## Supplementary Information for

## Raspberry-like Pd<sub>3</sub>Pb alloy nanoparticles: Superior electrocatalytic activity for ethylene glycol and glycerol oxidation

Yujie Duan<sup>a</sup>, Zhelin Liu<sup>a</sup>, Bo Zhao<sup>a,\*</sup>, Jinghai Liu<sup>b</sup>

<sup>a</sup> School of Chemistry & Environmental Engineering, Changchun University of

Science and Technology, Changchun, Jilin 130022, P.R. China

<sup>b</sup> Inner Mongolia Key Laboratory of Carbon Nanomaterials, College of Chemistry

and Chemical Engineering, Nano Innovation Institute, Inner Mongolia University for

Nationalities, Tongliao, Inner Mongolia 028000, China



Fig. S1 Typical TEM images of PdPb (A) and PdPb<sub>3</sub> (B) nanomaterials.



Fig. S2 Typical TEM images of products prepared without CTAC (A) or citric acid (B).



**Fig. S3** CV curves of Pd<sub>3</sub>Pb (a), PdPb (b), Pd (c) and PdPb<sub>3</sub> (d) modified GCEs in 1 M KOH at the

scan rate of 50 mV s  $^{-1}$ .



**Fig. S4** Histograms of activities per unit Pd mass (left) or total mass (right) on Pd<sub>3</sub>Pb alloy and commercial 10% Pd/C catalyst towards the electrooxidation of ethylene glycol (A) and glycerol

(B).