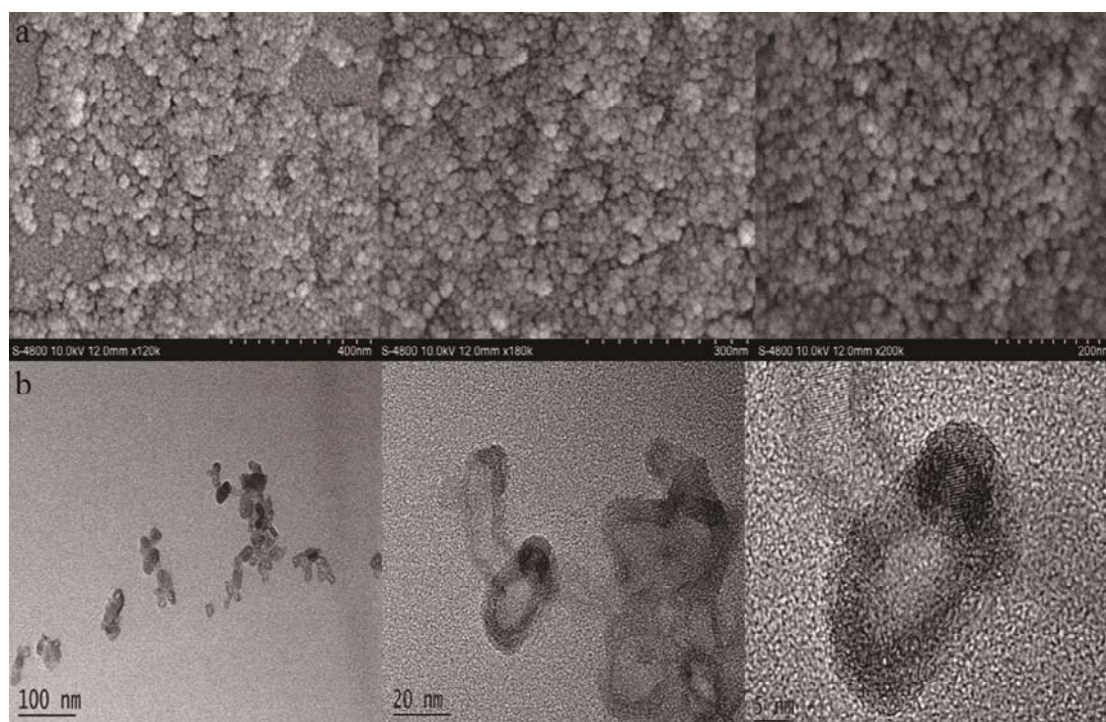


# Supplementary Materials: Natural Products

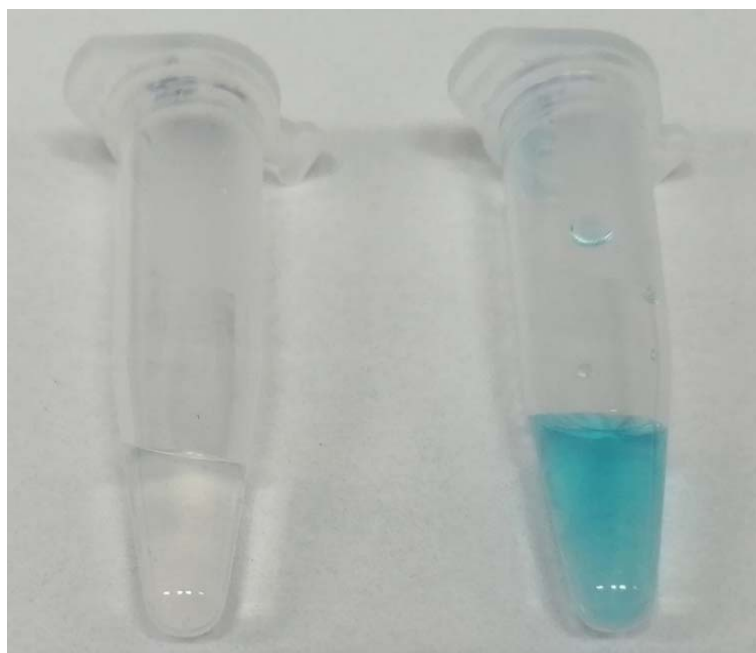
## Self-Assembled Nanozyme for Cascade Detection of Glucose and Bacterial Viability in Food

