

Supplementary Information

A novel biosensor based on ball-flower-like Cu-hemin MOF grown on elastic carbon foam for trichlorfon detection

Yonggui Song, Baixi Shan, Bingwei Feng, Pengfei Xu, Qiang Zeng, Dan Su*

Jiangxi University of Chinese Traditional Medicine, 1688 Meiling Road, Nanchang 330006, China.

*Corresponding author: Tel/Fax: +86 791 87802135. E-mail: sud94@aliyun.com (D. Su).

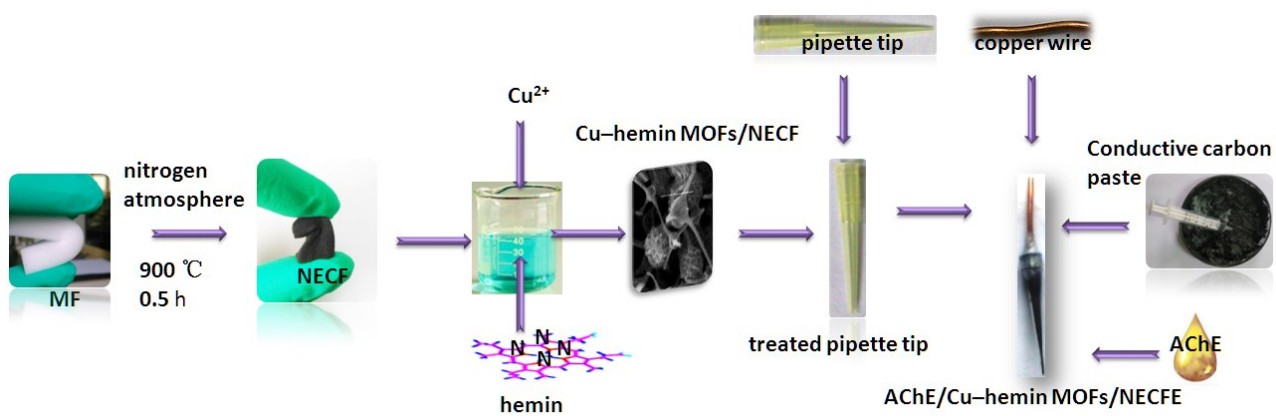


Fig. S1. Schematic illustration of the fabrication of the integrated AChE/Cu-hemin MOFs/NECFE.

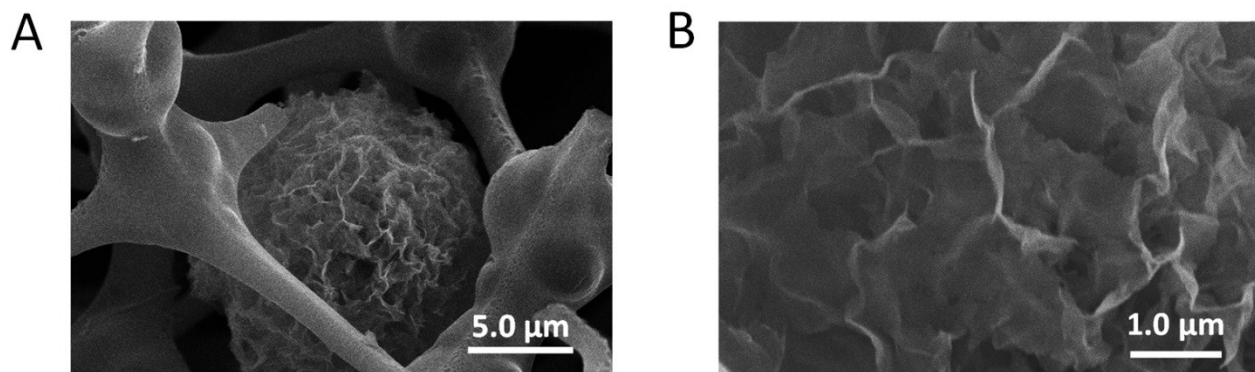


Fig. S2. A SEM image of Cu-hemin MOFs/NECF, B Detailed structure of Cu-hemin MOFs/NECF.

