Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Modulating optical properties of AIE fluophor confined within UiO-66's nanochannels for chemical sensing

Zhixiang Lu,[a] Mingjiang Wu,[a] Shuang Wu, [b] Shaoxiong Yang, [a] Yuan Li, [a] Xiaolan Liu, [a] Liyan Zheng, *[a] Qiue Cao, *[a] and Zhongtao Ding [a]

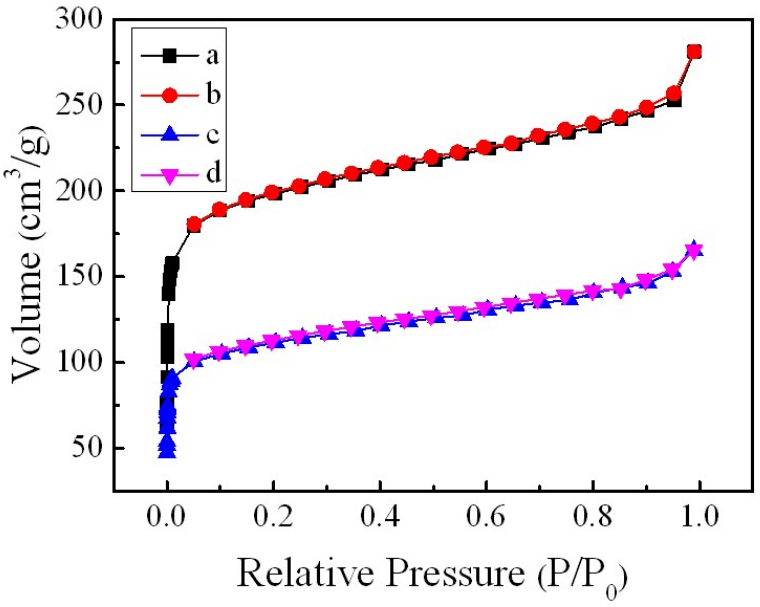

Figure S1. N_2 sorption isotherm of UiO-66 (curve a and b) and UiO-66⊃HDBB (curve c and d).

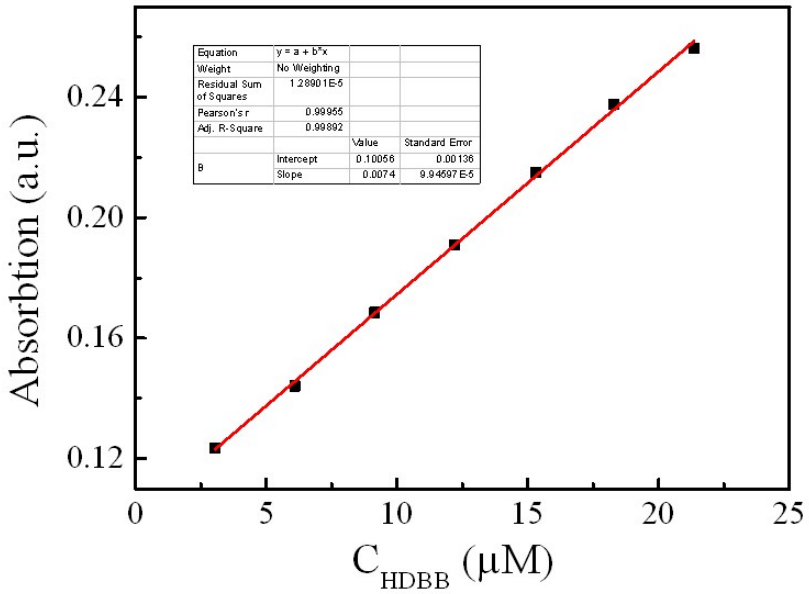

Figure S2. Standard curve of HDBB in pH 12.0 phosphate buffer solution by UV-Vis measurement.

