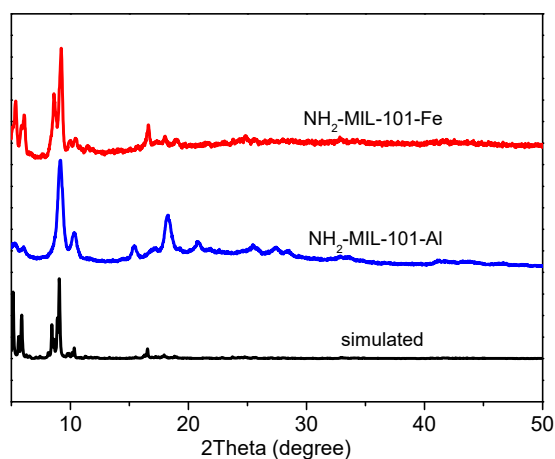


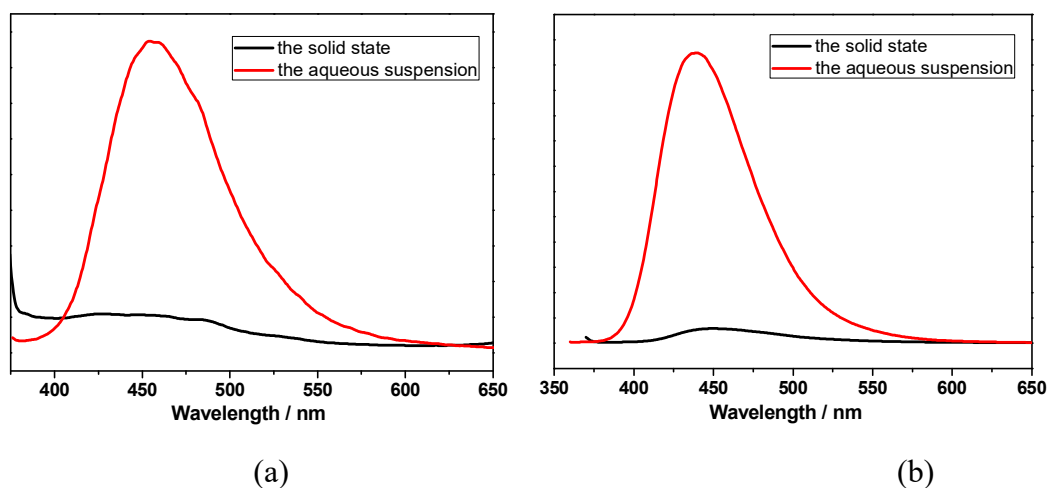
## Sensing Properties of NH<sub>2</sub>-MIL-101 Series for Specific Amino Acid via Turn-On Fluorescence

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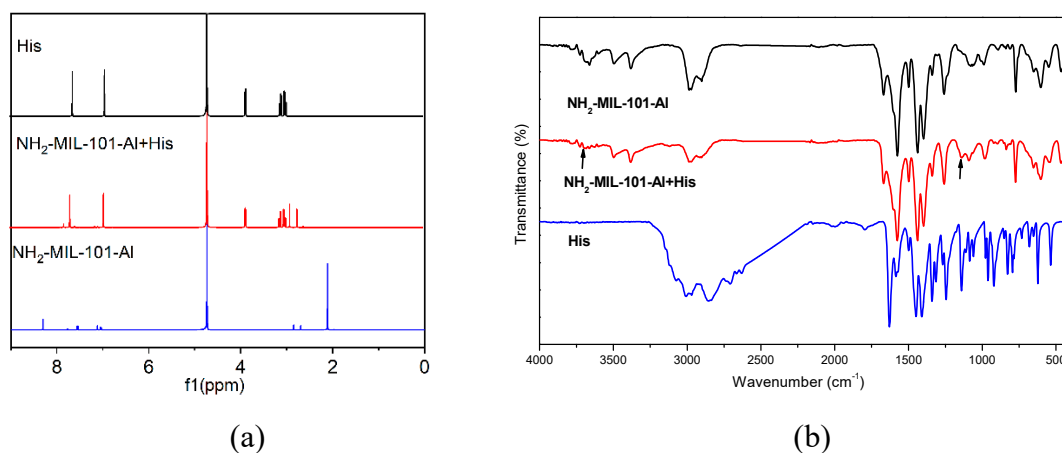
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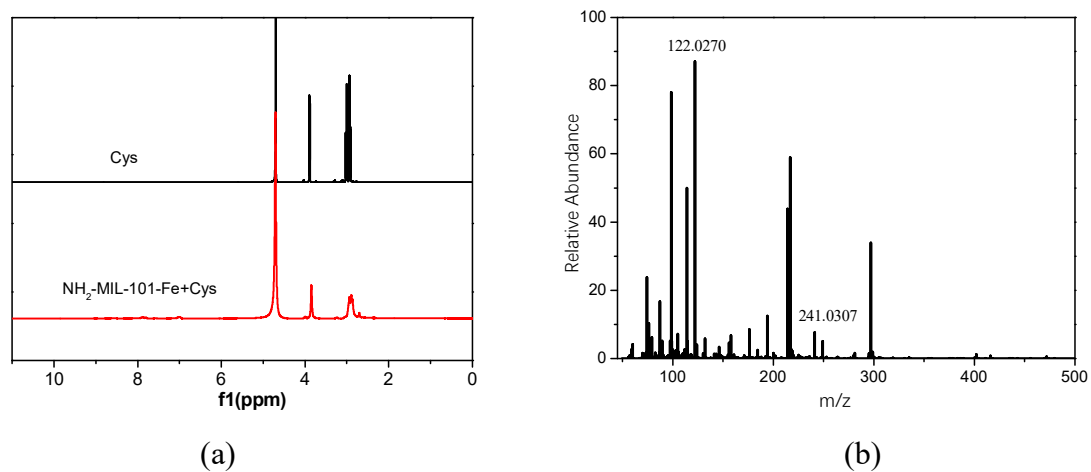
**Figure S1.** PXRD patterns of the as-synthesized NH<sub>2</sub>-MIL-101-Fe and NH<sub>2</sub>-MIL-101-Al and the simulated one.



**Figure S2.** (a) Fluorescence emission spectra of  $\text{NH}_2\text{-MIL-101-Fe}$  in the solid state and aqueous suspension. (b) Fluorescence emission spectra of  $\text{NH}_2\text{-MIL-101-Al}$  in the solid state and aqueous suspension.



**Figure S3.** (a)  $^1\text{H-NMR}$  spectra in  $\text{D}_2\text{O}$  of His, digested  $\text{NH}_2\text{-MIL-101-Al}$  before and after the immersion in the solution of His. (b) FT-IR spectra of His,  $\text{NH}_2\text{-MIL-101-Al}$  before and after the immersion in the aqueous solution of His.



**Figure S4.** (a)  $^1\text{H}$ -NMR spectra in  $\text{D}_2\text{O}$  of Cys and digested  $\text{NH}_2\text{-MIL-101-Fe}$  after the immersion in the solution of Cys. (b) HRMS spectrum of digested  $\text{NH}_2\text{-MIL-101-Fe}$  after the immersion in aqueous solution of Cys.