Electronic Supporting Information

Effective determination of Cd(II) and Pb(II) simultaneously using square wave anodic stripping voltammetry based on aluminum silicon carbide-reduced graphene oxide nanocomposite modified electrode

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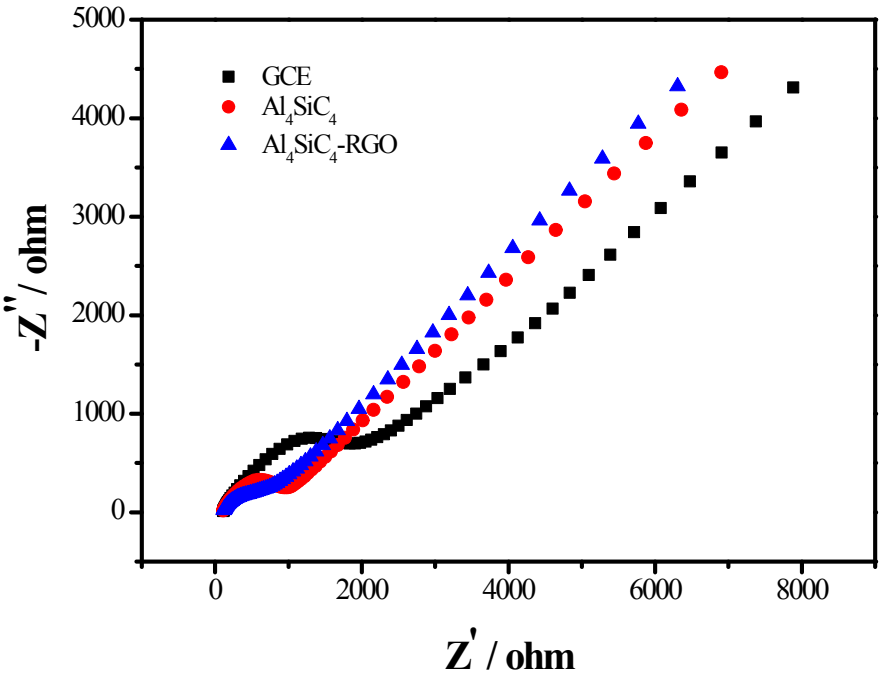

Fig. S1 Nyquist diagram of electrochemical impedance spectra for bare , Al_4SiC_4 nanoparticle, and Al_4SiC_4-RGO nanocomposite modified GCE in the solution of 5 mmol/L $[Fe(CN)_6]^{3-/4-}$ containing 0.1 mol/L KCl.

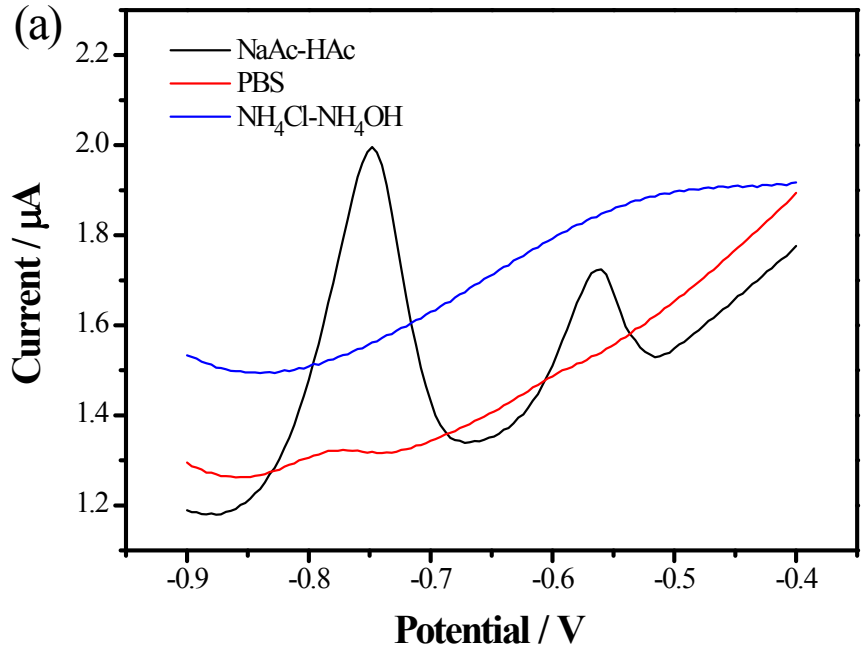

Fig. S2 (a)