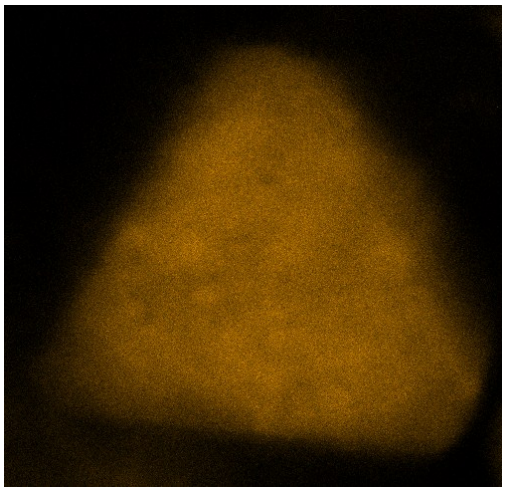

Figure S3. Fluorescence microscopy image of UiO-66⊃HDBB composite.

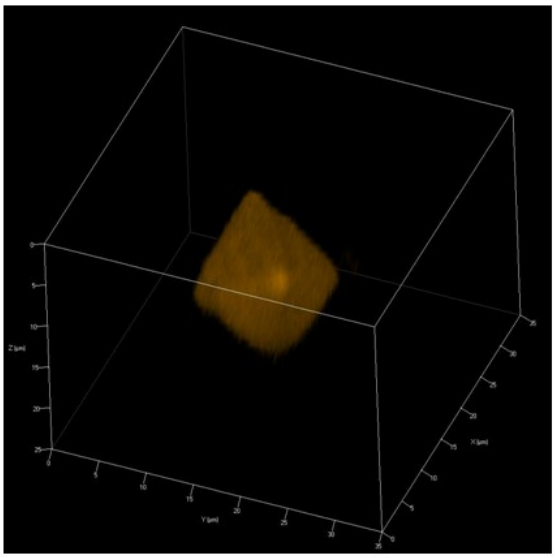

Figure S4. 3D representation of UiO-66⊃HDBB composite.

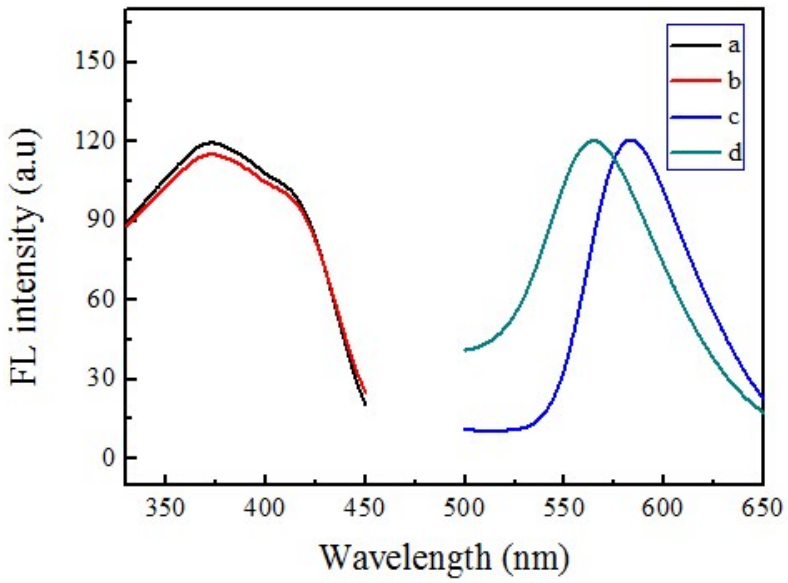

Figure S5. The excitation spectra of (pH= 4, 20 μM) HDBB (curve a) and (pH= 4, 0.15 mg/ L) UiO-66⊃HDBB (curve b), the fluorescence emission intensity of (pH= 4, 20 μM) HDBB (curve c) , and (pH= 4, 0.15 mg/ L) UiO-66⊃HDBB (curve d)

