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Electrochemical sensing platform amplified with Au@Ag nanoparticles decorated three-dimensional N-doped graphene aerogel for ultrasensitive determination of baicalein

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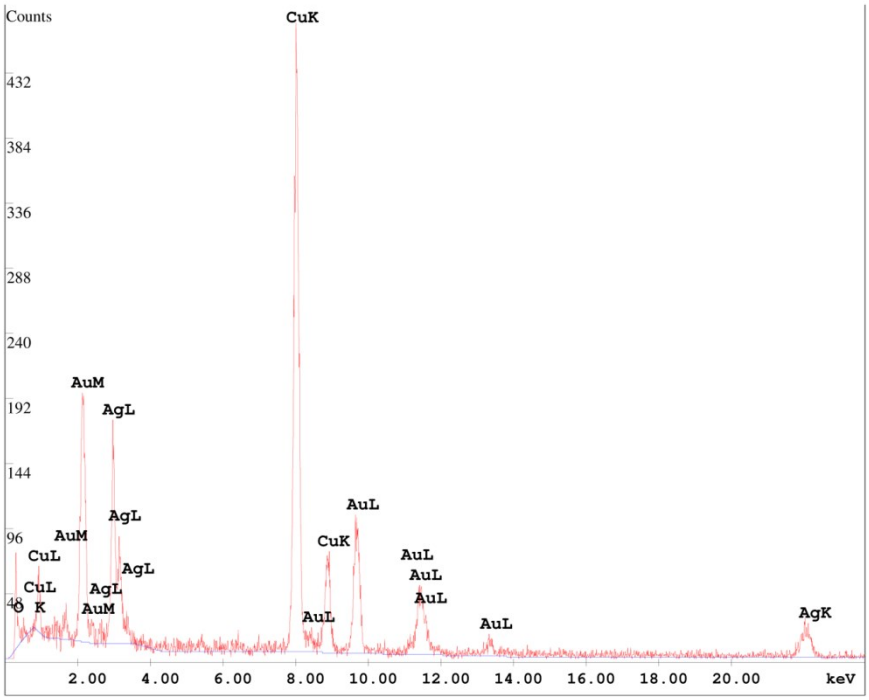

Element	Weight %	Atomic %
AgL	35.1	49.7
AuL	64.9	50.3
Total	100.0	100.0

Fig. S1 Energy dispersive spectroscopy (EDS) spectra of some Au@Ag alloy nanoparticles.

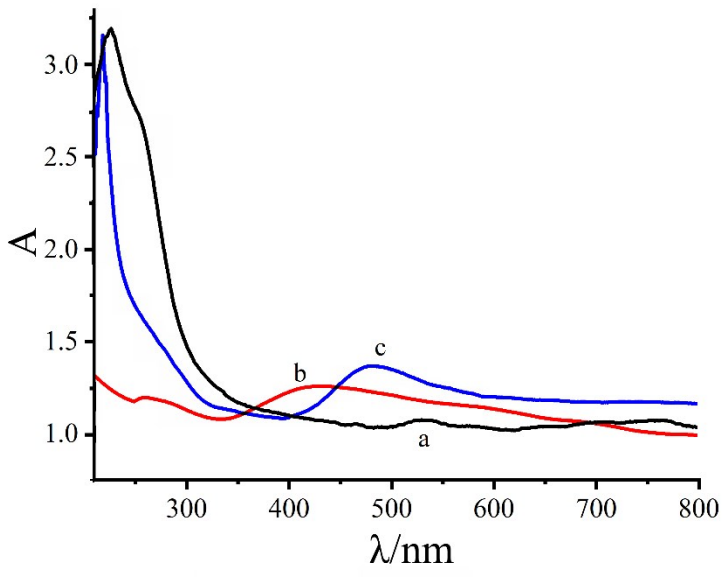

Fig. S2 UV-vis spectra for AuNPs/3DNGA (a), AgNPs/3DNGA (b), and Au@Ag /3DNGA (c)

