Electronic Supplementary Information

for

Inhibited oxidase mimetic activity of palladium nanoplates by poisoning the active sites for thiocyanate detection

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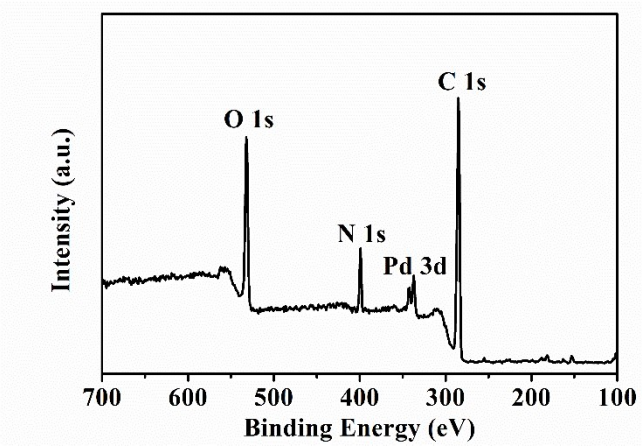

Fig. S1 The XPS spectrum of PdSP@rGO.

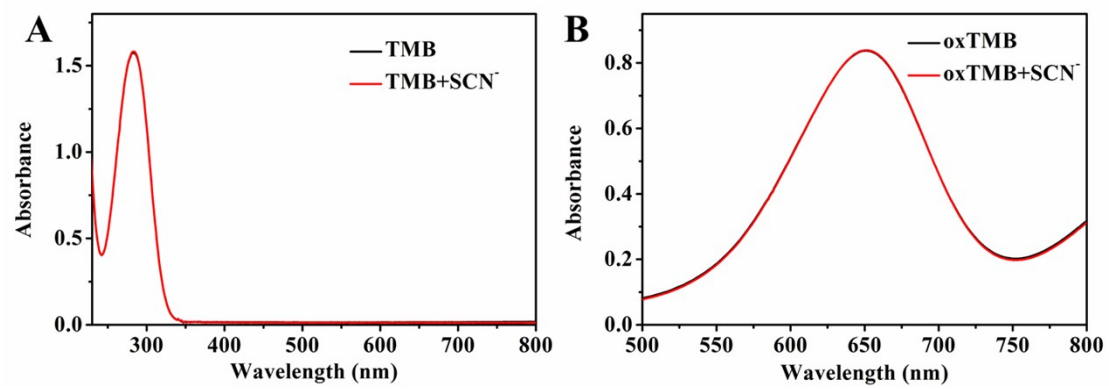

Fig. S2 The UV-vis absorption spectra of (A) TMB and (B) oxTMB in the absence and presence of SCN^-.

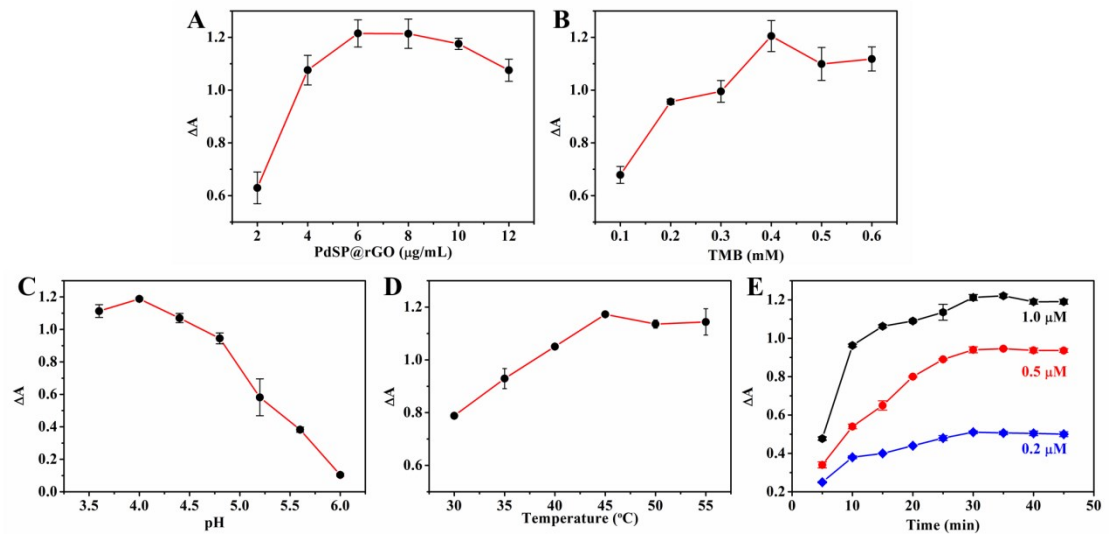

Fig. S3 Optimization of (A) PdSP@rGO concentration, (B) TMB concentration, (C) pH, (D) temperature and (E) reaction time for SCN^- detection.

Table S1 Comparison of our assay with other nanomaterial-based optical SCN^- assays

Material	Method	Linear range	LOD	Reference
Au NP-Fluorescein	Fluorometry	1.0–40.0 nM	0.09 nM	1
Au NCs	Fluorometry	0.8–150 μM	0.42 μM	2
Au NP-CDs	Colorimetry	0.2–2 μM	0.14 μM	3
	Fluorometry	0.1–1.6 μM	0.036 μM	3
CTAB-Au NPs	Colorimetry	0.1–5 μM	6.5 nM	4
Citrate-Au NPs	Colorimetry	0.25–2 μM	0.14 μM	5
Cystamine-Au NPs	Colorimetry	0.2–4 μM	0.2 μM	6
Tween 20-Au NPs	Colorimetry	0.2–2 μM	0.2 μM	7
Au@Pt NCs	Colorimetry	0.02–40 μM	5 nM	8
PdCu nanocarols	Colorimetry	0.001–100 μM	1 nM	9
Pd SP@rGO	Colorimetry	0.05-2 μM	0.044 μM	This work

Reference

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