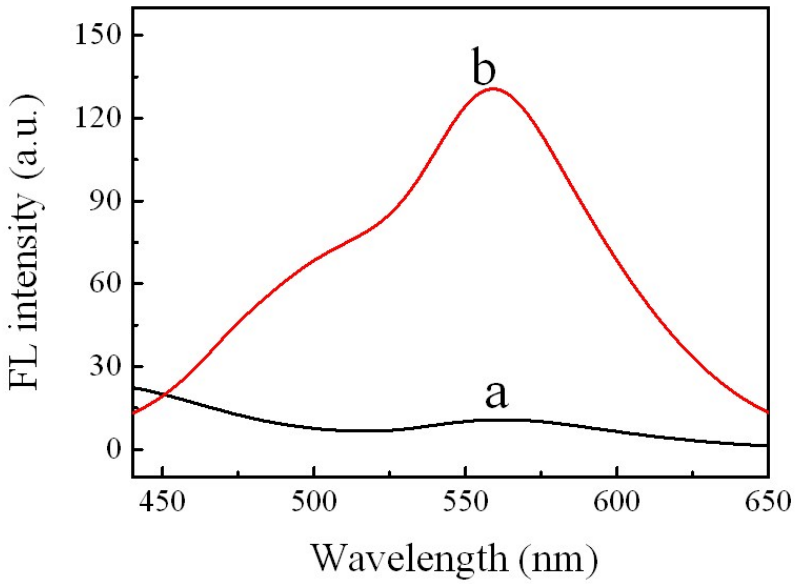

Figure S6. Fluorescence emission spectra of 6 μM HDBB (curve a) and 0.1 mg/mL UiO-66⊃HDBB (curve b) in DMF solution.

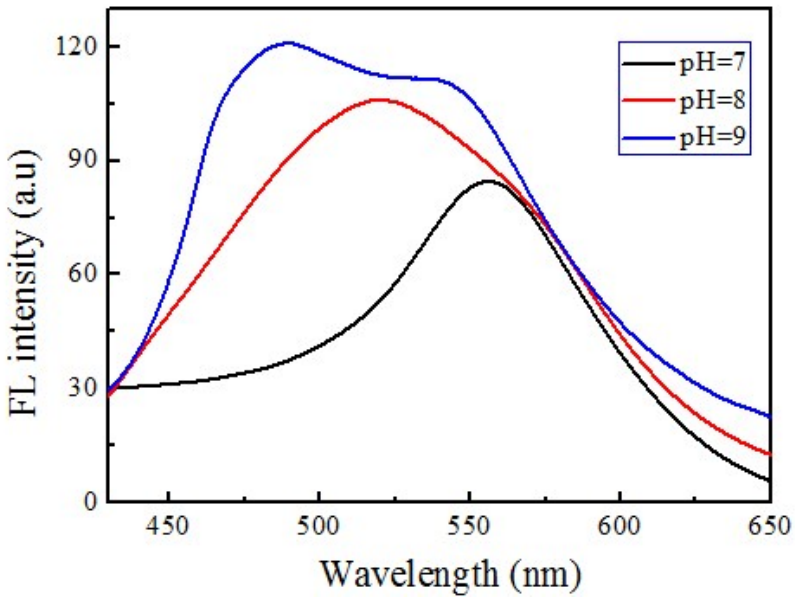

Figure S7. pH-dependent fluorescent spectra of UiO-66⊃HDBB in the aqueous solutions with pH ranging from 7 to 9 measured under excitation of 365 nm.

