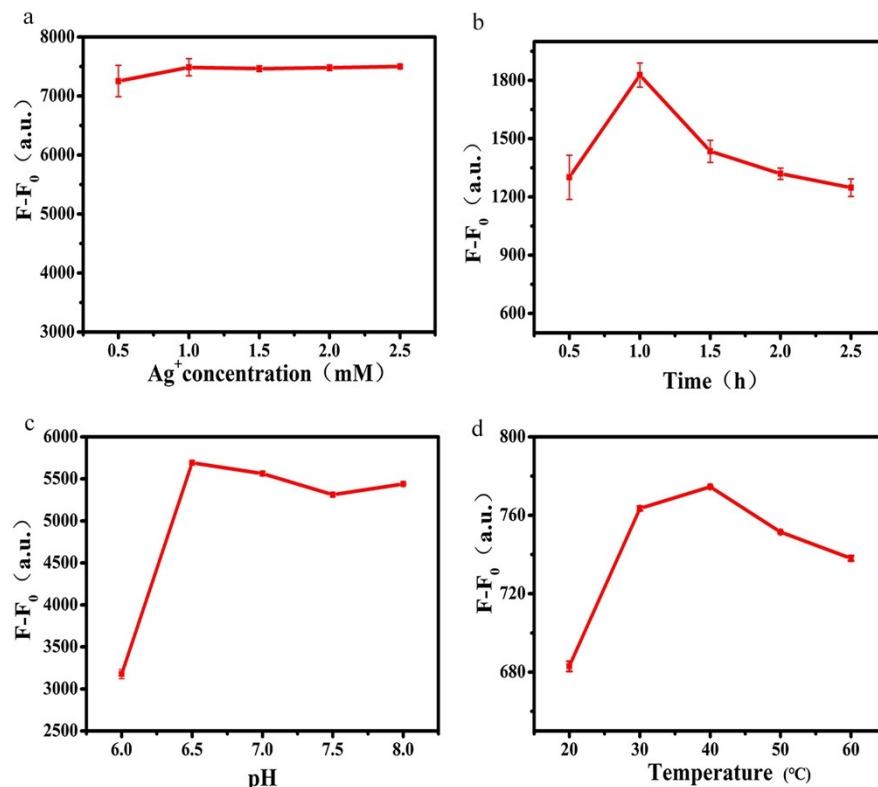


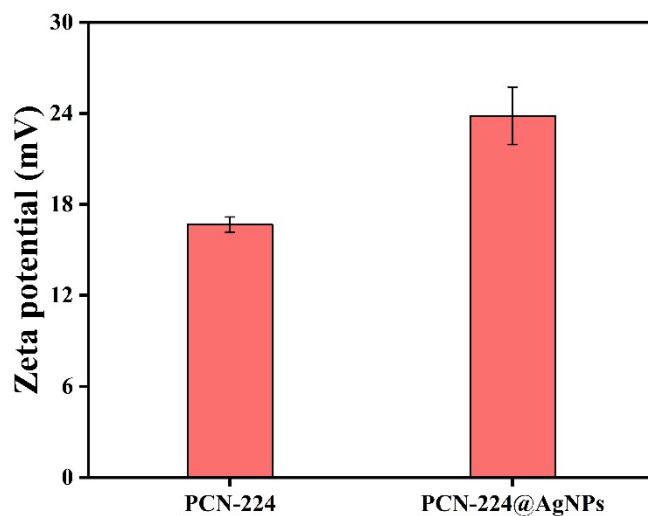
Supplementary Materials

Fig. S1



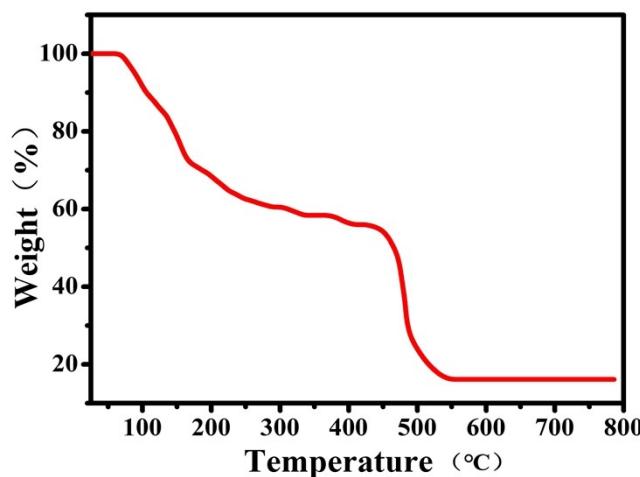
Effect of time, (b) pH, (c) temperature and (d) the concentration of Ag^+ on the fluorescence response. All experiments were performed three times.

Fig. S2



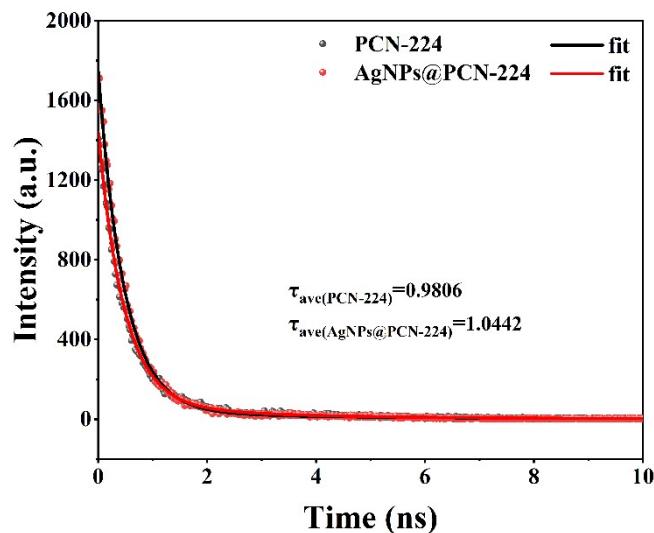
The zeta potential of PPCN-224 and AgNPs@PCN-224