Qiuping Zhang, Yi Kang, Hao Sun, Yanmin Liang, Zehui Su, Jie Dan, Linpin Luo, Tianli Yue,

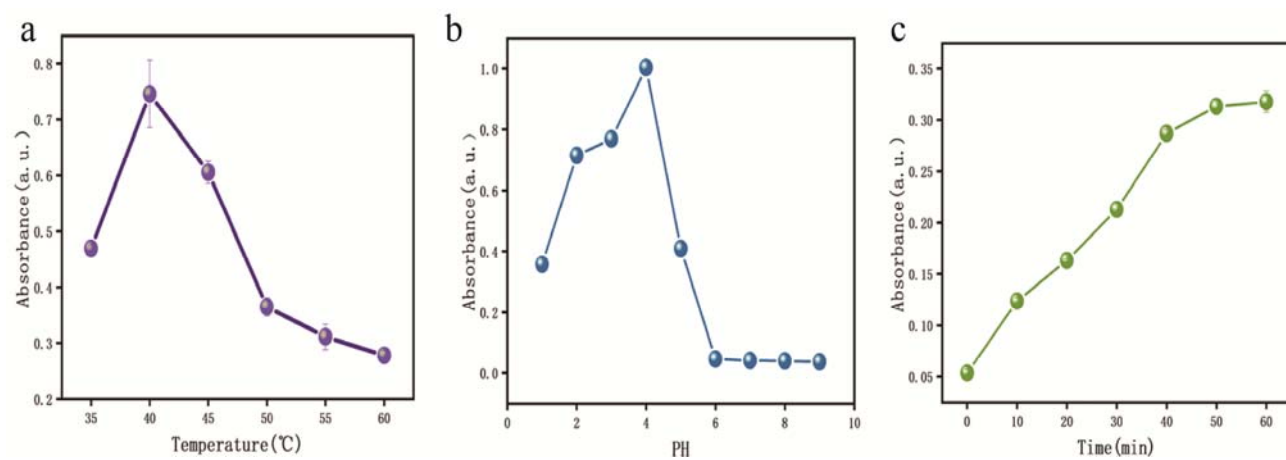
Jianlong Wang \*, Wentao Zhang \*



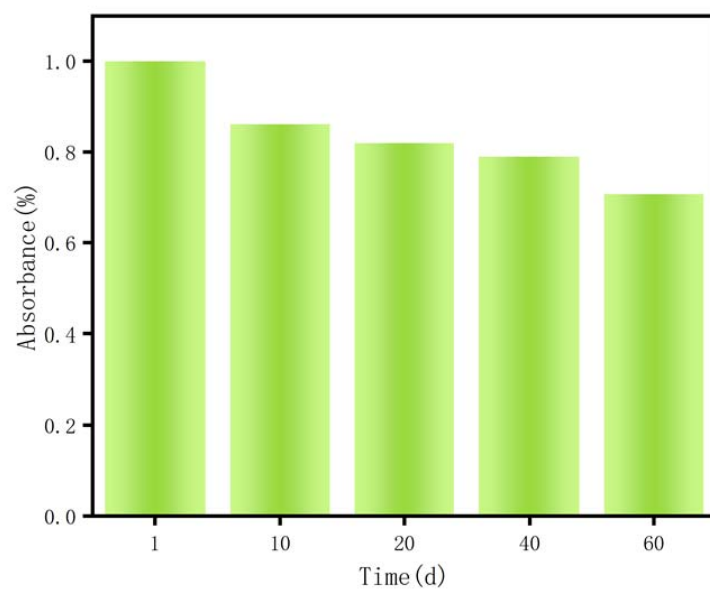
**Figure S1.** The morphology of nanomaterials with different sizes, including SEM image (a); and TEM image (b).



