

Heterometallic ZnHoMOF as A Dual-responsive Luminescence sensor for Efficient Detection of Hippuric Acid Biomarker and Nitrofurantoin Antibiotics

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Table of Contents

Figure S1. PXRD patterns of ZnHoMOF after soaking in different pH values.....	2
Figure S2. TG-DTG curves of as-synthesized and activated ZnHoMOF samples.....	2
Figure S3. Luminescent spectra of free H ₆ TDP and ZnHoMOF in solid state at room temperature.....	2
Figure S4. Luminescence of ZnHoMOF dispersed in 0.01 M urine chemicals aqueous solutions.....	3
Figure S5. Enhanced emission spectra of ZnHoMOF in water with the incremental addition of HA biomarker.....	3
Figure S6. Luminescence of ZnHoMOF dispersed in the 0.1 mM antibiotics aqueous solutions.....	3
Figure S7. Emission spectra of ZnHoMOF in aqueous solutions with incremental addition of NFZ (a), and NFT (b)..	4
Figure S8. Recyclable behavior of ZnHoMOF when sensing of NFZ (a), and NFT (b).....	4
Figure S9. PXRD patterns of recycled ZnHoMOF after sensing HA, NFT, and NFZ.....	4
Figure S10. The luminescence decay lifetimes of ZnHoMOF samples before and after sensing nitrofurantoin antibiotics (NFT and NFZ).....	4
Figure S11. The FT-IR spectra of ZnHoMOF before or after sensing of HA, NFT and NFZ.....	5
Figure S12. The BET tests of ZnHoMOF before or after sensing of HA, and nitrofurantoin antibiotics (NFT and NFZ) at 77K.....	5

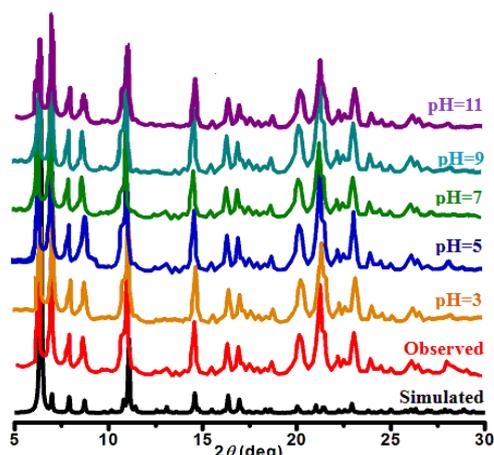


Figure S1. PXRD patterns of ZnHoMOF after soaking in different pH values.

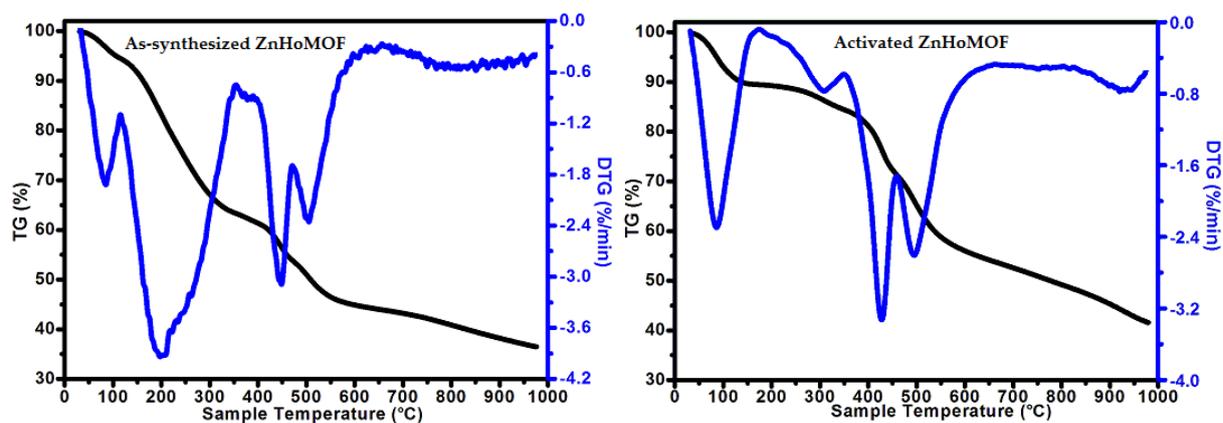


Figure S2. TG-DTG curves of as-synthesized and activated ZnHoMOF samples.

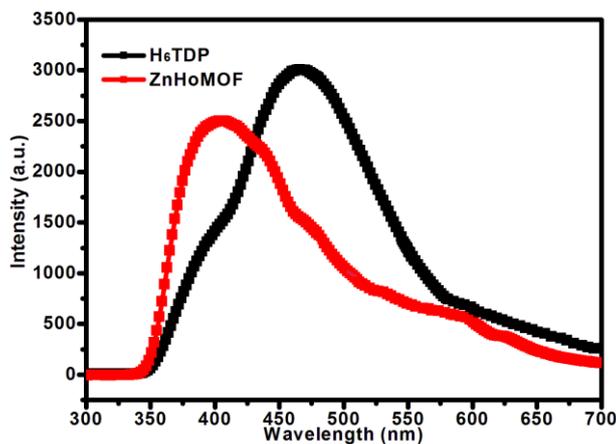


Figure S3. Luminescent spectra of free H₆TDP and ZnHoMOF in solid state at room temperature.