Fig. S3



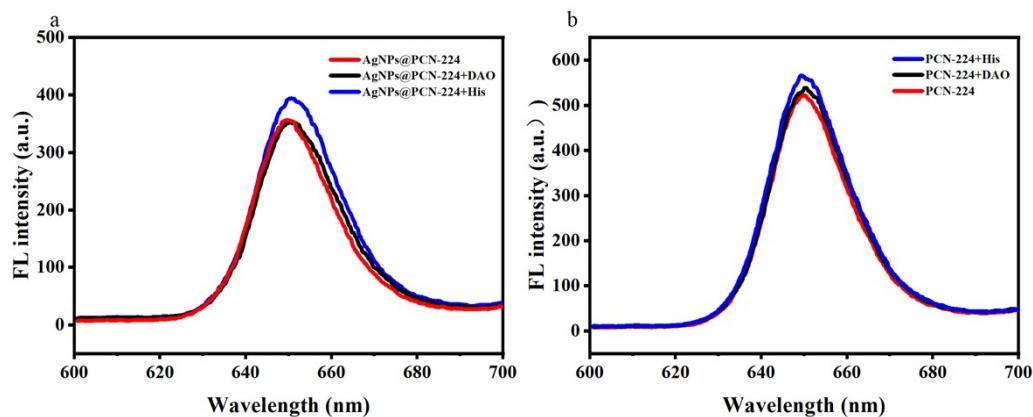
TGA curve of PCN-224

Fig. S4



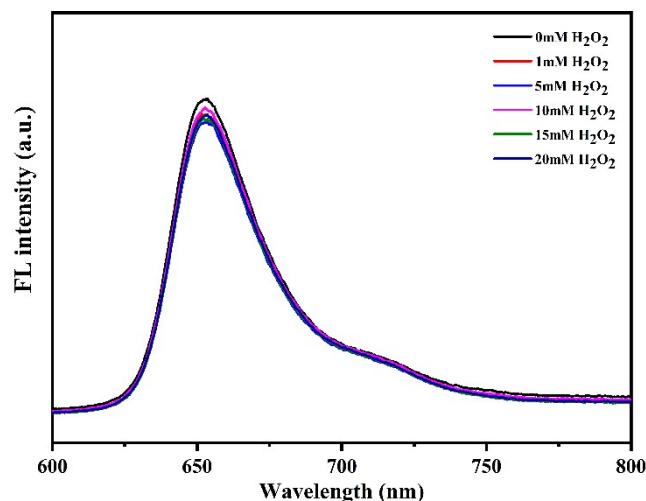
PCN-224 and AgNPs@PCN-224 fluorescence lifetimes.

Fig. S5



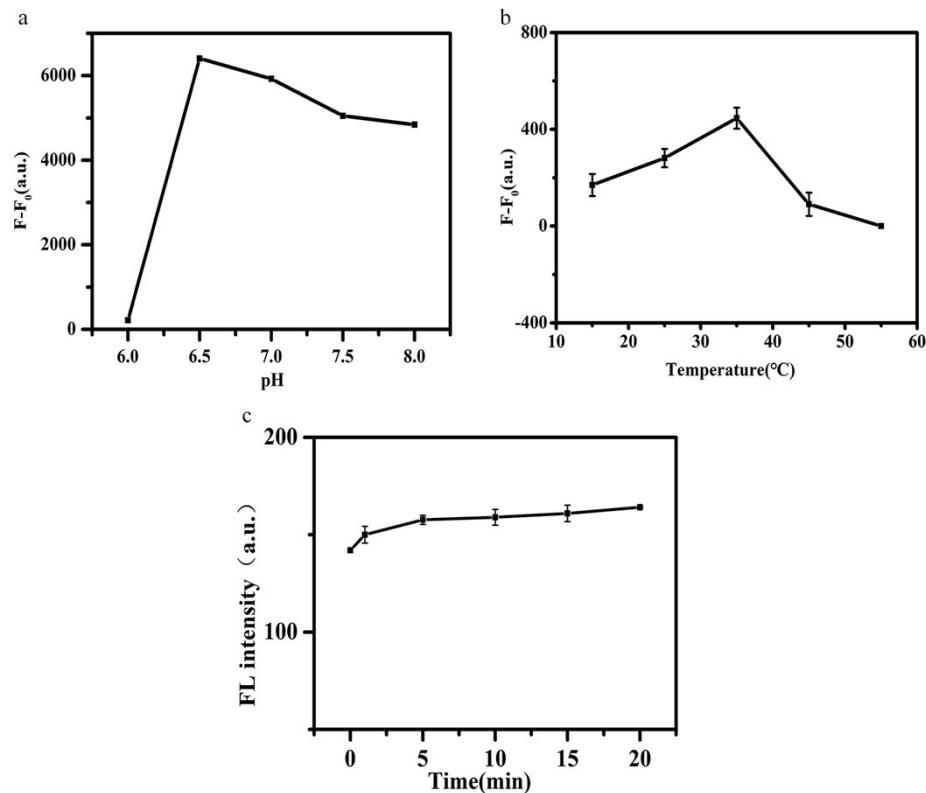
Fluorescence spectra of (a) AgNPs@PCN-224 and (b) PCN-224 after adding His and DAO, respectively.

