

Synthesis of rod-like metal-organic framework materials as
electrochemical aptamer sensor for sensitive detection of tetracycline
Yuting Luo, Yiwei Sun, Haoxiang Wang, Yuyang He, Mengqi Lu, Ruoyu

Wang, Dongpo Xu*

School of Health Science and Engineering, University of Shanghai for Science
and Technology, Shanghai 200093, PR China.

*Corresponding author: xudongpo@usst.edu.cn

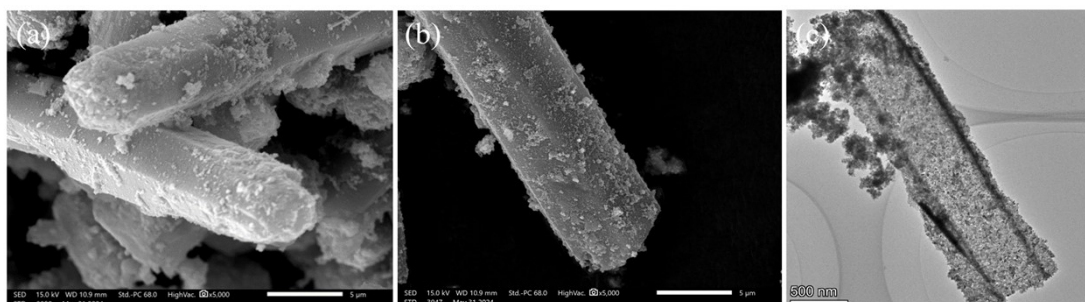


Fig. S1. (a-b) SEM images and (c) TEM images of NH₂-MIL-68 (In).

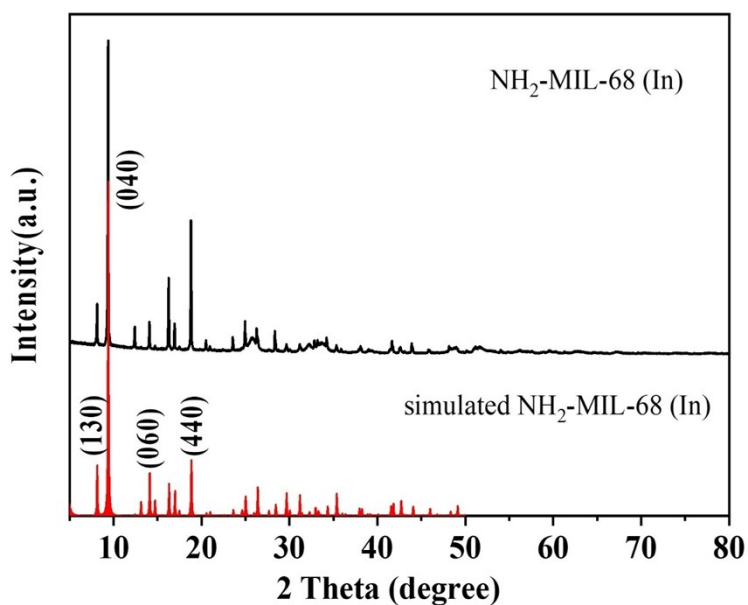


Fig. S2. The XRD of the NH₂-MIL-68 (In).

