Supplementary Material

For

Electrochemical sensor based on laser scribed graphitic carbon nanosheets loading palladium nanoparticles: Ultrasensitive detection of hydrazine

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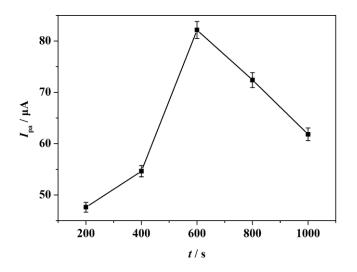


Fig. S1 The oxidation peak current of 2.0 mM hydrazine in 0.1 M PBS (pH = 7) at Pd/LSGCNs/GCE with different electrodeposition time of Pd (200, 400, 600, 800 and 1000 s) at -0.2 V potential

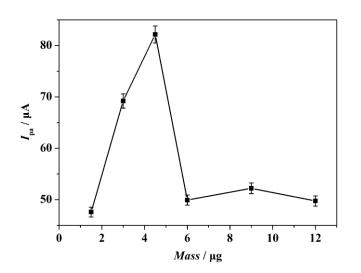


Fig. S2 The oxidation peak current of hydrazine on the different mass of Pd/LSGCNs/GCE in the presence of 2.0 mM hydrazine in 0.1 M PBS (pH=7): 1.5, 3.0, 4.5, 6.0, 9.0 and 12.0 μg

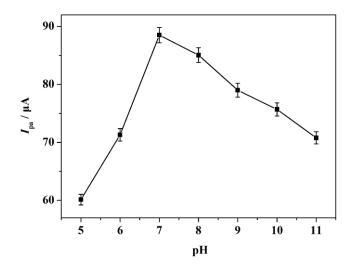


Fig. S3 Variation of the anodic peak current with pH

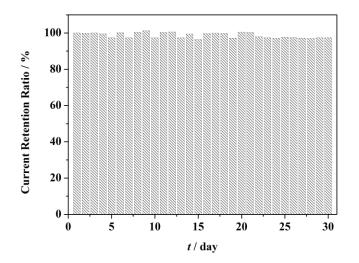


Fig. S4 The current conservation ratio for Pd/LSGCNs/RDE during one month

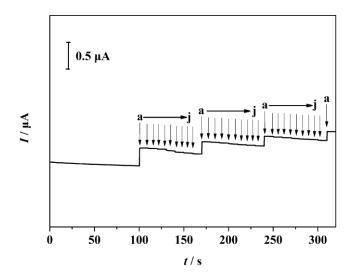


Fig. S5 Amperometric response on Pd/LSGCNs/RDE of (a) 5 μ M hydrazine added into 0.1 M PBS (pH=7) with (b) uric acid in 3-fold concentration, (c) Na⁺, (d) CO₃²⁻ and (e) fructose in 60-fold concentration, and (f) glucose, (g) NH₄⁺, (h) Cl⁻, (i) K⁺ and (j) NO₃⁻ in 200-fold concentration