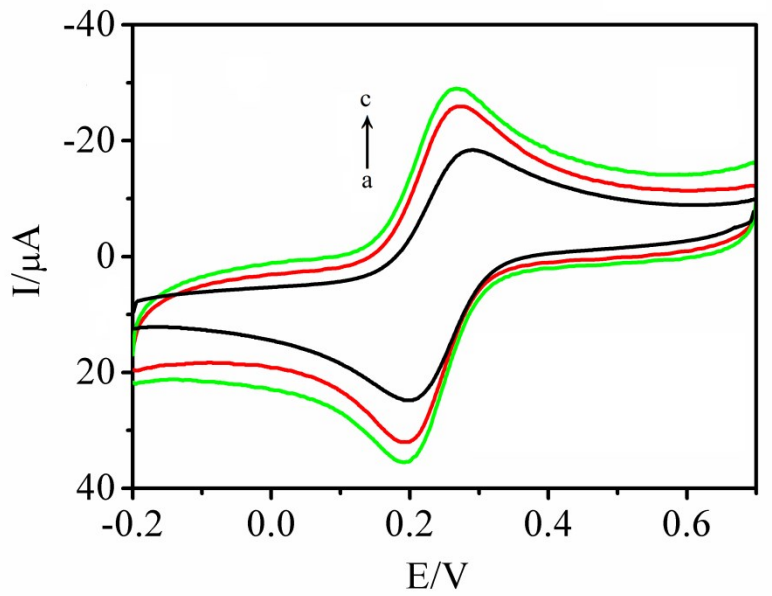

Fig. S3 CV curves of CILE (a), 3DNGA/CILE (b) and Au@Ag/3DNGA/CILE (c) in a 1.0 mmol/L $[Fe(CN)_6]^{3-/4-}$ and 0.5 mol/L KCl solution with the scan rate of 100 mV/s.

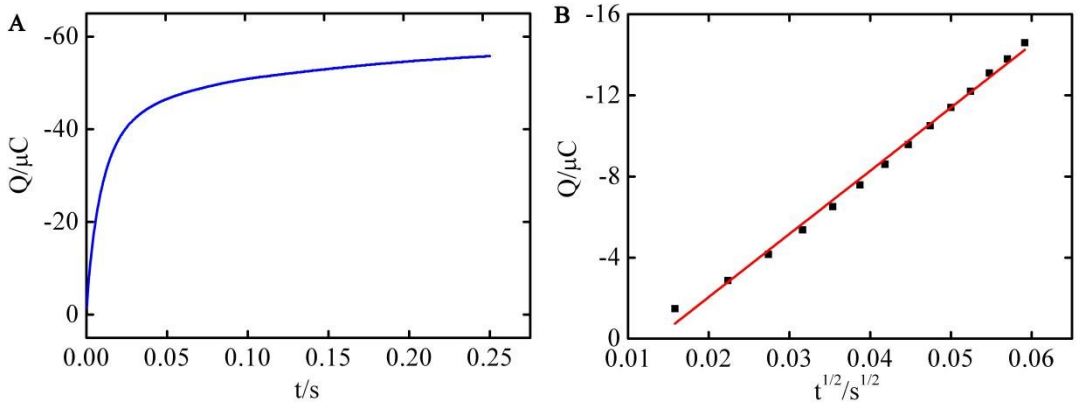

Fig. S4 (A) Chronometric curves of 1×10^{-5} mol/L baicalein on Au@Ag/3DNGA/CILE; (B) Relationship of Q from Au@Ag/3DNGA/CILE with $t^{1/2}$.

Table S1 Atomic percentage of different elements in the Au@Ag/3DNGA nanocomposite.

Matrix	C1s	N1s	O1s	Au4f	Ag3d
Au@Ag/3DNGA	83.23%	7.57%	7.38%	0.76%	1.06%

Table S2 Influence of common coexistent species on baicalein analysis (1.0×10^{-6} mol/L).

Coexisting substance	Concentration (mg/L)	Relative error (%)	Coexisting substance	Concentration (mmol/L)	Relative error (%)
Arginine	10.0	-1.75	Ascorbic acid	1.0	1.48
Valine	10.0	-0.28	Co^{2+}	1.0	-3.20
Alanine	10.0	-2.59	Ba^{2+}	1.0	1.82
Glutamine	10.0	-0.52	Ca^{2+}	1.0	-3.88
Proline	10.0	-3.64	Cu^{2+}	1.0	-0.77
Tyrosine	10.0	-3.28	Cd^{2+}	1.0	-2.37
Lysine	10.0	-2.15	Ni^{2+}	1.0	-4.83
Myohemoglobin	10.0	3.72	Pb^{2+}	1.0	0.37
Glucose	10.0	-0.74	Zn^{2+}	1.0	-0.55