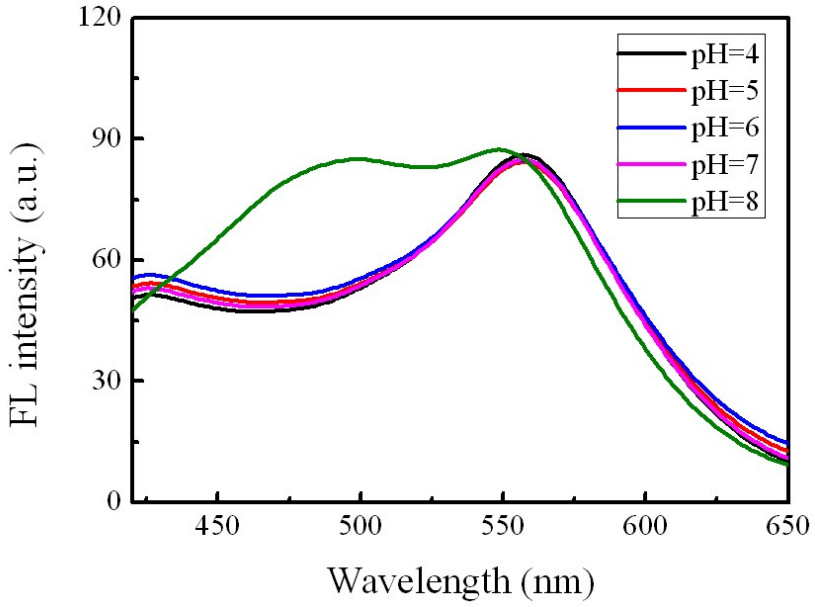

Figure S8. pH dependent fluorescent spectra of UiO-67⊃HDBB in the aqueous solutions with pH ranging from 4 to 8 measured under excitation of 365 nm.

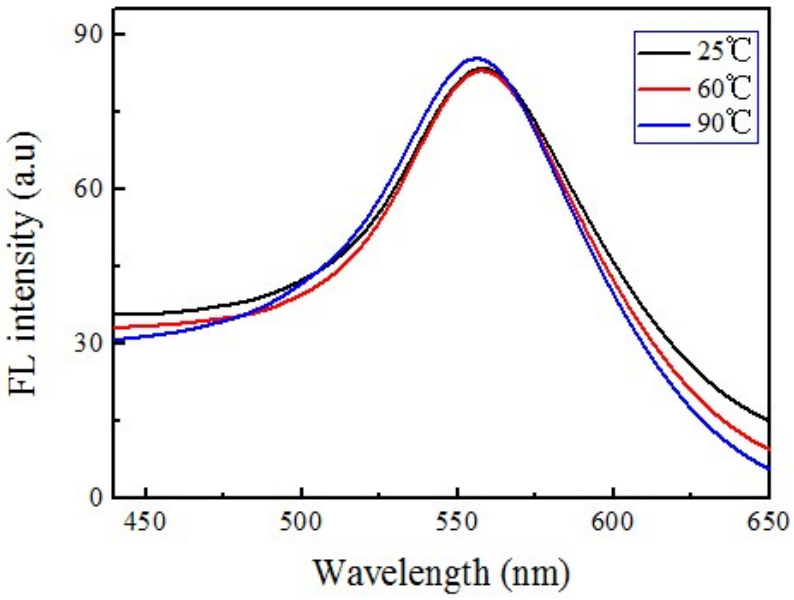

Figure S9. Fluorescence emission spectra of (pH= 4, 0.15 mg/ L) UiO-66⊃HDBB in 25 ℃、60 ℃、90 ℃

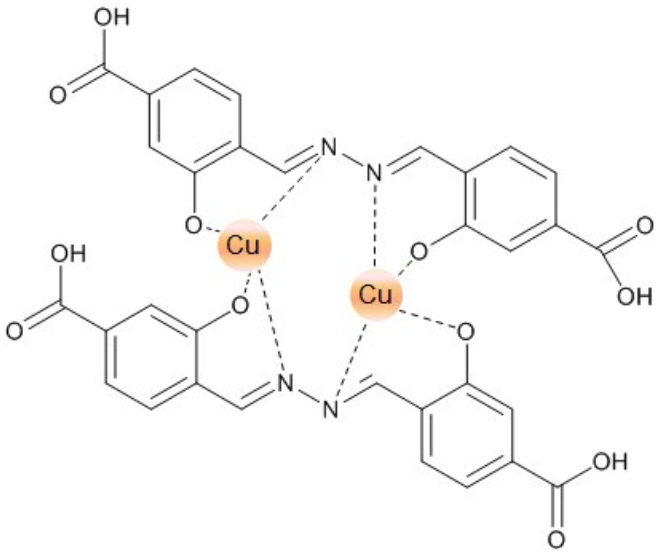

Figure S10. The structure of UiO-66⊃HDBB ground state complex