

Supplementary Information

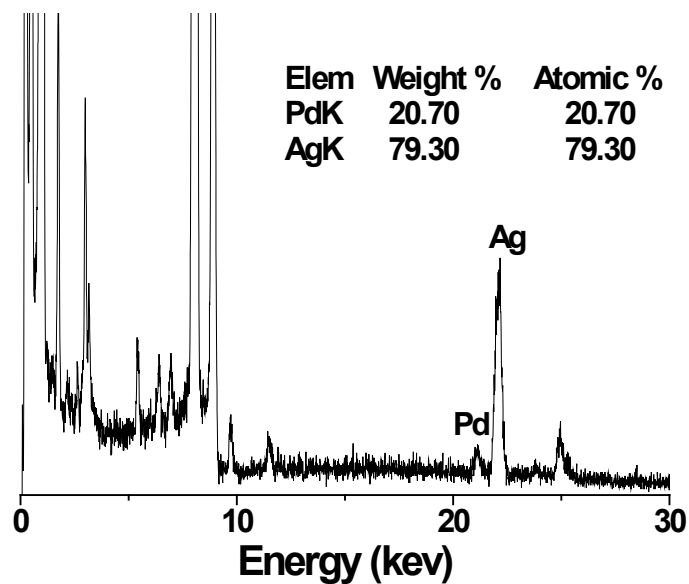


Fig. S1. EDS of Ag₄Pd₁ alloy nanoparticles

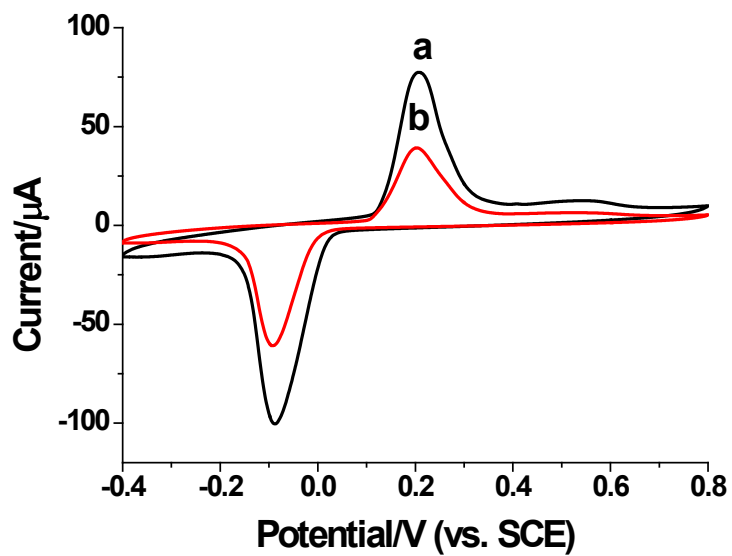


Fig. S2. Cyclic voltammograms of IL-GN-Ag₄Pd₁/GCE (a) and Ag₄Pd₁/GCE (b) in 0.1 M PBS (pH = 7.0). Scan rate: 50 mV/s.

