

A dual-signal output ratiometric electrochemiluminescent sensor for NADH detection

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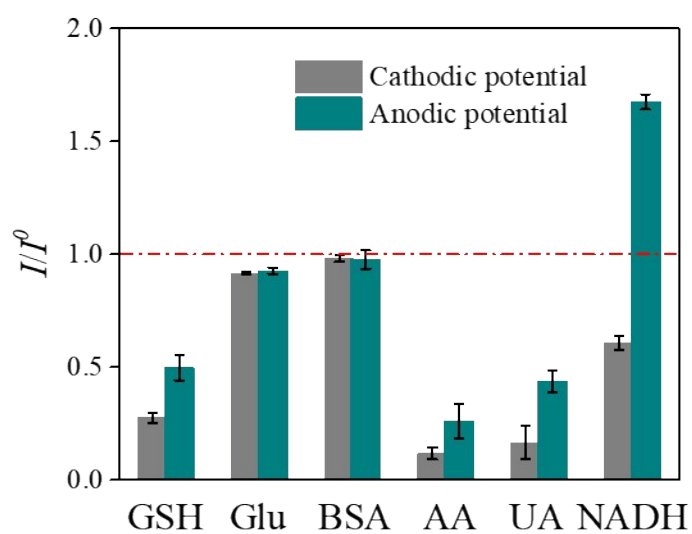
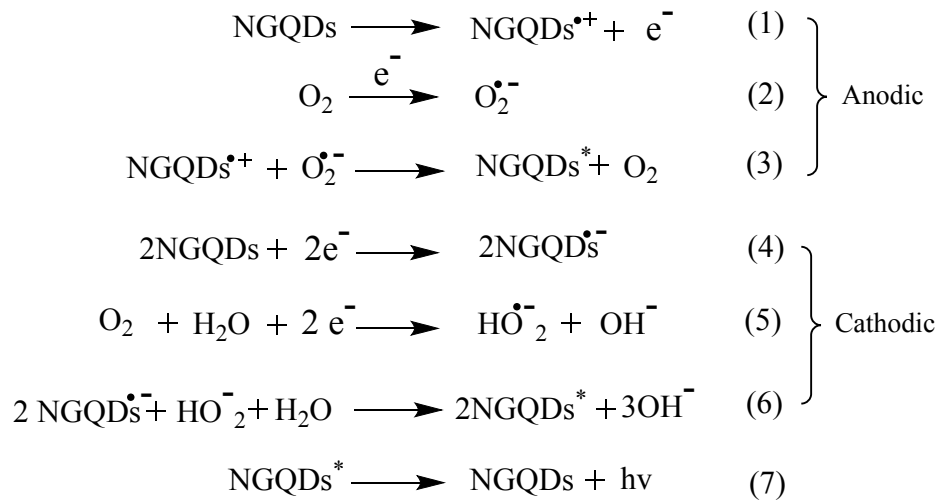


Fig. S1. Ratio values of different potential intensities of the dual-potential ECL system toward 100 μM NADH against 200 μM GSH, Glu, AA, uric acid (UA) and 10 mg mL^{-1} BSA interfering species (note: I is the anodic or cathodic ECL peak intensity, the I^0 is the initial anodic and cathodic ECL intensity of the dual-potential ECL system).



Scheme S1. The entire dual-potential ECL mechanism equations of NGQDs.

Table S1. Comparison of various methods and its composite used towards the detection of NADH.

method	Material or electrode	Linear range	Limit of detection	Reference
Colorimetric	MnO ₂ nanosheets	5.0–100 μ M	-	[1]
Electrochemical	PTH/SPCE	5.0–100 μ M	3.0 μ M	[2]
Electrochemical	MWCNT/AuNP/PNR	12.4–150 μ M	3.72 μ M	[3]
Electrochemical	PAA–MWNT/GCE	4.0–400 μ M	1.0 μ M	[4]
Electrochemical	PEDOT/GCE	5.0–45 μ M	3.8 μ M	[5]
Electrochemical	GC/MWCNT/Flu/GCE	15–84 μ M	5.0 μ M	[6]
Electrochemical	Poly Xa/FAD/MWCNT/GCE	5.0–170 μ M	1.0 μ M	[7]
Electrochemical	PGE/SWCNT/PCV/GCE	1.3–280 μ M	1.3 μ M	[8]
Electrochemical	AuNPs/PB/EGP	0.5–1000 μ M	0.21 μ M	[9]
Ratiometric ECL	NGQDs	10–400 μ M	2.5 μ M	This work

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