe **L**.

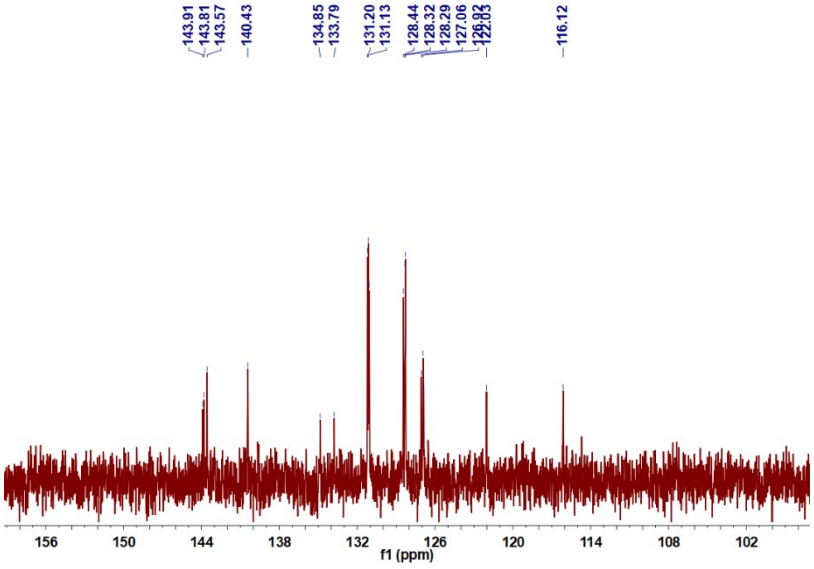

Figure S8. ^{13}C NMR of probe **L**.

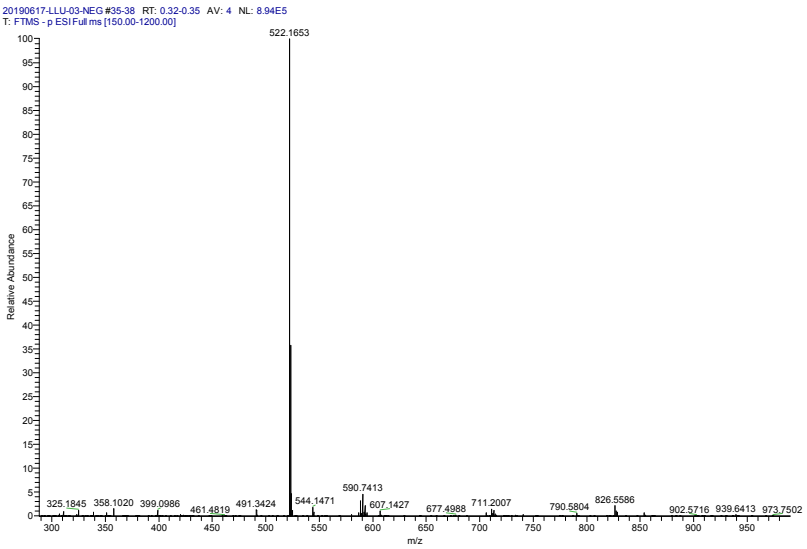

Figure S9. HRMS (ESI+) spectrum of probe **L**.

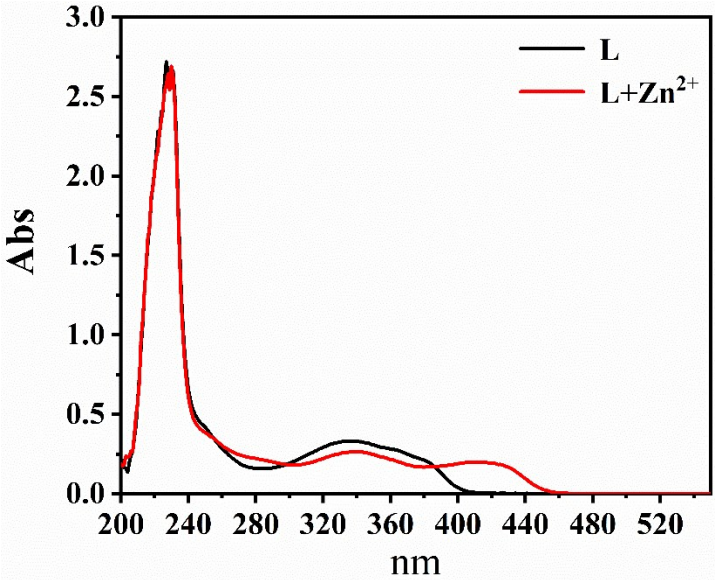

Figure S10. The UV-Vis absorption spectrum of probe **L** and **L**-Zn^{2+} in EtOH/H_2O (4:1, v/v, HEPES = 20 mM, pH = 7.20).