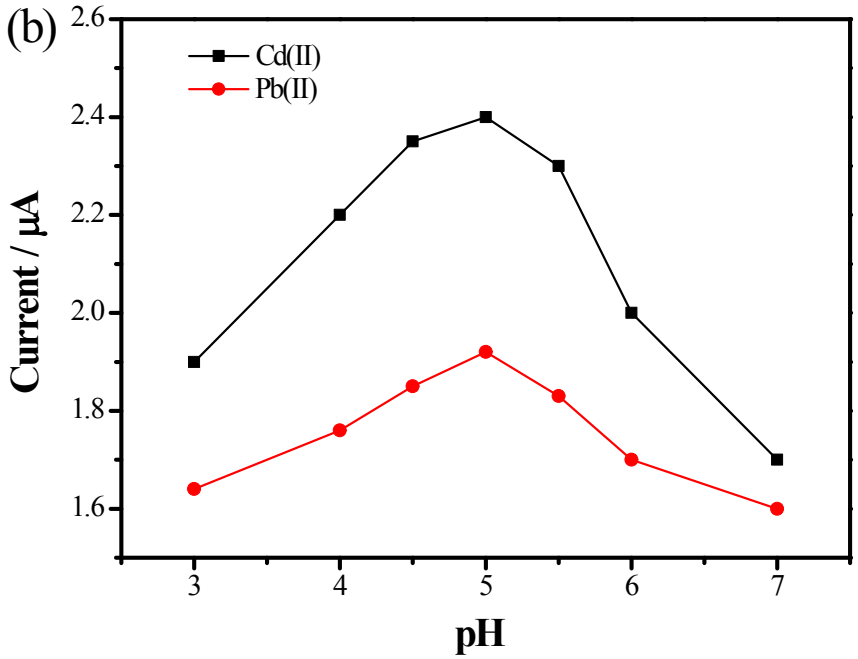

Fig. S2 (b)

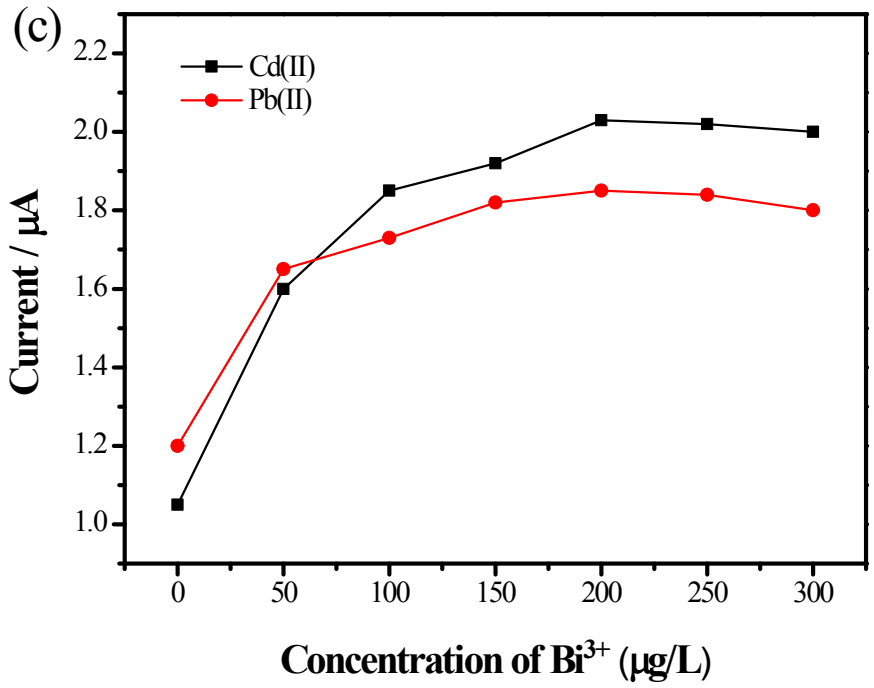

Fig. S2 (c)

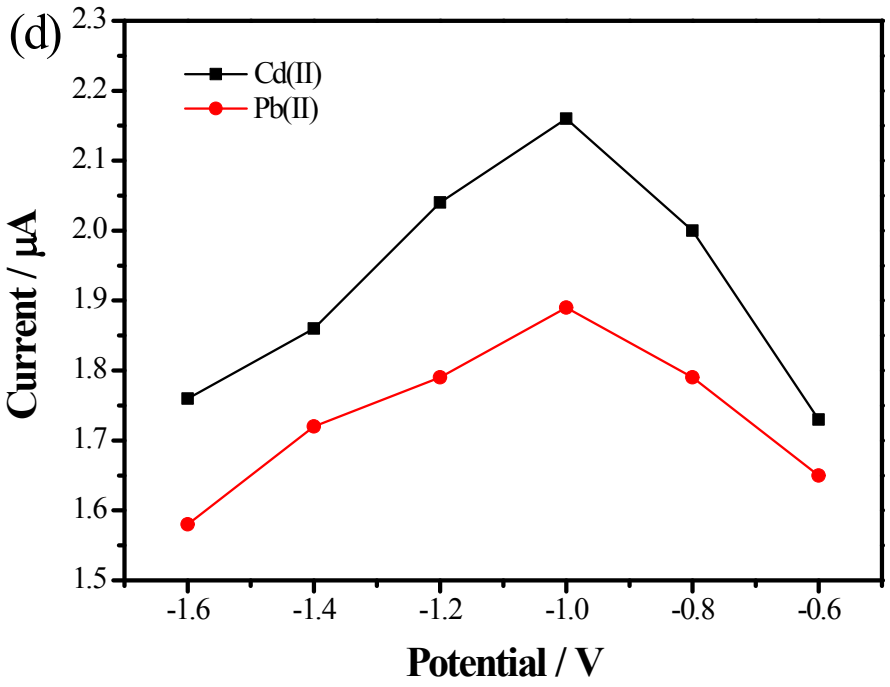

Fig. S2 (d)

