Supporting Information for Fabrication of reduced graphene oxide-

bimetallic Pd@Au nanocomposites for the simultaneous determination of

ascorbic acid, dopamine, and uric acid

Cui'e Zou^a, Jiatai Zhong^a, Jin Wang^a, Shumin Li^a, Bo Yan^a, Jun Guo^c, Yukou Du^{a,b*}

- ^a College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, PR China.
- ^b Tokyo University of Science Yamaguchi, SanyoOnoda-shi, Yamaguchi 756-0884, Japan.



^c Testing and Analysis Center, Soochow University, Suzhou, 215123 PR China.

Figure S1. (A) XRD Patterns for RGO, Pd@Au, and Pd@Au/RGO. (B) CVs of bare GCE, RGO/GCE, Pd@Au/GCE, and Pd@Au/RGO/GCE recorded in 5.0 mM $Fe(CN)_6^{3-/4-} + 0.1$ M KCl solution.



Figure S2. CVs of the Pd@Au/RGO/GCE in 0.1 M PBS (pH = 7.0) solution containing 5.0 mM AA(A), 0.1 mM DA(B), 0.5 mM UA(C) at scan rates from 20 to 200 mV s⁻¹.



Figure S3. CVs of the Pd@Au/RGO/GCE in 0.1 M PBS solution containing 5.0 mM AA(A), 0.1 mM DA(B), 0.5 mM UA(C) under different pH solutions ranging from 5.0 to 9.0, inserts are the corresponding plots of potentials(V) versus pH of the solution.



Figure S4. Individual DPV curves of the Pd@Au/RGO/GCE in 0.1 M PBS (pH = 7.0) solution containing different concentrations of AA(24.88 to 515.70 μ M), DA(0.2 to 2.63 μ M), UA(1.25 to 13.38 μ M) at the scan rate of 50 mV s⁻¹; The inserts are the anodic currents versus the concentration of AA, DA and UA accordingly.