Supporting Information

Distinction of antioxidants using a three-channel colorimetric sensor array constructed with bimetallic FeCo nanozyme

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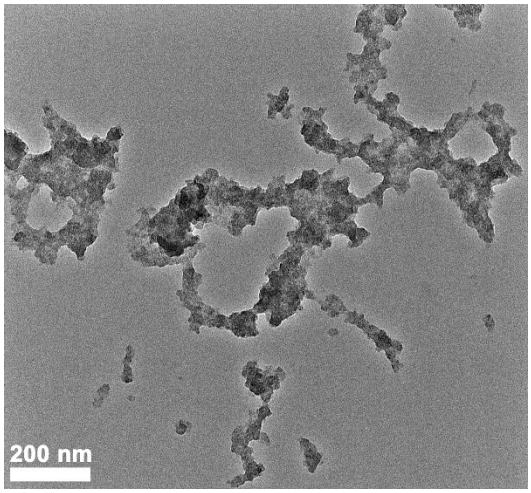

Fig. S1 TEM image of Fe/Co NSs.

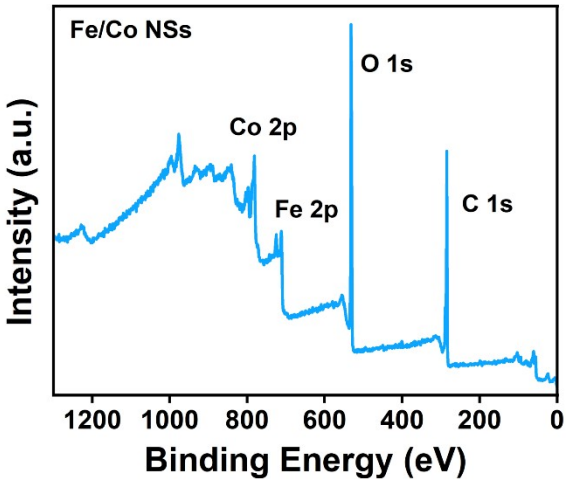

Fig. S2 XPS entire spectrum of Fe/Co NSs.

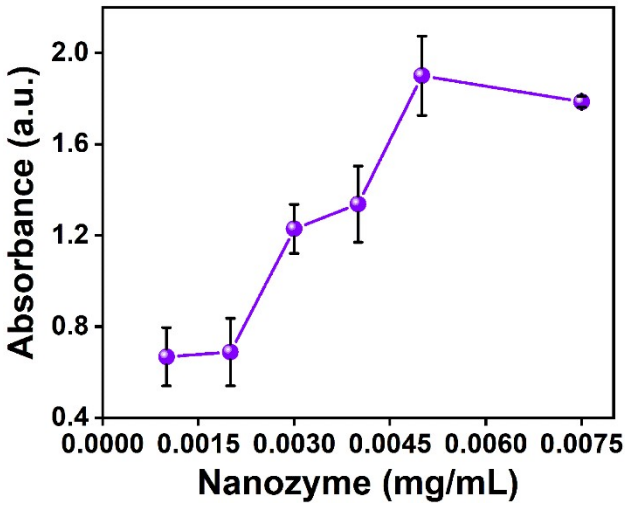

Fig. S3 The effect of Fe/Co NSs concentrations on the absorbance of Fe/Co NSs-TMB-H_2O_2 at 652 nm.

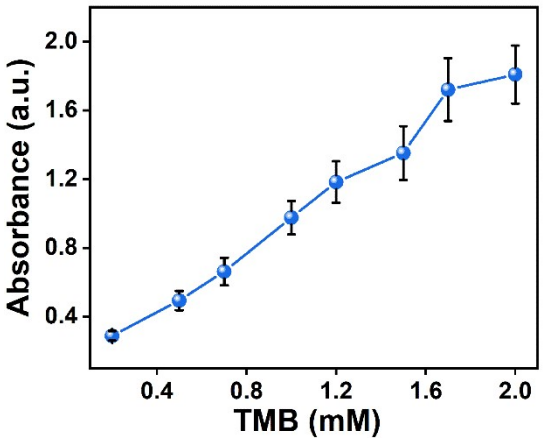

Fig. S4 The effect of TMB concentrations on the absorbance of Fe/Co NSs-TMB-H_2O_2 at 652 nm.

