

Supplementary Material

Well-Dispersive Palladium Nanoparticles on Graphene Oxide for Nonenzymatic Glucose Sensor

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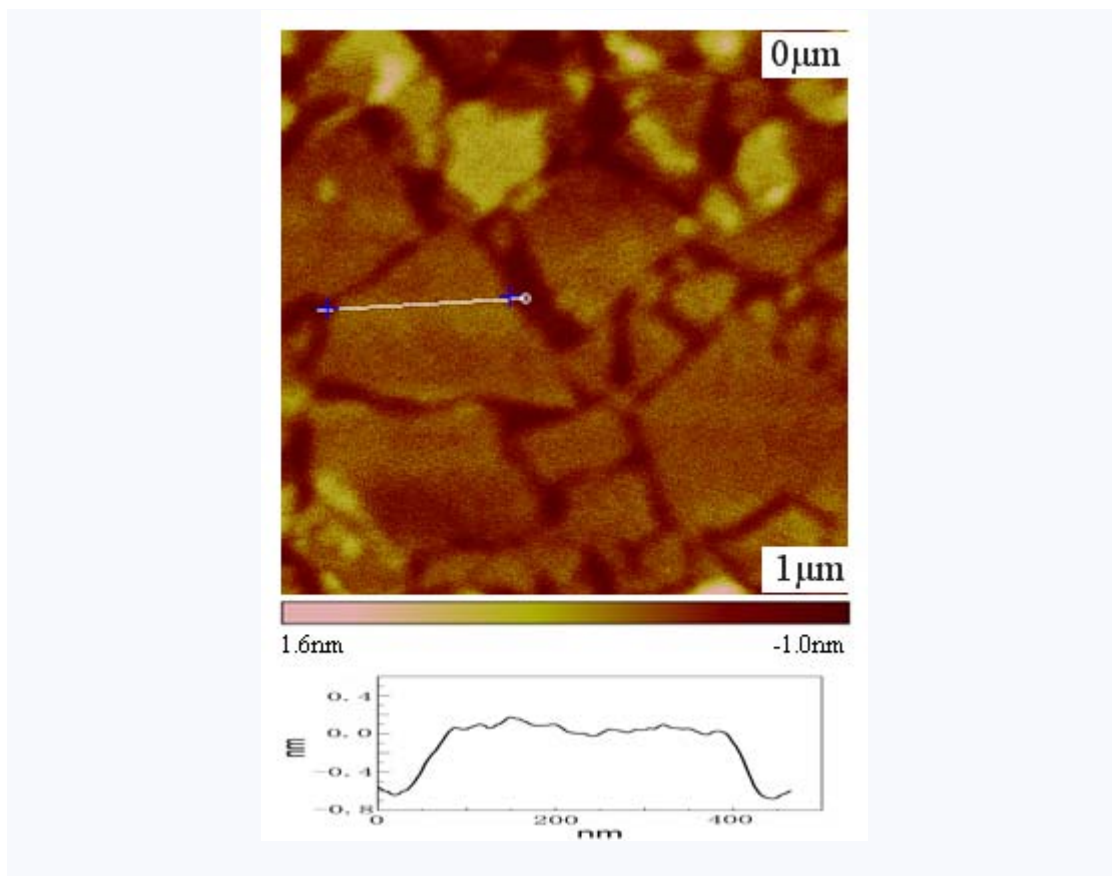


Fig. S1 AFM image and height profile of GO.

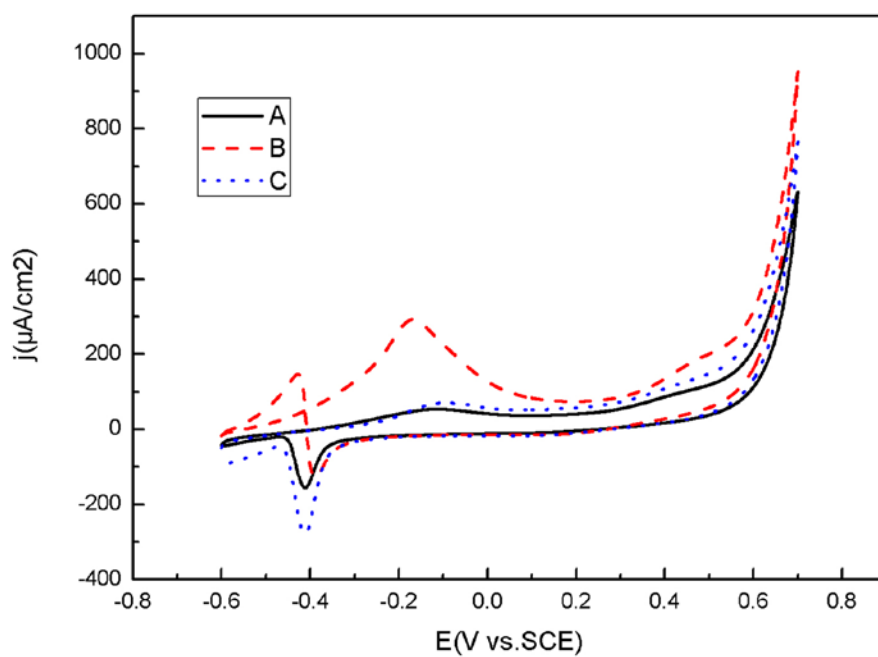


Fig. S2 CVs of as-prepared Pd NPs/GO at different volume ratios of GO and Pd modified GCE in 0.1 M NaOH with 5mM glucose. A) 10:1, B) 20:1, C) 40:1. Reaction time: 15 min. Scan rate: 10 mV/s.

