

# **Degradable photoactivated metal organic frameworks with an oxidase-like nanozyme for colorimetric detection of galantamine**

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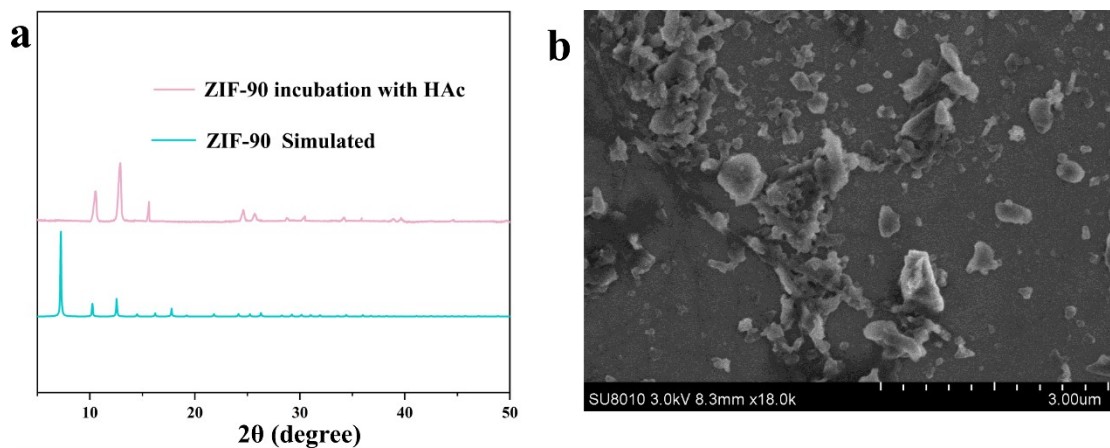


Fig. S1. (a) PXRD patterns (b) SEM image of ZIF-90 after incubation with acetic acid.

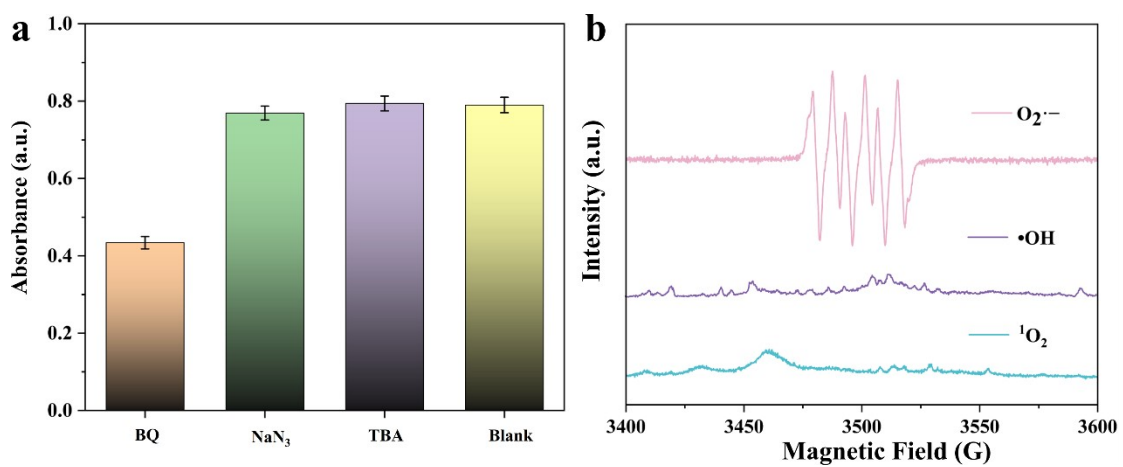


Fig. S2. (a) The catalytic oxidation of TMB in the presence of various radical quenchers, (b) ESR spectra of the ZIF-90 after irradiation

**Table S1.** Sensing performance comparison between the biosensors in this work and some reported sensors for AChE inhibitors.

Biosensor	Analyte	Linear range	Detection limit	Reference
colorimetric	paraoxon	80–600 ng/mL	11 ng/mL	1
fluorometric	carbaryl	0.05–50 $\mu$ M	0.8 nM	2
colorimetric	carbaryl	0.05–50 $\mu$ M	1.6 nM	2
colorimetric	TPP	0 -1000 ng mL <sup>-1</sup>	0.201 ng mL <sup>-1</sup>	3
chemiluminescence	tacrine	0- 0.78 $\mu$ M	21.9 nmol L <sup>-1</sup>	4
fluorometric	fenitrothion	0.1 - 500 ng/mL	0.037 ng/mL	5
colorimetric	huperzine A	5–500 nM	4.17 nM	6
colorimetric	paraoxon	0–30 ng mL <sup>-1</sup>	1.07 ng/mL	7
colorimetric	galantamine	10 <sup>-11</sup> -10 <sup>-5</sup> M	3.15pM	this work

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