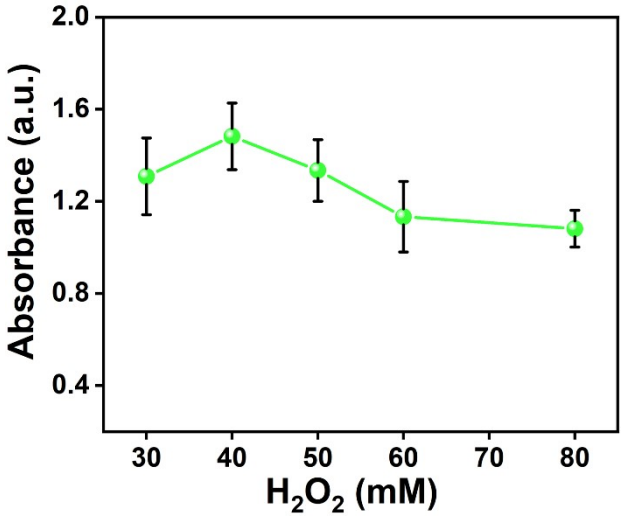

Fig.S5 The effect of H_2O_2 concentrations on the absorbance of Fe/Co NSs-TMB-H_2O_2 at 652 nm.

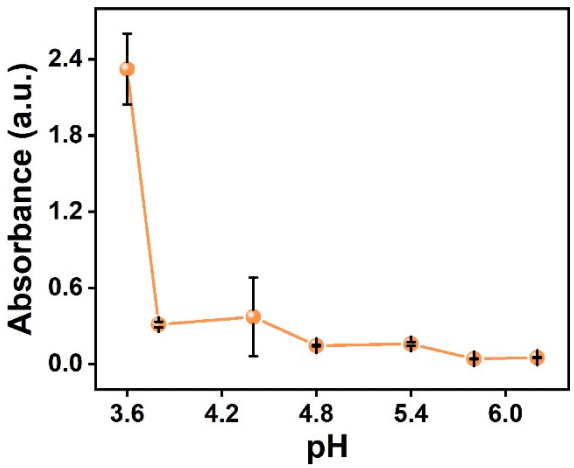

Fig. S6 The effect of solution pH on the absorbance of Fe/Co NSs-TMB-H_2O_2 at 652 nm.

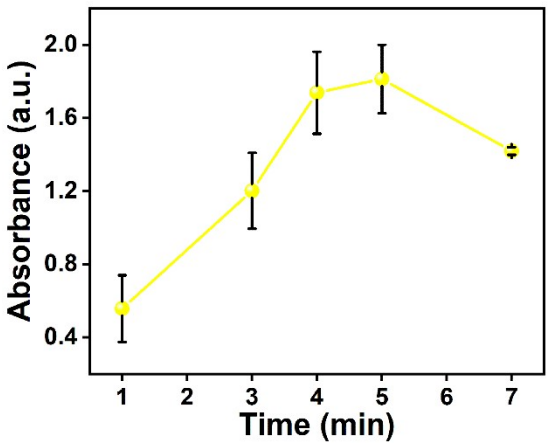

Fig. S7 The effect of incubation time of antioxidant on the absorbance of Fe/Co NSs-TMB-H_2O_2 at 652 nm.

Catalyst	Substract	K_m (mM)	V_{max} (10^{-8} M·s^{-1})	Ref.
Fe/Co NSs	H_2O_2	9.03	14.6	This work
	TMB	3.26	38.2	
HRP	H_2O_2	3.7	8.71	1
	TMB	0.434	10.0	

Table S1 The comparison of K_m and V_{max} of Fe/Co NSs towards two substrates.

1 L. Gao, J. Zhuang, L. Nie, J. Zhang, Y. Zhang, N. Gu, T. Wang, J. Feng, D. Yang, S. Perrett and X. Yan, *Nat.Nanotechnol.* 2007, **2**, 577.