Fig. S6



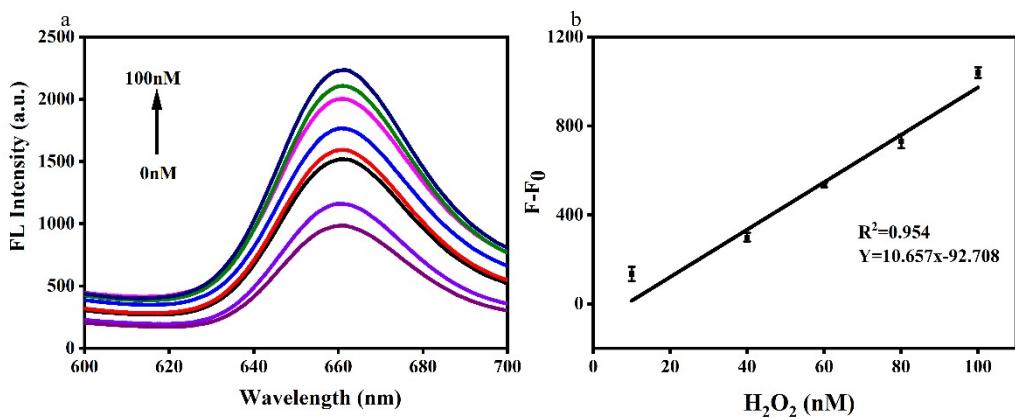
Fluorescence spectra of PCN-224 under different concentrations of H_2O_2 (H_2O_2 concentrations: 0, 1, 5, 10, 15, 20 mM)

Fig. S7



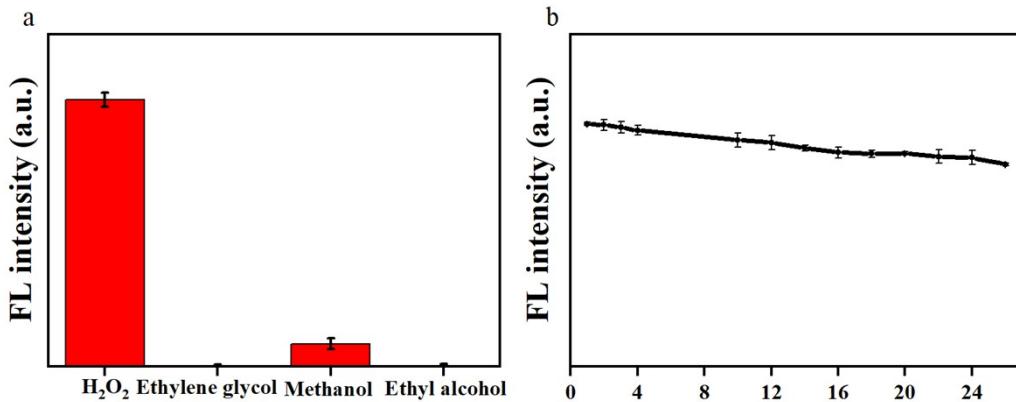
(a) Effect of pH, (b) temperature and (c) time on the fluorescence response. All experiments were performed three times.

Fig. S8



(a) Fluorescence determination of histamine (0 - 100 nM) and (b) the corresponding calibration curve.

Fig. S9



(a) Specificity and (b) Stability of AgNPs@PCN-224.

Table S1. Various Previously Reported Sensors for bioamine

Method	LOD (μM)	Linear range (μM)	Ref
QDs@IL@MIP	110	449~2249	1
HB@NPS@FC	8.55	29.12~166.67	2
MGO-DAO	1.23	5~800	3
N、S-CDs@CdTeQDs-FP	3.886	0~50	4
GNPs	0.6	0.6~12	5
AgNPs@PCN-224	3.3×10^{-5}	$1 \times 10^{-4} \sim 100$	This work

Reference

1. Wang, Q. H., Fang, G. Z., Liu, Y. Y., Zhang, D. D., Liu, J. M., & Wang, S, *Food Anal. Methods*, 2017, **10**, 2585-2592.
2. Chaicham, A., Kongwutthivech, J., Tuntulani, T., & Tomapatanaget, B, *Sensor Actuat B-chem.*, 2018, **258**, 621-627.
3. Xu, X., Wu, X., Zhuang, S., Zhang, Y., Ding, Y., & Zhou, X, *Biosensors (Basel)*., 2022, **12(2)**, 135.
4. Yan, J., Fu, Q., Zhang, S., Liu, Y., Shi, X., Hou, J., ... & Ai, S, *Spectrochim Acta A Mol Biomol Spectrosc*, 2022, **282**, 121706.
5. El-Nour, K. M. A., Salam, E. T. A., Soliman, H. M., & Orabi, A, *Nano Lett*, 2017, **12**, 1-11.