Electronic supplementary information (ESI)

Facile and Novel Electrochemical Preparation of Graphene–Transition Metal Oxide Nanocomposite for Ultrasensitive Electrochemical Sensing of Acetaminophen and Phenacetin

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Fig. S1 (A) SWVs of ZnO/EGR/GCE to 20 μ M AC in 0.1 M PBS with different pH values. Inserts are plots of E and I *vs* pH value, respectively. (E/V = 0.7145 – 0.0545 pH) (B) Effect of modification time to the SWV responses of ZnO/EGR/GCE to 20

µM AC in 0.1 M PBS (pH 6.0).



Fig. S2 Raman spectrum of ZnO. All data were acquired at 514.5 nm excitation.

Table S1

Results of interference experiments on the current intensity of AC and PCT on ZnO/EGR/GCE. (n = 3)

Interferent	Concentration (µM)	Current ratio ^{<i>a</i>} of AC	Current ratio of PCT
Phenylalanine	50	1.053	0.988
Alanine	50	0.959	0.860
Leucine	50	1.095	0.925
Glucose	200	1.150	0.891
Maltose	100	1.146	1.129
Sucrose	100	1.106	1.073
Citric acid	400	1.087	0.966
NaCl	200	1.060	1.023
	100	1.172	1.201
$\operatorname{Cu}(\operatorname{NO}_3)_2$	100	1.104	1.105
^a Ratio of currents for mixtures of interferents and 10 μ M AC or 10 μ M PCT			
6).			