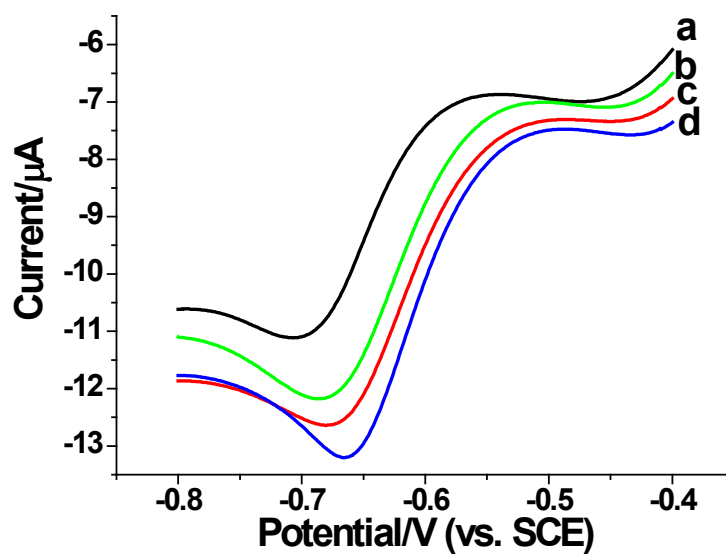


Fig. S3. Linear sweep voltammograms of IL-GN-Ag/GCE (a), IL-GN-Ag₂Pd₁/GCE (b), IL-GN-Ag₆Pd₁/GCE (c) and IL-GN-Ag₄Pd₁/GCE (d) in 0.1 M PBS (pH 7.0) solution containing 25 μM TCA and 80 μM CTAB. Scan rate: 50 mV/s.

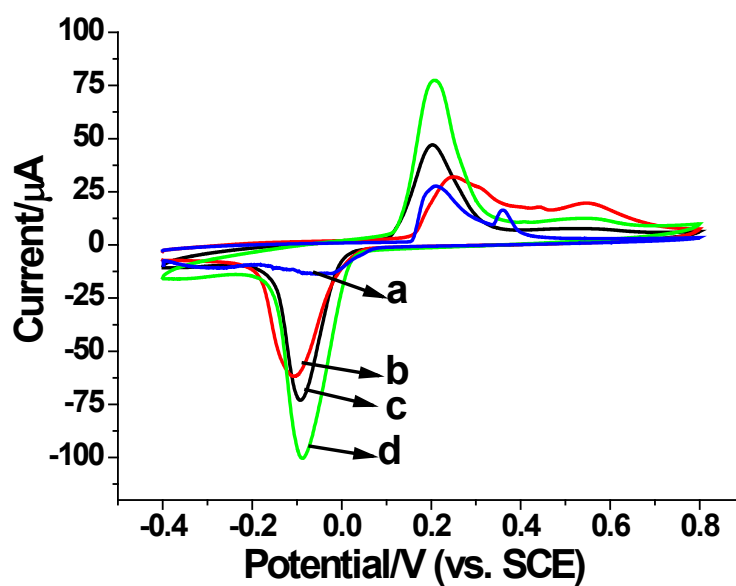


Fig. S4. Cyclic voltammograms of IL-GN-Ag/GCE (a), IL-GN-Ag₂Pd₁/GCE (b), IL-GN-Ag₆Pd₁/GCE (c) and IL-GN-Ag₄Pd₁/GCE (d) in 0.1 M PBS (pH = 7.0). Scan rate: 50 mV/s.