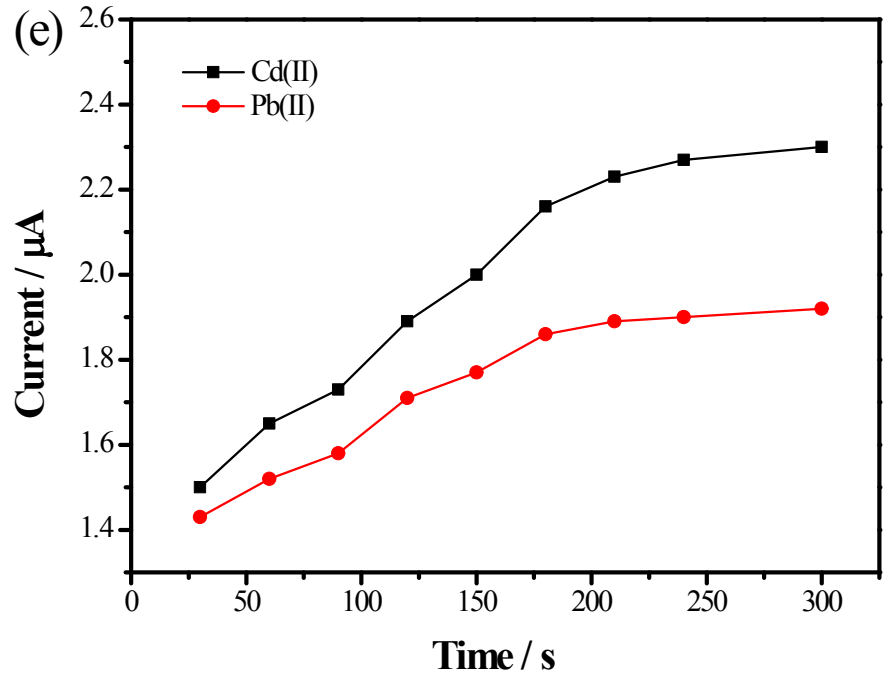

Fig. S2 (e)

Figs. S2(a-e) Optimization of experimental conditions. Influence of (**a**) supporting electrolytes; (**b**) pH value; (**c**) Concentrations of Bi^{3+}; (**d**) deposition potential; and (**e**) deposition time on the voltammetric response of the Al_4SiC_4-RGO nanocomposite modified GCE. Data were evaluated by SWASV of 150 µg/L each of Cd(II) and Pb(II).

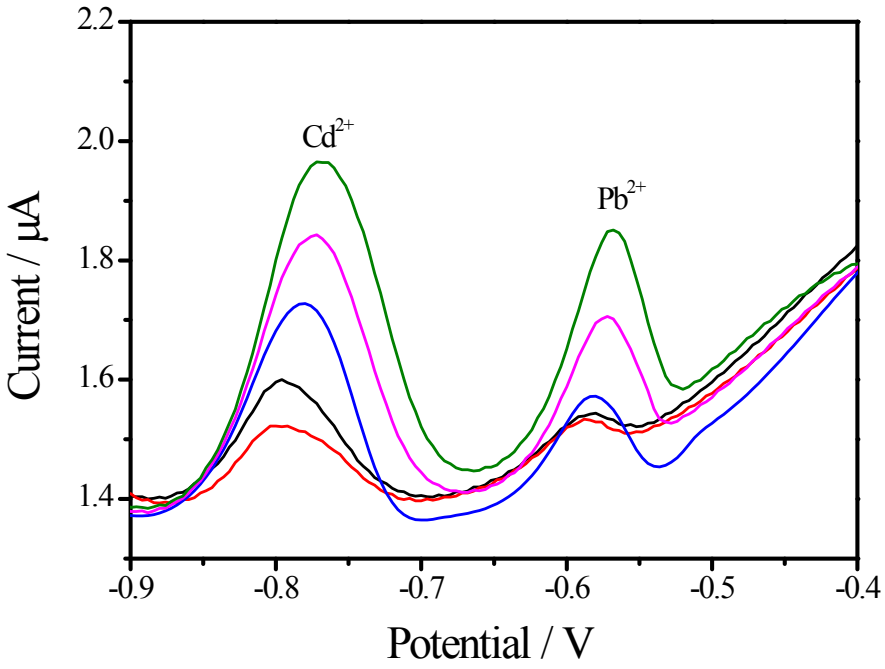

Fig.S3 SWASV response of the Al_4SiC_4-RGO nanocomposite modified GCE for the simultaneous analysis of Cd(II) and Pb(II) with different concentrations, from LOQ to 150 μg/L (10 μg/L, 40 μg/L, 70 μg/L, 100 μg/L, 120 μg/L, 150 μg/L). 0.1 mol/L acetate buffer (pH 5.0); Deposition potential, -1.0 V; deposition time, 180 s; concentrations of Bi^{3+}, 200 μg/L.