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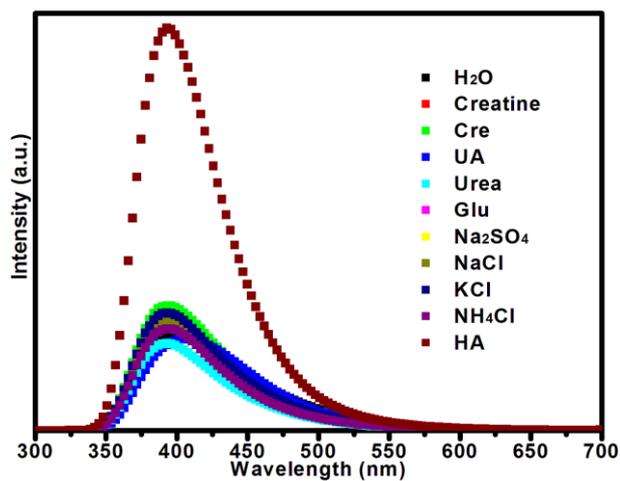
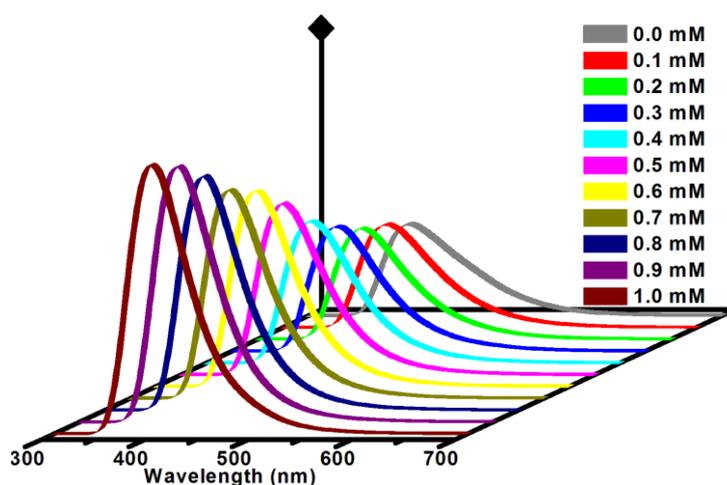


Figure S4. Luminescence of ZnHoMOF dispersed in 0.01 M urine chemicals aqueous solutions.



5 **Figure S5.** Enhanced emission spectra of ZnHoMOF in water with the incremental addition of HA biomarker.

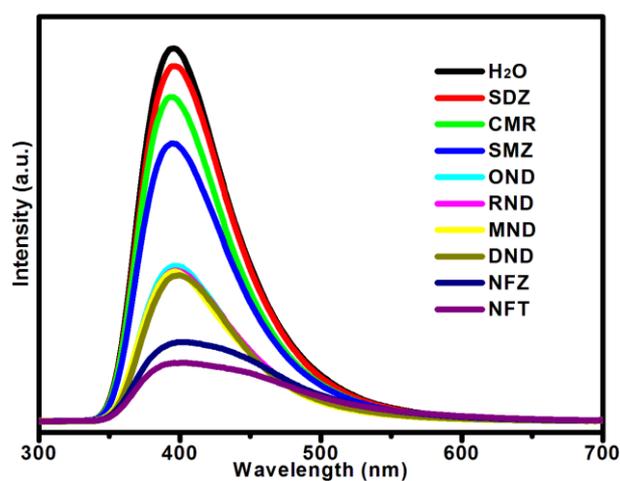


Figure S6. Luminescence of ZnHoMOF dispersed in the 0.1 mM antibiotics aqueous solutions.

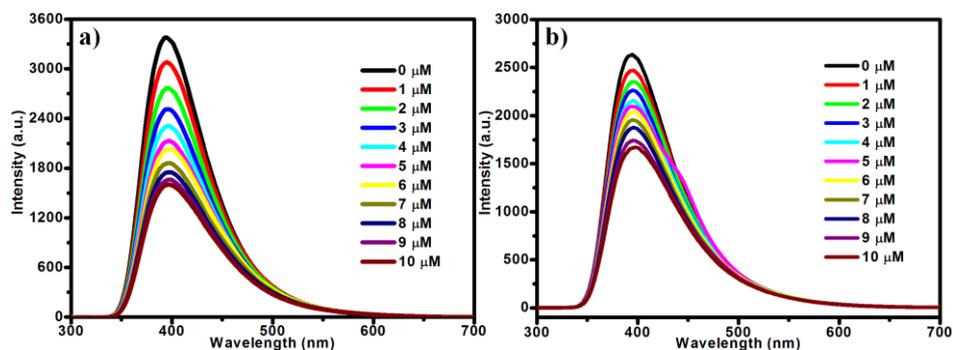


Figure S7. Emission spectra of ZnHoMOF in aqueous solutions with incremental addition of NFZ (a), and NFT (b).

