Electronic Supplementary Material (ESI) for Analytical Methods.

Electrochemiluminescence detection of chlorpromazine hydrochloride at bare and graphene oxide modified glassy carbon electrodes

Fengyu Liu,*[a] Jiantao Shao,[a] Yinqi Zhao

[a]State Key Laboratory of Fine Chemicals, School of Chemistry, Dalian University of Technology, No. 2, Linggonglu, Ganjingzi District, 116024, Dalian, China. E-mail: liufengyu@dlut.edu.cn

Supporting information

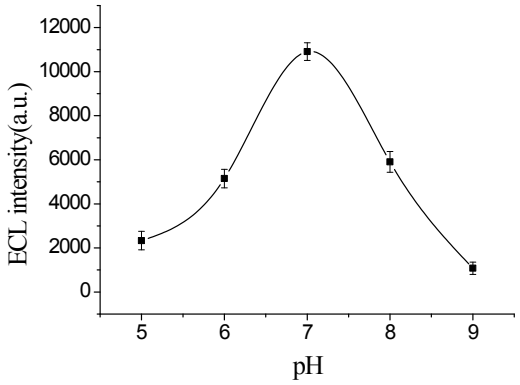

Fig. S1 ECL of 2.0×10^{-4} mol•L^{-1} $Ru(bpy)_3^{2+}$ and 1.0×10^{-5} mol•L^{-1} CPZ under different pH in 0.1 mol•L^{-1} phosphate buffer at GC electrode, Scan rate: 100 mV•s^{-1}.

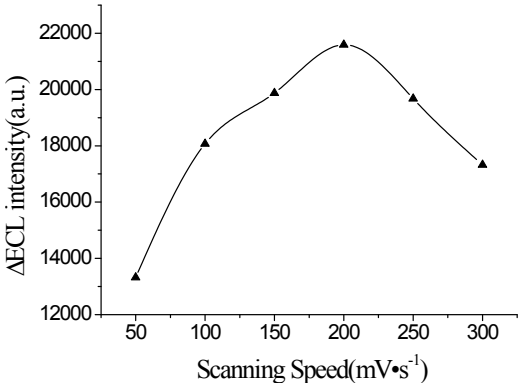

Fig. S2 Dependence of different scan rates on ECL increase with 2.0×10^{-4} mol•L^{-1} $Ru(bpy)_3^{2+}$and 1.0×10^{-5} mol•L^{-1} CPZ in 0.1 mol•L^{-1} phosphate buffer (pH = 7) at GC electrode, $\Delta ECL = ECL_{\text{after addition of analyst}}-ECL_{\text{before addition of analyst.}}$

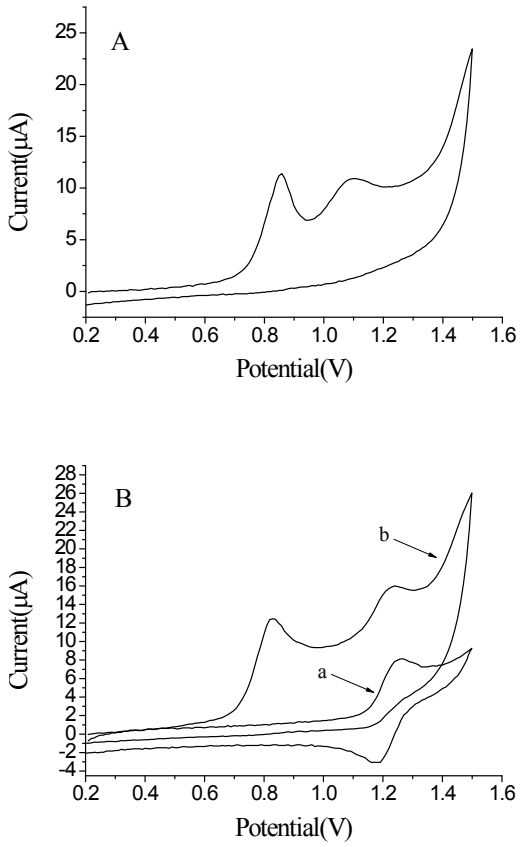

Fig. S3 Cyclic voltammograms of CPZ on GC electrode. A: 1.0×10^{-4} mol•L^{-1} CPZ; B(a): 2.0×10^{-4} mol•L^{-1} $Ru(bpy)_3^{2+}$; B(b): CPZ-$Ru(bpy)_3^{2+}$ (concentration of CPZ: 1.0×10^{-4} mol•L^{-1}; $Ru(bpy)_3^{2+}$: 2.0×10^{-4} mol•L^{-1}.); scan rate: 100 mV•s^{-1}; scan potential: 0.2 - 1.6 V.

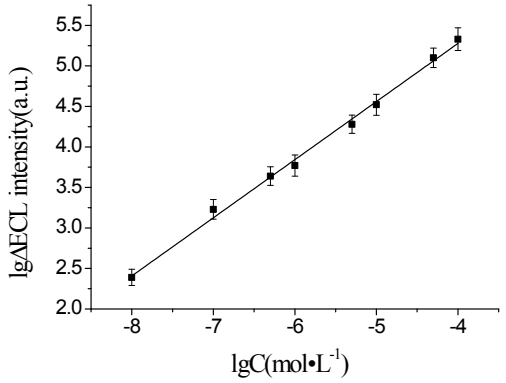

Fig. S4 Dependence of logarithmic ECL increase versus logarithmic concentration of CPZ in 0.1 mol•L^{-1} phosphate buffer (pH = 7) at GC electrode.

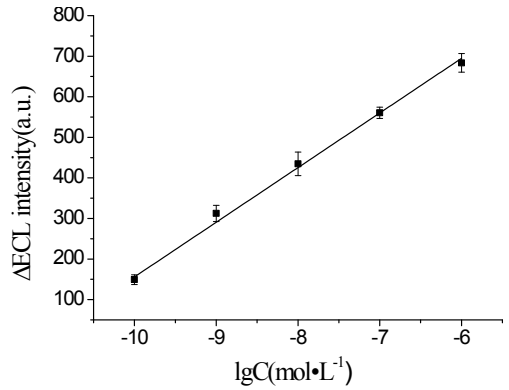

Fig. S5 Dependence of the ECL increase versus the logarithmic concentration of CPZ with 2.0×10^{-4} mol•L^{-1} $Ru(bpy)_3^{2+}$ in 0.1 mol•L^{-1} phosphate buffer (pH = 7) at GO modified GC electrode.

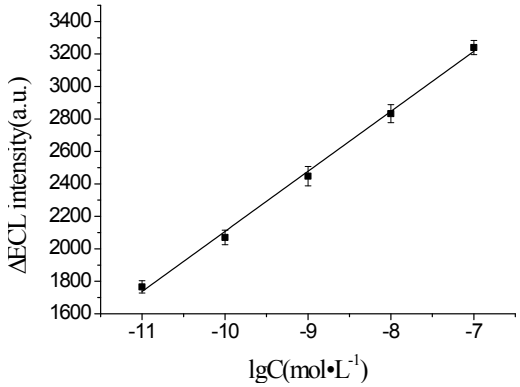

Fig. S6 Dependence of the ECL increase versus the logarithmic concentration of CPZ with 2.0×10^{-4} mol•L^{-1} $Ru(phen)_3^{2+}$ in 0.1 mol•L^{-1} phosphate buffer (pH = 7) at GO modified GC electrode.