

Supporting information

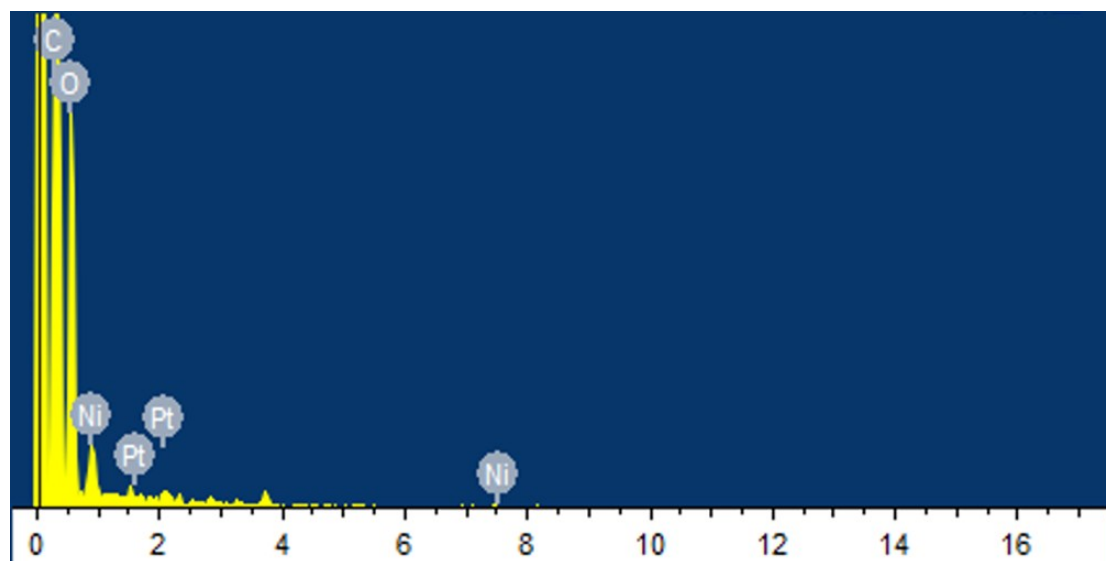


Fig. S-1 EDS pattern of Pt-Ni/PDA/rGO nanocomposites.

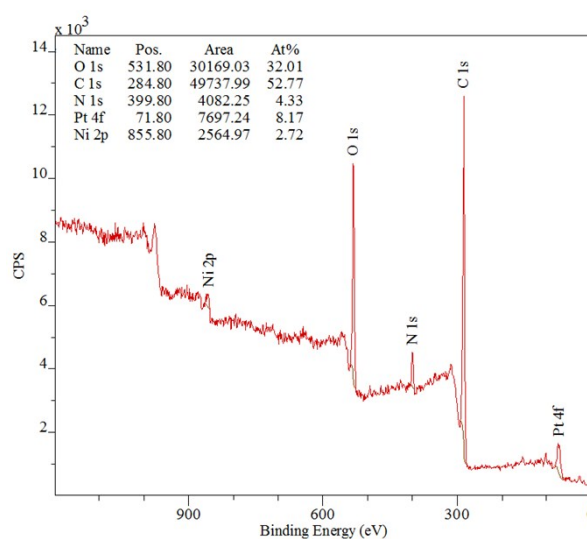


Fig. S-2 XPS spectra of Pt-Ni/PDA-rGO nanocomposites.

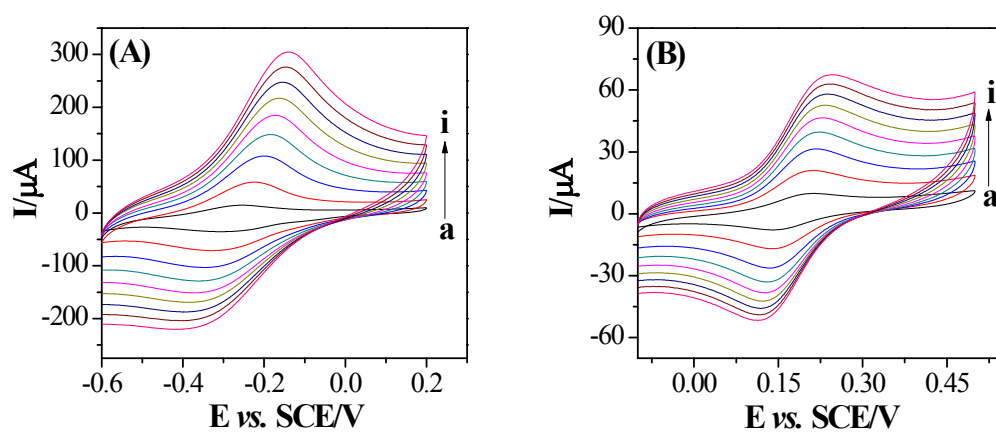


Fig. S-3 Cyclic voltammograms of Pt-Ni/PDA/rGO/GCE for different scan rates in 1 mM $\text{Ru}(\text{NH}_3)_6\text{Cl}_3$ (A) and 1 mM $\text{K}_4\text{Fe}(\text{CN})_6$ (B) with 0.1 M KCl.