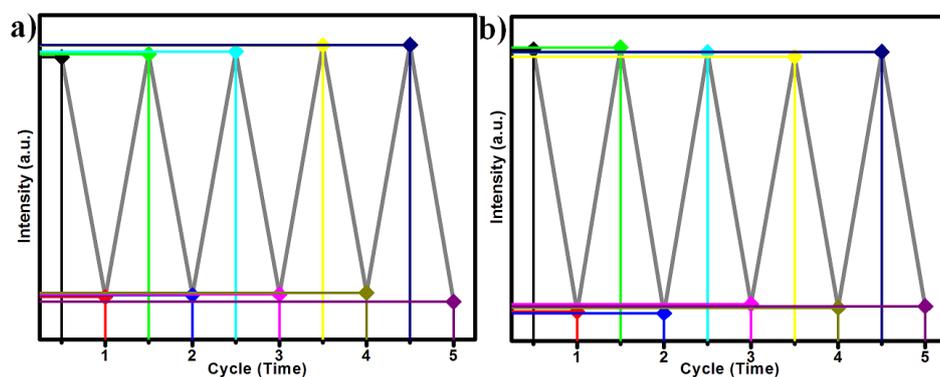


Figure S8. Recyclable behavior of ZnHoMOF when sensing of NFZ (a), and NFT (b).

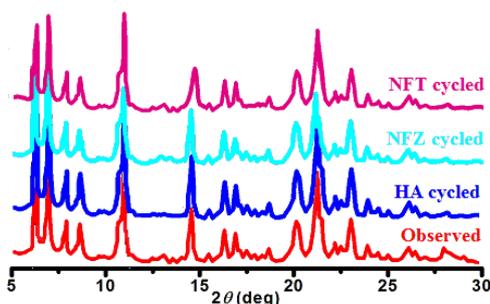


Figure S9. PXRD patterns of recycled ZnHoMOF after sensing HA, NFT, and NFZ.

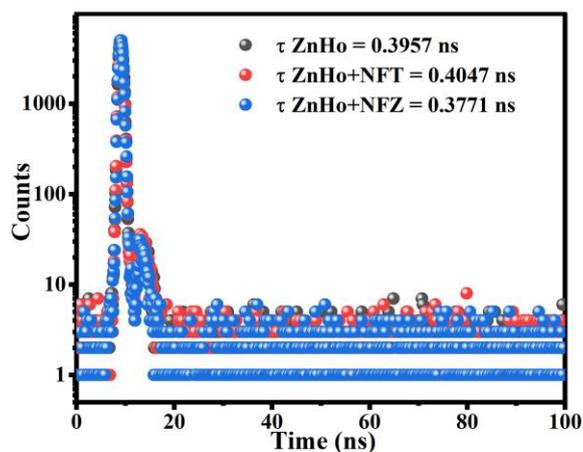


Figure S10. The luminescence decay lifetimes of ZnHoMOF samples before and after sensing nitrofurantoin (NFT and NFZ).

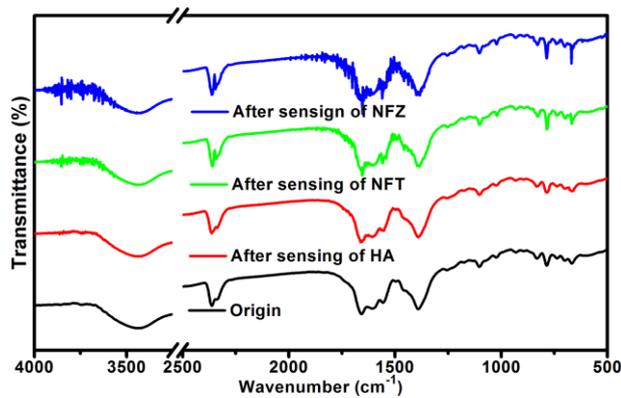


Figure S11. The FT-IR spectra of ZnHoMOF before or after sensing of HA, NFT and NFZ.

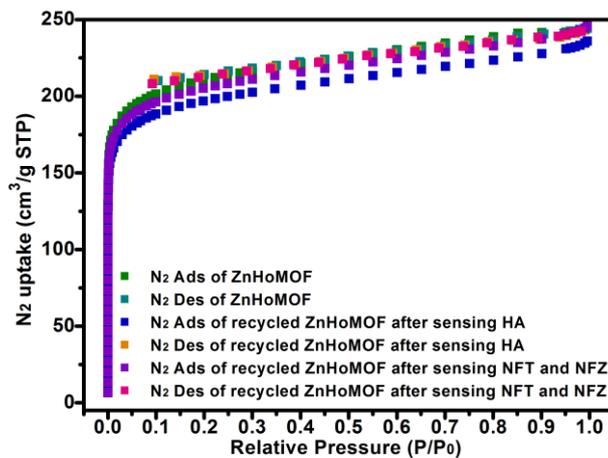


Figure S12. The BET tests of ZnHoMOF before or after sensing of HA, and nitrofurantoin antibiotics (NFT and NFZ) at 77K.