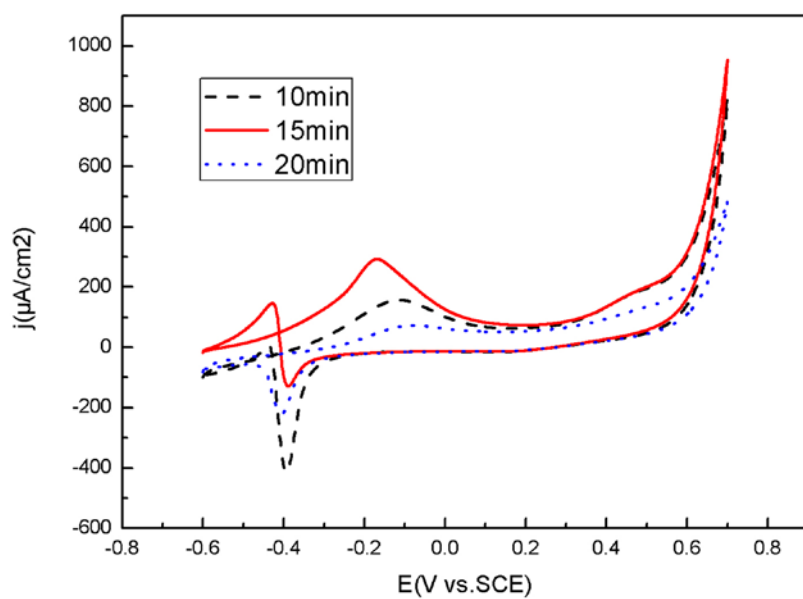


Fig. S3 CVs of as-prepared Pd NPs/GO prepared at different ultrasound time (10 min, 15 min and 20 min) modified GCE in 5 mM glucose solution with 0.1 M NaOH. Volume ratios of GO and Pd: 20:1. Scan rate: 10 mV/s.

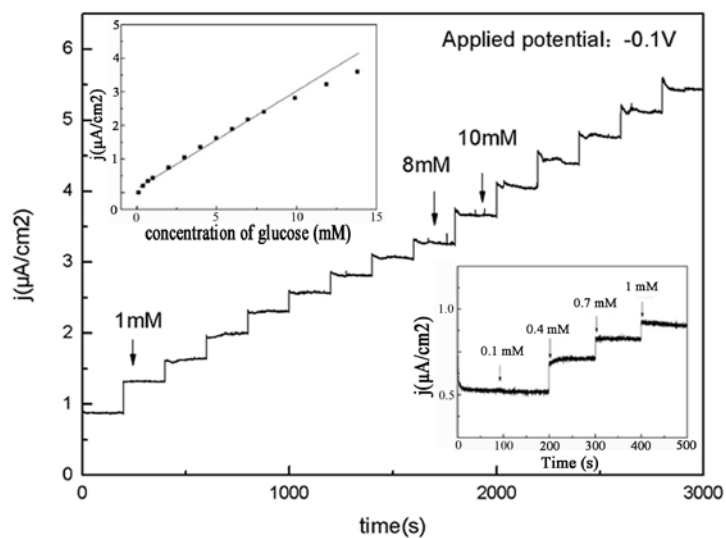


Fig. S4 Typical current density–time dynamic response of as-synthesized Pd NPs/GO-nafion (reaction time: 15 min. volume ratios of GO and Pd: 20:1) modified GCE towards successive addition of 1 mM glucose in NaOH (0.1 M) at -0.1 V , the left inset is the calibration curve for glucose detection, the right inset is amplified response curve.

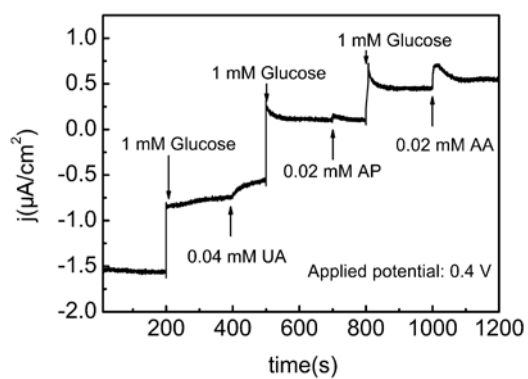


Fig. S5 Typical current density–time dynamic response of as-synthesized Pd NPs/GO-nafion (reaction time: 15 min. volume ratios of GO and Pd: 20:1) modified GCE towards interferences and glucose in NaOH (0.1 M) at 0.4 V.