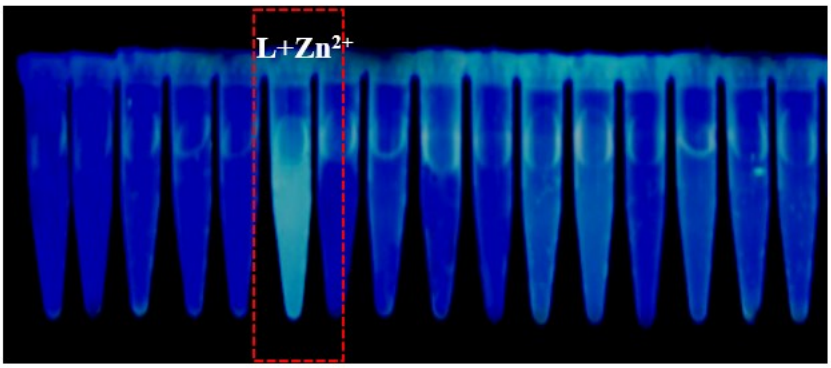

Figure S11. A photograph of fluorescence change of probe **L** under hand-hold UV lamp with various mental ions in EtOH/H_2O (4:1, v/v, HEPES = 20 mM, pH = 7.20). (From left to right: **L**,

Fe^{2+}, Cu^{2+}, Al^{3+}, Fe^{3+}, Zn^{2+}, Mn^{2+}, Hg^{2+}, Ba^{2+}, Co^{2+}, Li^{+}, Na^{+}, K^{+}, Ni^{2+}, Ca^{2+}, Mg^{2+})

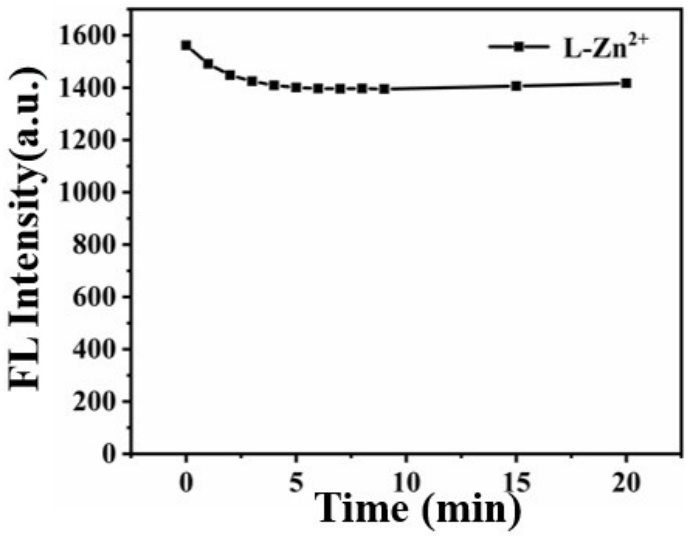

Figure S12. Photostability evaluation of **L**-Zn^{2+} complex under xenon lamp.

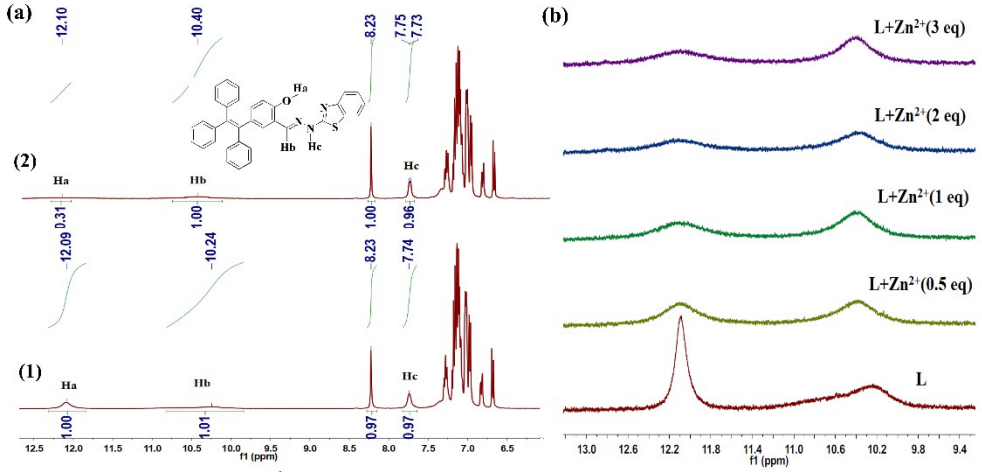

Figure S13. (a) ^{1}H NMR spectra in DMSO-d6 of (1) **L** only, (2) **L** with 3eq of Zn^{2+}. (b). ^{1}H NMR spectra in DMSO-d6 of (1) **L** only, (2) **L** with 0.5eq of Zn^{2+}, (3) **L** with 1eq of Zn^{2+}, (4) **L** with 2eq of Zn^{2+}, (5) **L** with 3 eq of Zn^{2+}.