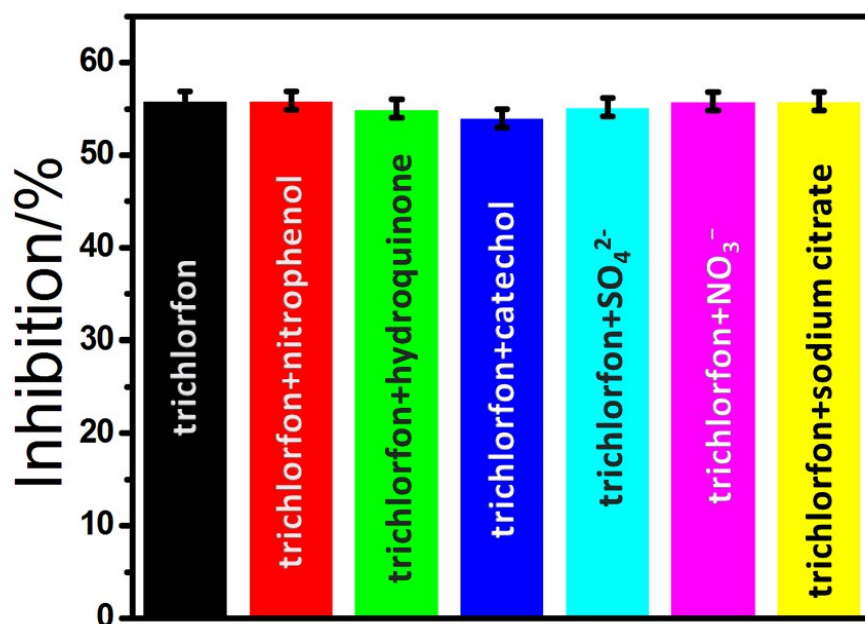


Fig. S3. Comparison of the percentage of the inhibition of the AChE/Cu-hemin MOFs/NECFE in 0.1 M pH 7.0 PBS with 1.0 mM ATCl in the presence of trichlorfon and other interfering substances.

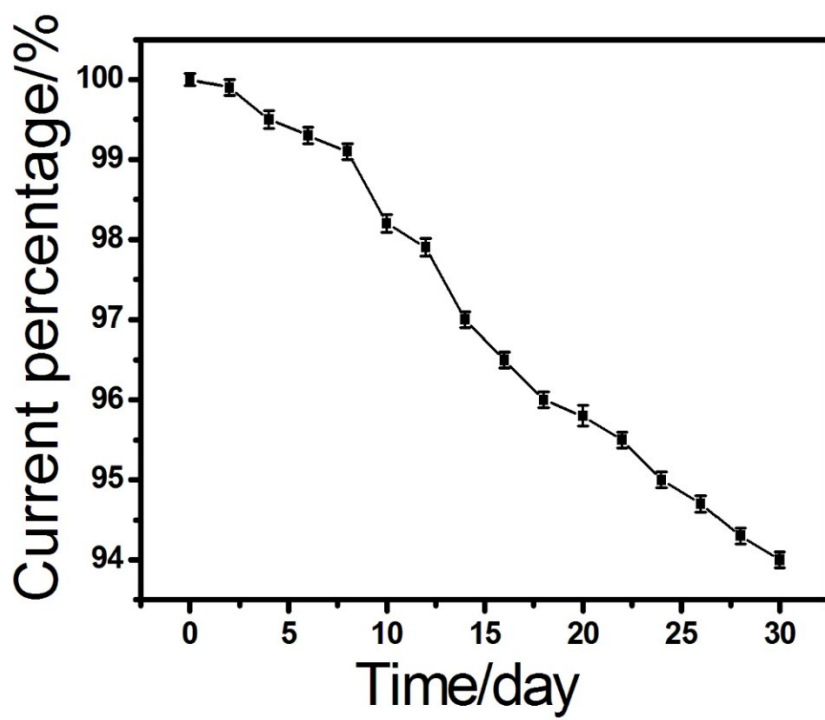


Fig. S4. Stability test of the AChE/Cu-hemin MOFs/NECFE in 30 days.

Table S1. Recovery studies of trichlorfon in tomato samples. (Each result was estimated by six determinations)

Sample	Taken (ng mL ⁻¹)	Found (ng mL ⁻¹)	Recovery (%)	RSD (%)
1	0.80	0.775	96.9	3.2
2	1.50	1.46	97.6	3.8
3	2.50	2.65	106	3.5
4	4.50	4.59	102	3.0
5	15.0	15.4	103	3.9