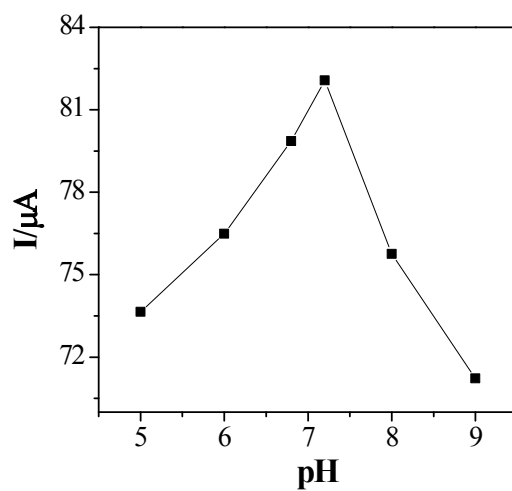


Fig. S-4 Oxidation peak current of 0.8 mM DA for the Pt-Ni/PDA/rGO/GCE in 0.1 mol L^{-1} PBS of different pH value.

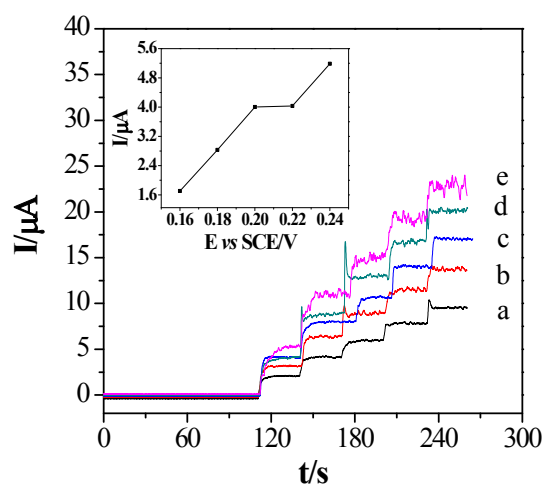


Fig. S-5 Current-time curves of the Pt-Ni/PDA/rGO/GCE with successive injection of 0.1 mM DA at different applied potentials (from a to e: 0.16, 0.18, 0.20, 0.22, 0.24 V, respectively); Inset: Relationship between the current and the applied potential.

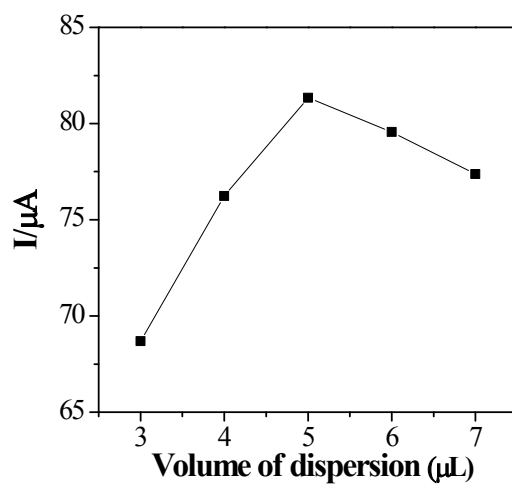


Fig. S-6 The coverage study of Pt-Ni/PDA/rGO for 0.8 mM DA.

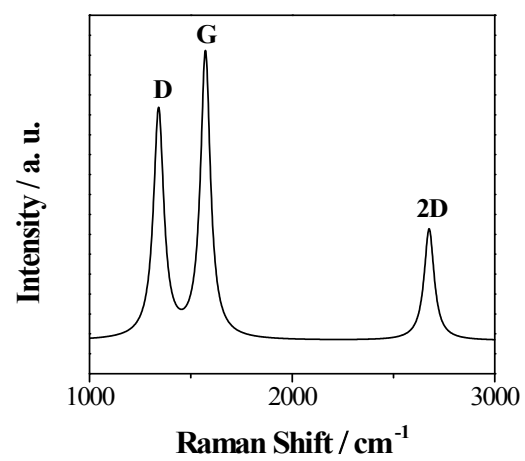


Fig. S-7 Raman spectra of Pt-Ni/PDA/rGO