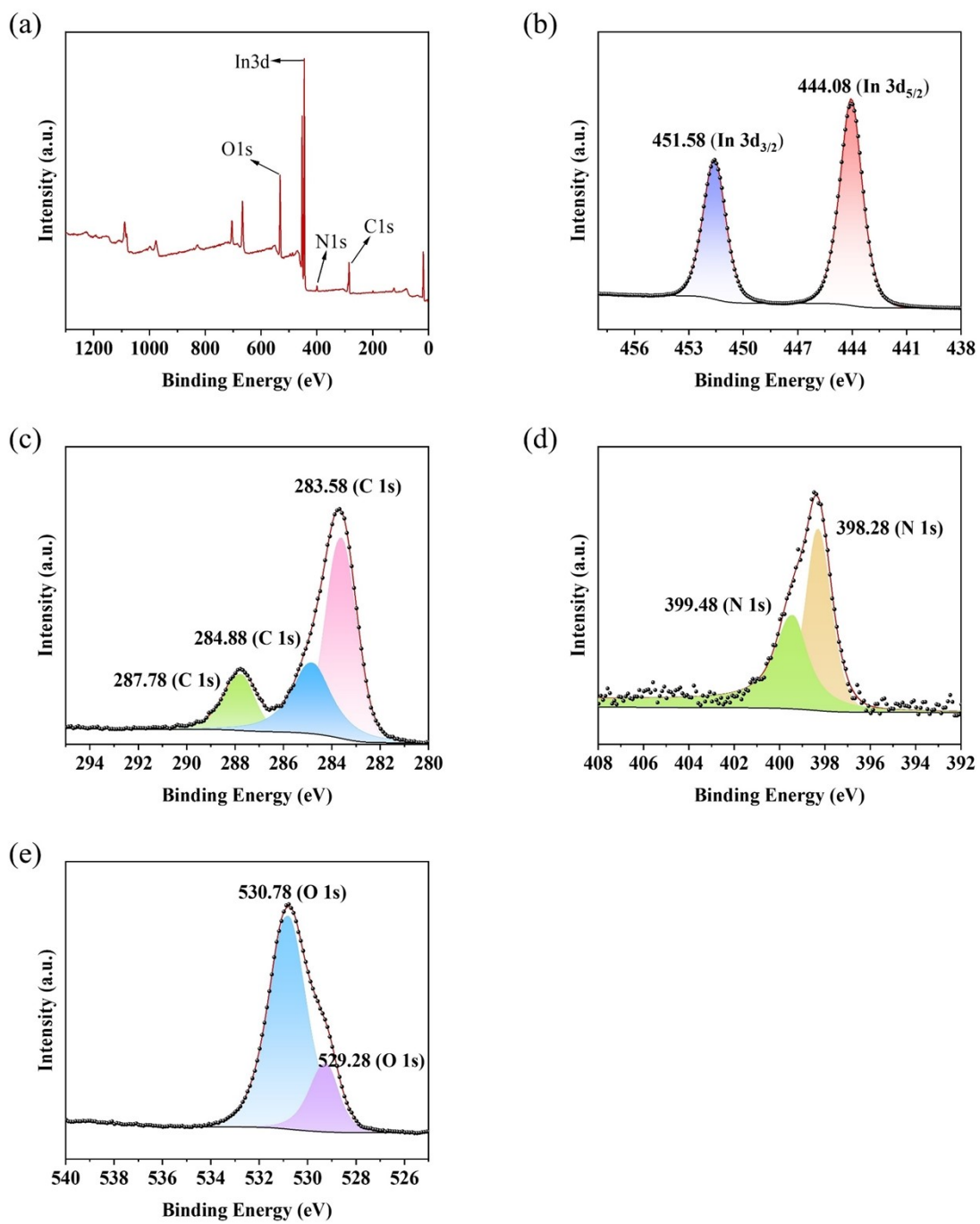


Fig. S3. The XPS of the NH₂-MIL-68 (In): Survey spectra(a); (b–e): high-resolution XPS for In 3d, C 1s, N 1s and O 1s.

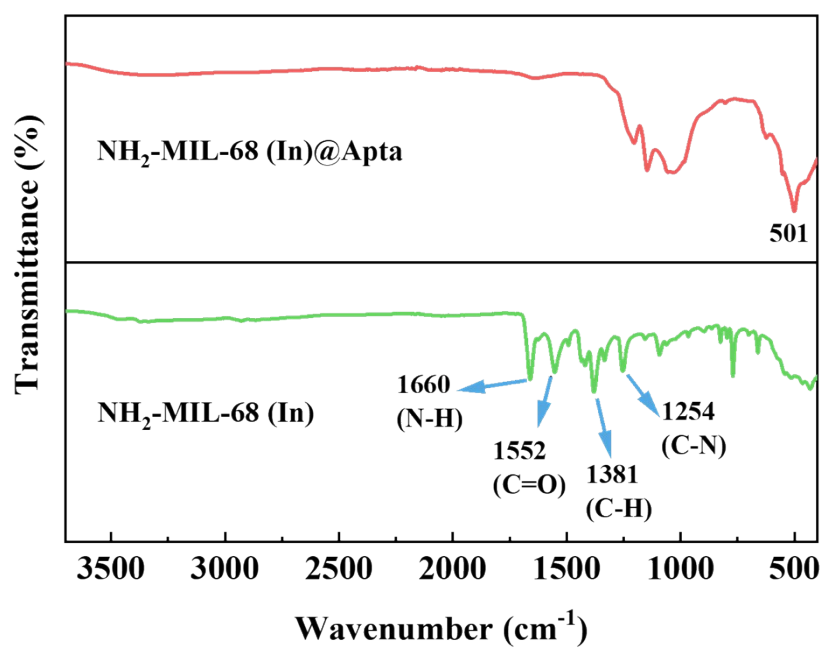


Fig. S4. The FT-IR spectra of $\text{NH}_2\text{-MIL-68 (In)}$ and $\text{NH}_2\text{-MIL-68 (In)@Apta}$.

