

Highly sensitive and selective non-enzymatic glucose detection based on indigo carmine/hemin/H₂O₂ chemiluminescence

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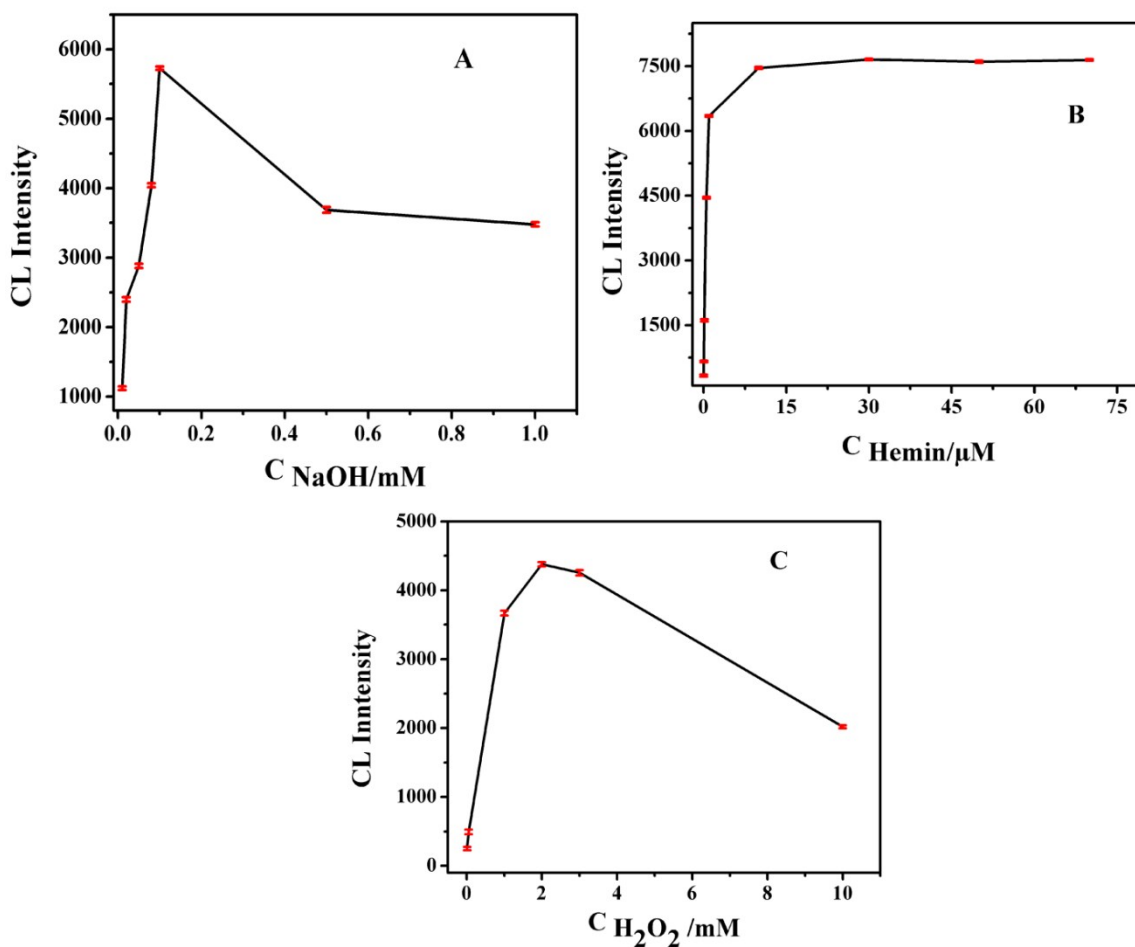


Figure S1. Relations of CL intensities and the concentrations of NaOH (A), Hemin (B) and H₂O₂ (C). $C_{\text{glucose}} = 500 \mu\text{M}$, $C_{\text{IC}} = 1.0 \text{ mM}$, in 0.1 M NaOH solution while, Hamamatsu CR-131 photomultiplier tube (PMT) was operated at -800 V

Table S1. Performance comparison of present method with reported IC detection methods.

Analytical method	Linear range	LOD	Ref
Resonance Rayleigh scattering	2.0 μM – 32.0 μM	0.024 μM	[1]
Spectrophotometric	1.7 μM – 39.0 μM	0.06 μM	[2]
Cyclic voltammetry	15.0 μM – 60.0 μM	0.11 μM	[3]
Capillary electrophoresis	N/A	3.2 μM	[4]
Green Chromatographic	2.1 μM - 21 μM	0.17 μM	[5]
IC/Hemin/Glucose/H ₂ O ₂ -CL	3.2 μM –10.0 mM	1.45 μM	This work

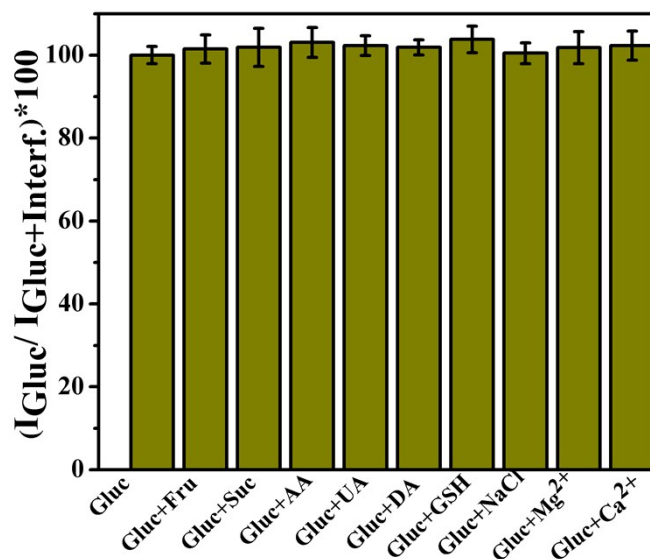


Figure S2. CL response of the system in the absence of additional interference as control (glucose only) and in the presence of different interfering species.

References

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