Supporting information

Manganese-based metal-organic frameworks with oxidase properties break the temperature limitation of nano enzymes for glutathione detection

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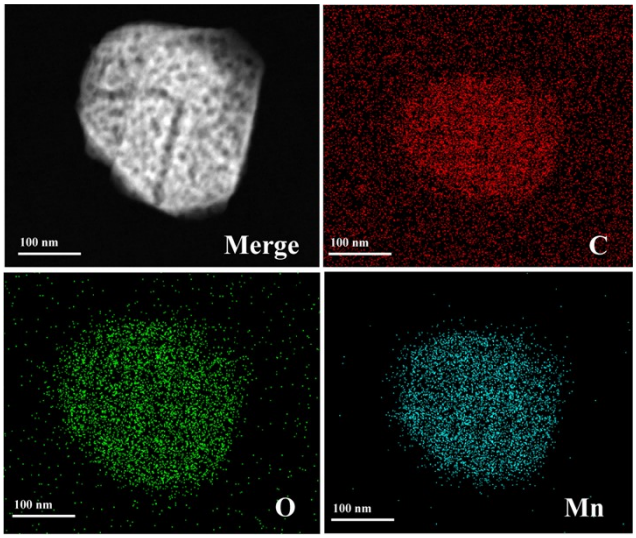

Fig. S1 Element distribution map of Mn/BTC-MOF

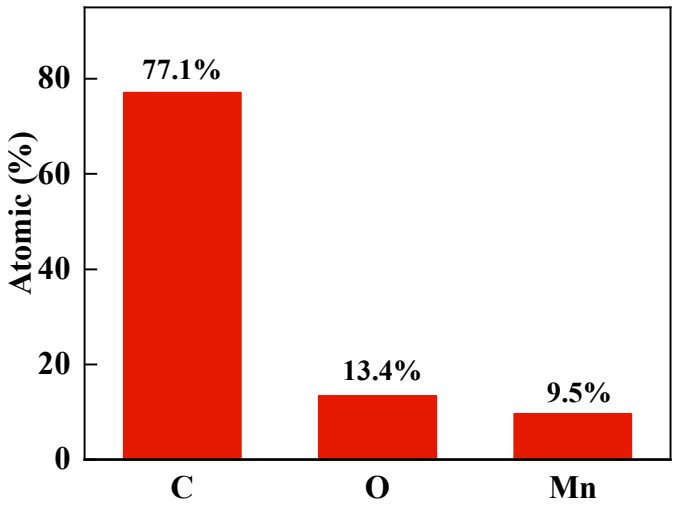

Fig. S2 Atomic ratio of C, O, and Mn in Mn/BTC-MOF

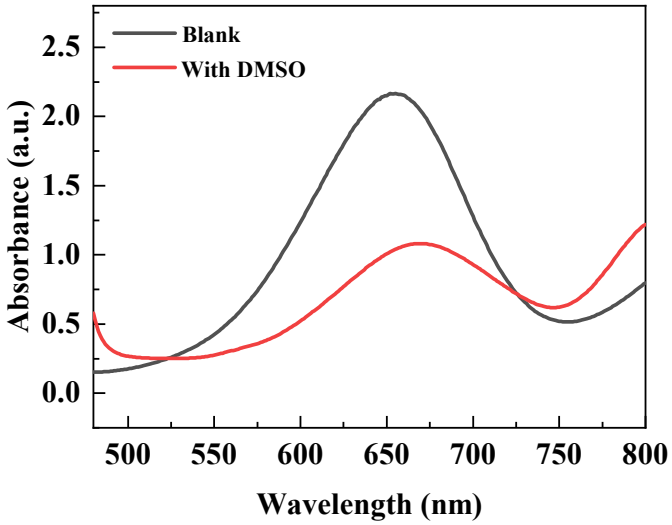

Fig. S3 Absorption spectra of Mn/BTC-MOF for the catalytic oxidation of TMB under water and DMSO conditions.

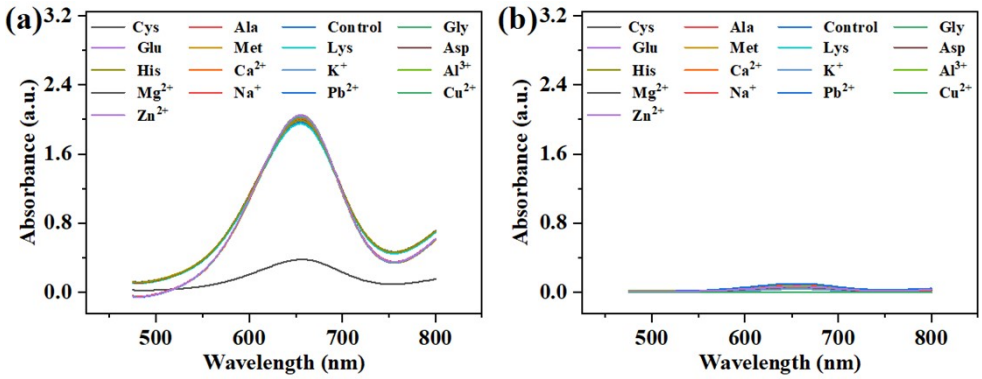

Fig. S4 (a) Absorption spectra of various interferences on Mn/BTC-MOF-TMB system without adding GSH in Fig. 7a; (b) Absorption spectra of Mn/BTC-MOF-TMB system with various interferences in the presence of GSH in Fig. 7a.

Table S1 Comparison of catalytic kinetic parameters

Catalyst	Substrate	K_m (mM)	V_{max} ($\times 10^{-8}$ M·s^{-1})	Ref.
$MnCO_3$ NPs	TMB	0.0233	1.29	1
MIL-53(Fe)	TMB	0.0108	8.78	2
AuNBPs@CuZn MOF	TMB	0.372	67.97	3
Au-MSNPs	TMB	0.22	11.8	4
Ag_1Pd_1	TMB	0.32	11.9	5
Au@Pt nanodendrites	TMB	0.192	8.16	6
HPR	TMB	0.434	10.0	7
BTO NPS	TMB	0.0482	0.765	8
Fe-MOF	TMB	2.6	5.6	9
Mn/BTC-MOF	TMB	0.02	0.0828	This work

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