

Supplementary data

Highly sensitive sensors for amperometric detection of nitrite based on carbon-supported PdNi and PdCo bimetallic nanoparticles

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Fig. S1

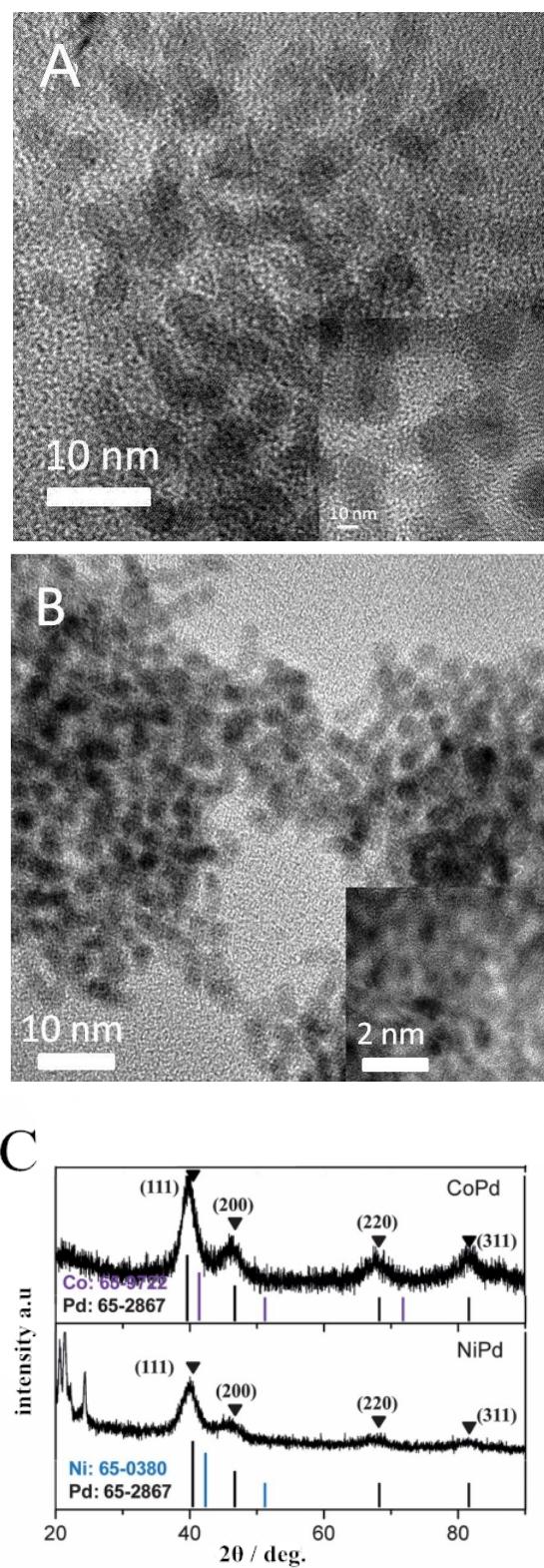


Fig. S1. (A) HR-TEM image of NiPd nanocrystals. (B) HR-TEM image of CoPd nanocrystals. (C) XRD patterns of as-synthesized CoPd and NiPd nanocrystals.