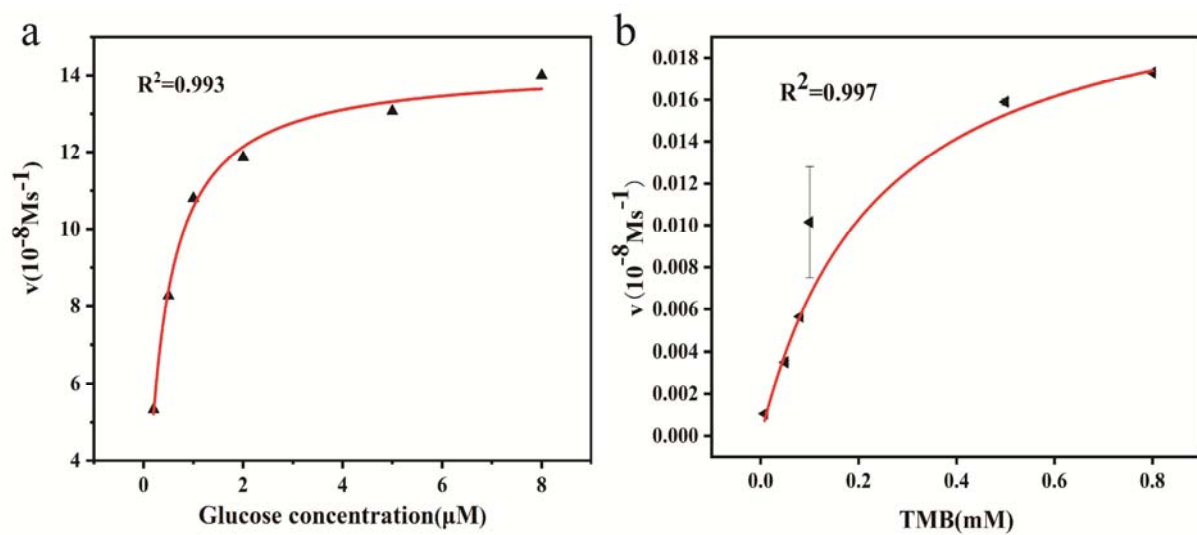
**Figure S2.** Effect of the presence of glucose on the chromogenic reaction: GOx@GA-Fe (II) +TMB (a); GOx@GA-Fe (II) +TMB +Glucose (b). The concentration of Glucose was 100  $\mu$ L, and the other conditions were the same.



**Figure S3.** Optimization of material reaction conditions, including temperature (a); pH(b) and reaction time(c).



**Figure S4.** Stability detection of GOx@GA-Fe (ii) from 1 to 60 days.



**Figure S5.** The steady-state kinetics of GOx@GA-Fe (II)/glucose(a) and GOx@GA-Fe (II) /TMB(b).

**Table S1** Comparison of the ability of different nanometer syntheses to detect glucose.

<b>Nanozyme</b>	<b>Linear range(<math>\mu\text{M}</math>)</b>	<b>LOD(<math>\mu\text{M}</math>)</b>	<b>Ref</b>
<b>GOx@CuBDC</b>	10–500	4.1	[1]
<b>GOx@ZIF-8(NiPd)</b>	10–300	9.2	[2]
<b>GOx@MOF-545(Fe)</b>	0.5–100	0.28	[3]
<b>H<sub>2</sub>TCPP-NiO + GOx</b>	50–500	20	[4]
<b>2D Au NPs/Cu-TCPP(Fe)</b>	10–300	8.4	[5]
<b>Au@Ag + GOx</b>	50–20,000	39	[6]
<b>SiO<sub>2</sub>/Imi/Pt/GOx</b>	100–800	163	[7]
<b>Chitosan-Au</b>	1–5000	3	[8]
<b>CNT-CS-Au</b>	6–5000	3	[9]
<b>Au@Ag NRs</b>	50–20,000	39	[6]
<b>Fe<sub>3</sub>O<sub>4</sub>-Au-CS</b>	3–570	1.2	[10]
<b>Porphyrin-ZnS</b>	50–500	36	[11]
<b>Fe<sub>3</sub>O<sub>4</sub>@CN-GQDs</b>	6–100	2	[12]
<b>Humic acid-Cu</b>	1–100	0.68	[13]
<b>Carbon nanodots</b>	1–50	0.4	[14]
<b>AuNPs@C.CNF</b>	1–60	0.67	[15]
<b>GOx@GA-Fe(II)</b>	0.1–500	0.43	This paper

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