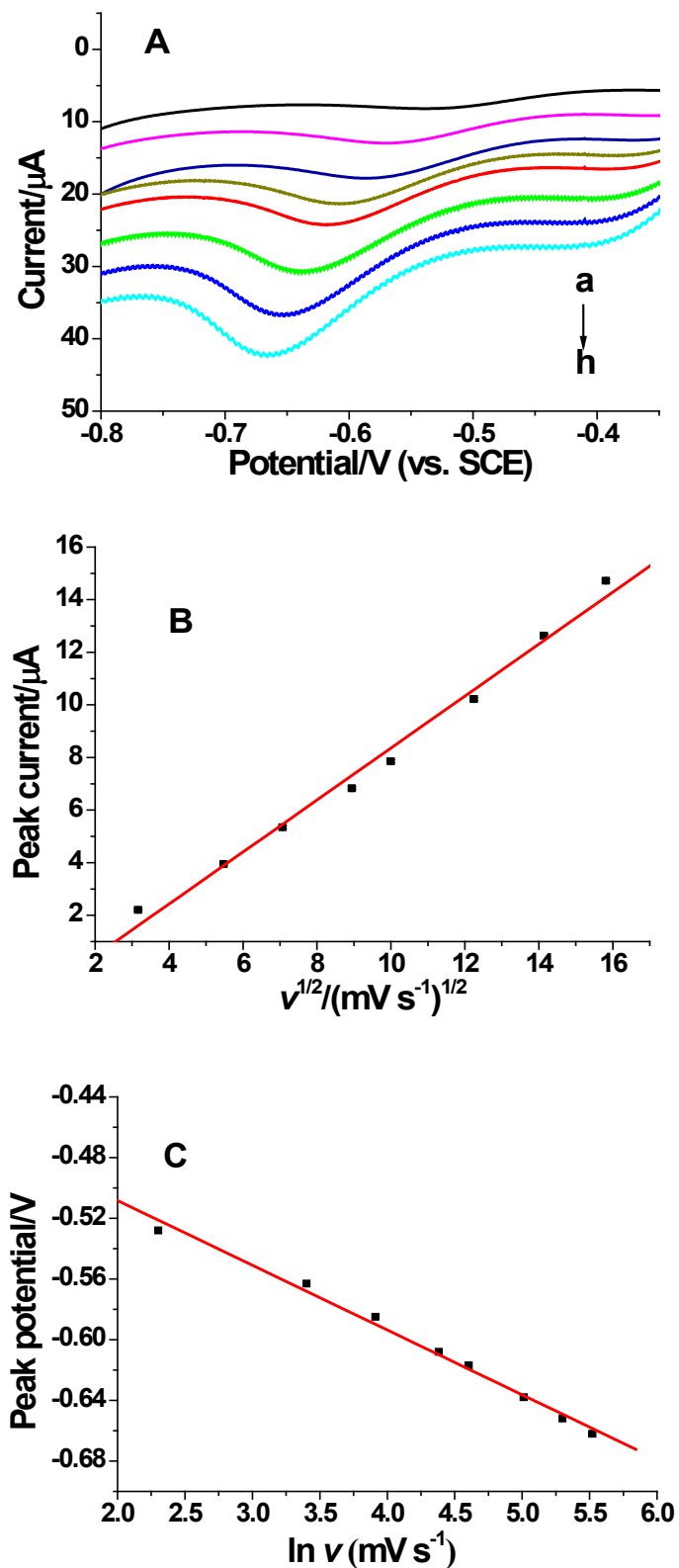


Fig. S5. (A) LSVs of TCA on IL-GN-Ag₄Pd₁/GCE at different scan rates. Scan rate (mV/s): 10 (a), 30 (b), 50 (c), 80 (d), 100 (e), 150 (f), 200 (g) and 250 (h). (B) Variation of peak current with $v^{1/2}$. (C) Variation of peak potential with $\ln v$.

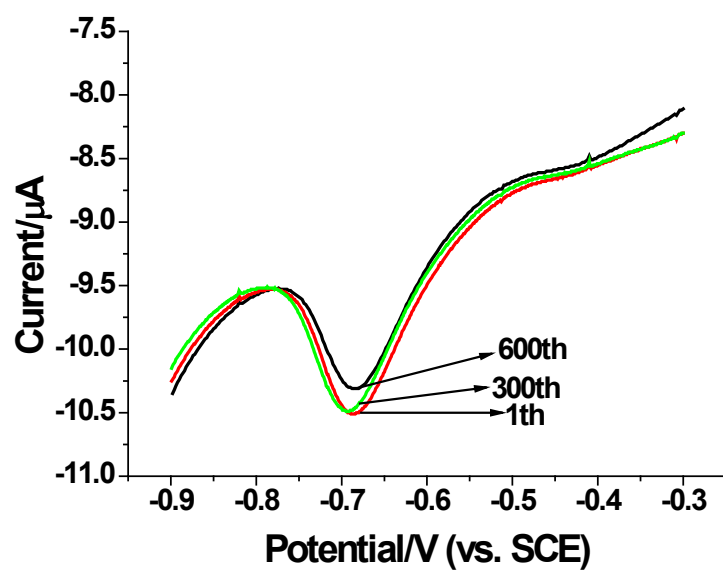


Fig. S6. Linear sweep voltammograms of IL-GN-Ag₄Pd₁/GCE in 0.1 M PBS (pH 7.0) containing 5 μM TCA and 80 μM CTAB. Scan rate: 50 mV/s. Labeled in the figure is the number of measurement.