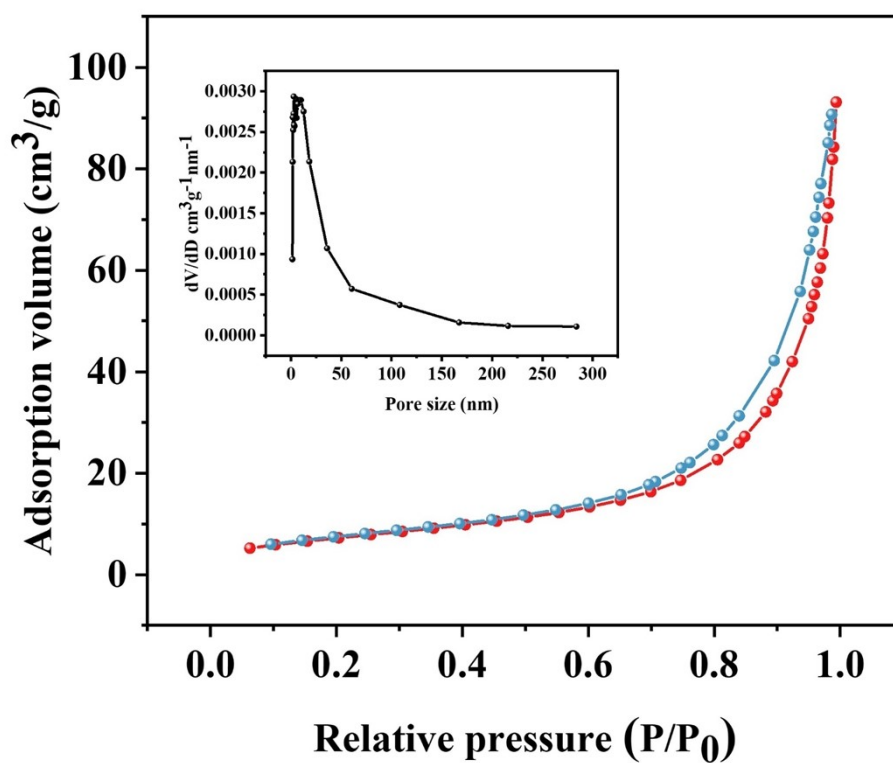


Fig. S5. N_2 isotherm of $\text{NH}_2\text{-MIL-68 (In)}$ (Inset: pore-size distribution of $\text{NH}_2\text{-MIL-68 (In)}$).

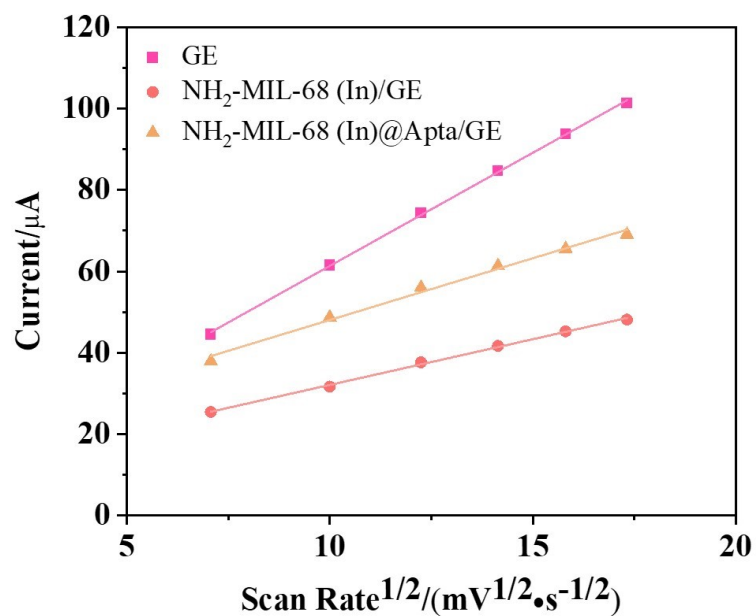


Fig. S6. The calibration curve of the oxidation peak-to-peak current and the square root of the scan rate of GE, NH₂-MIL-68 (In)/GE and NH₂-MIL-68 (In)@Apta/GE.