Fig. S2

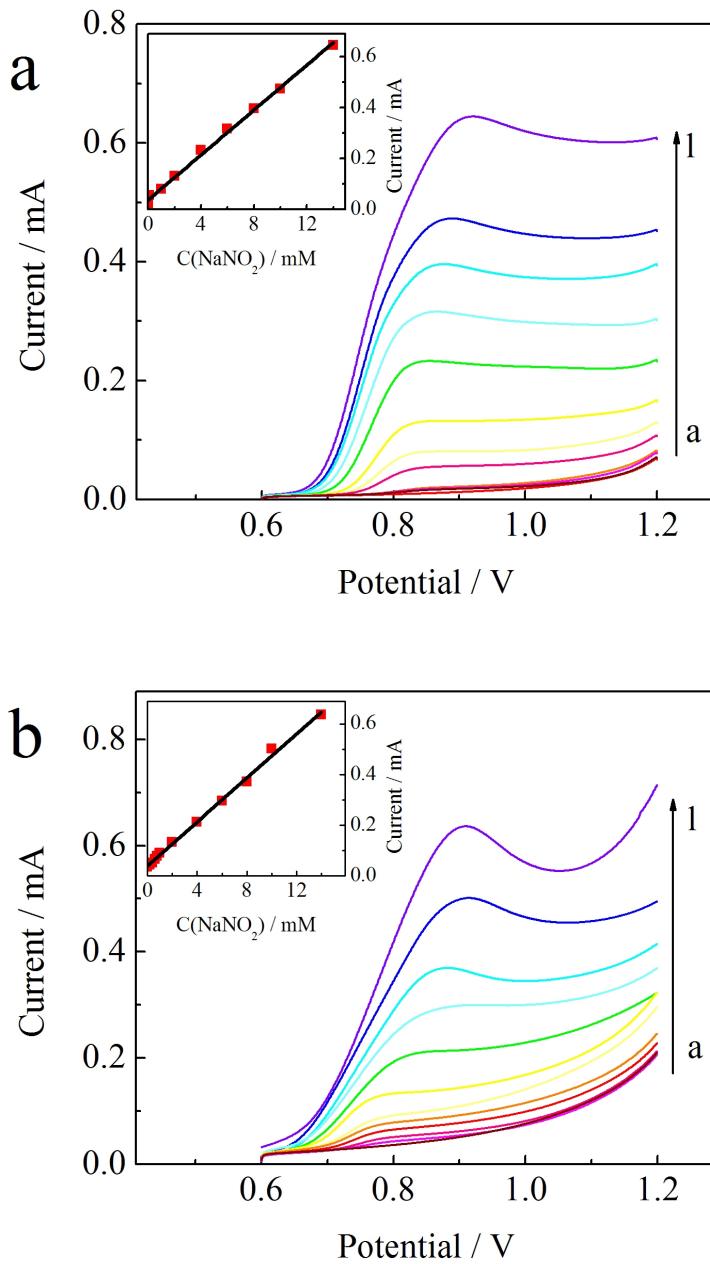


Fig. S2. Linear sweep voltammetry of PdNi/C (a) and PdCo/C (b) modified GCEs in 0.1 M PBS (pH=7.0) solution at different concentrations of nitrite: (a) 0.0, (b) 0.001, (c) 0.01, (d) 0.1, (e) 0.5, (f) 1, (g) 2, (h) 4, (i) 6, (j) 8, (k) 10, and (l) 14 mM; scan rate: 50 mV s⁻¹. Inset shows the calibration curve

Fig. S3

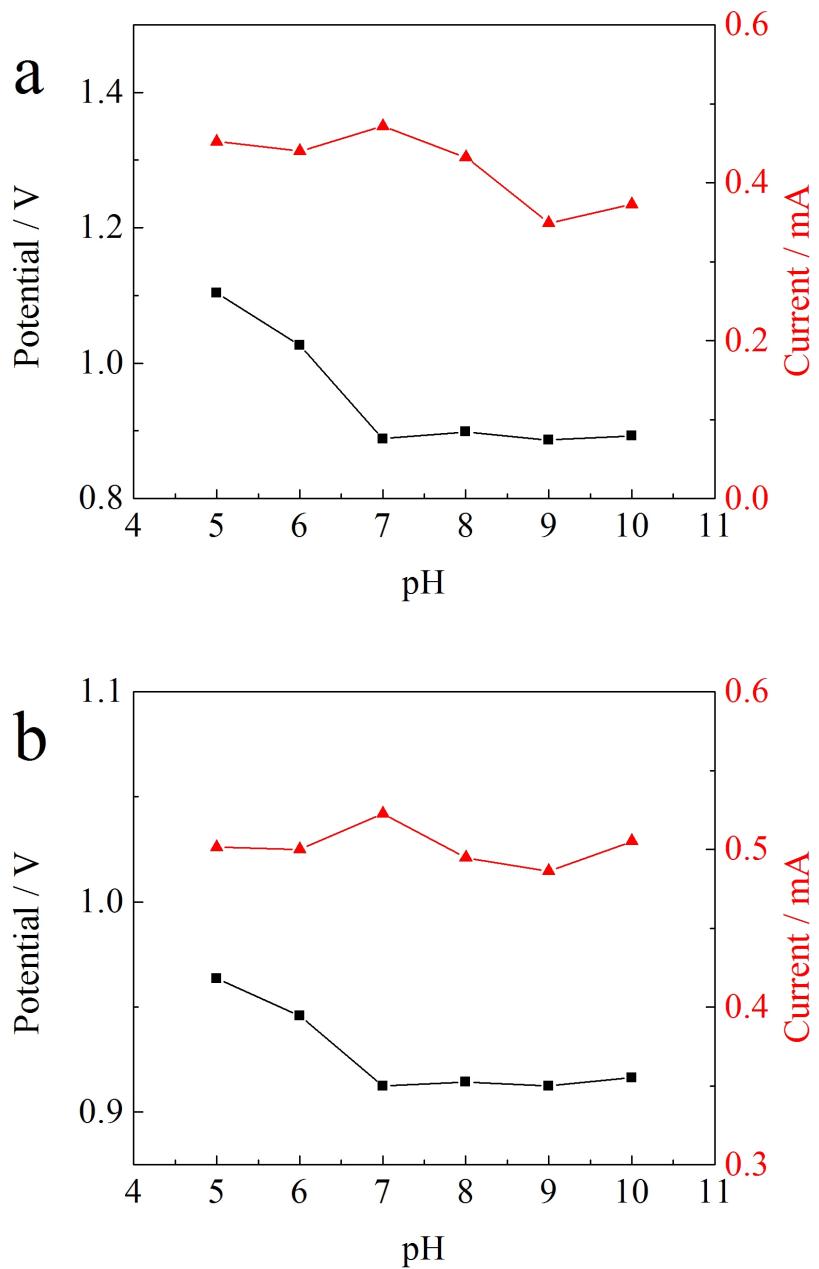


Fig. S3. The dependence of the oxidation peak potential and oxidation peak current on pH at PdNi/C (a) and PdCo/C (b) modified GCEs. Scan rate: 20 mV s⁻¹; $C_{\text{NaNO}_2} = 10 \text{ mM}$.