

Supporting materials

Effect of H_{Au}Cl₄ concentration on electrochemical DNA sensing behaviors of Au/nanoSPAN nanocomposite

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EDS results of Au/nanoSPAN/CPE

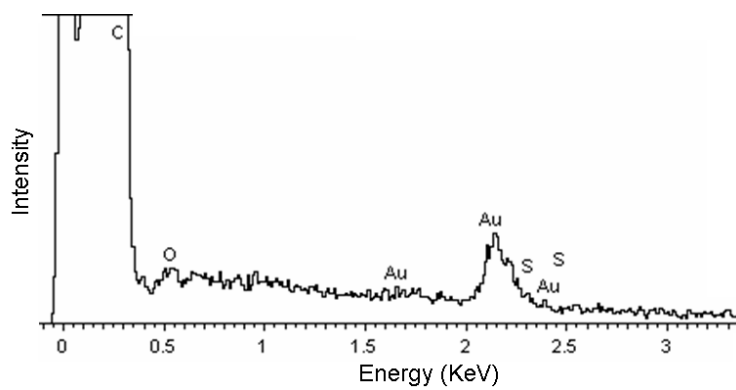


Fig. S1. EDS results of Au/nanoSPAN/CPE.

The effect of solution pH on the electrochemistry of Au/nanoSPAN/CPE

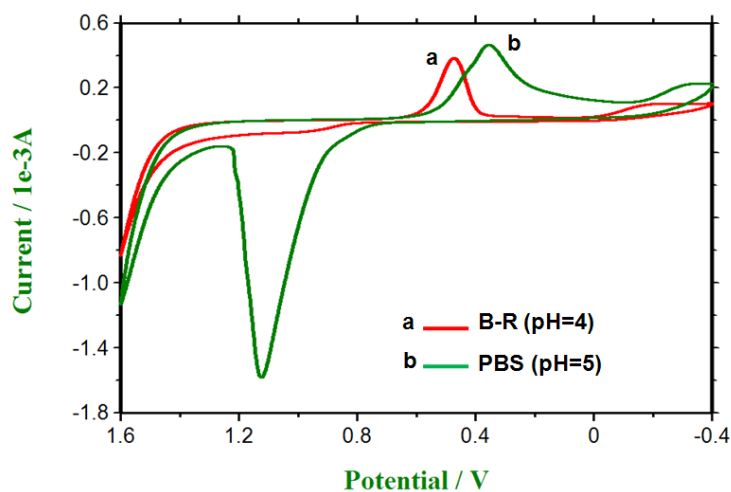


Fig. S2. CVs of Au/nanoSPAN/CPE in Britton–Robinson (B-R, pH=4) and phosphate buffer solution (PBS, pH=5)

As shown in Fig. S2, CVs of Au/nanoSPAN/CPE in B-R (pH=4) and PBS (pH=5) were also recorded for comparison with 0.5 M H₂SO₄ solution in Fig. 2. The result stated that the reduction peak potentials shifted negatively with the increase of the solution pH compared with 0.5 M H₂SO₄. In PBS (pH=5), an obvious oxidation peak appeared. The detailed mechanism is not unclear now.