Supporting Information

Label-free biosensor using a silver specific RNA-cleaving DNAzyme functionalized single-walled carbon nanotube for silver ion determination

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Keywords: Biosensor; Field effect transistor; Single carbon nanotube; Silver ion, Biosensor; DNAzyme

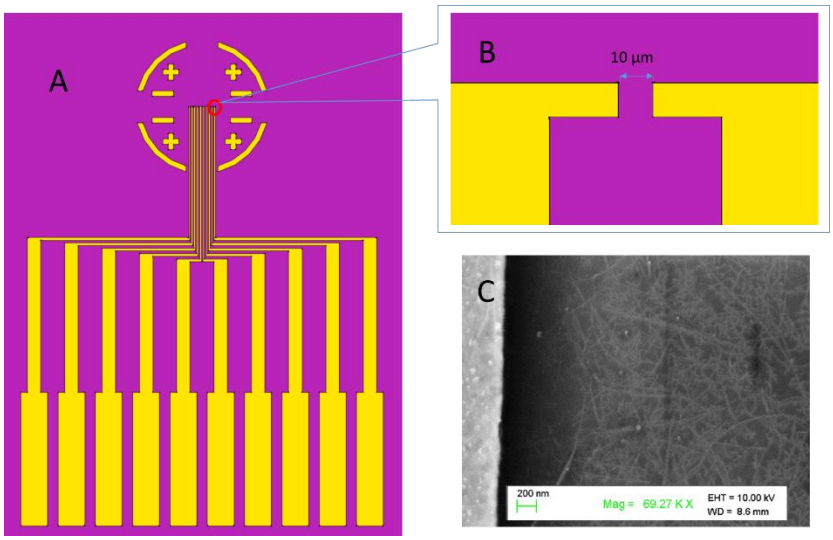

Figure S1. SEM image of SWNT networks produced by APTES-assisted assembly technique.

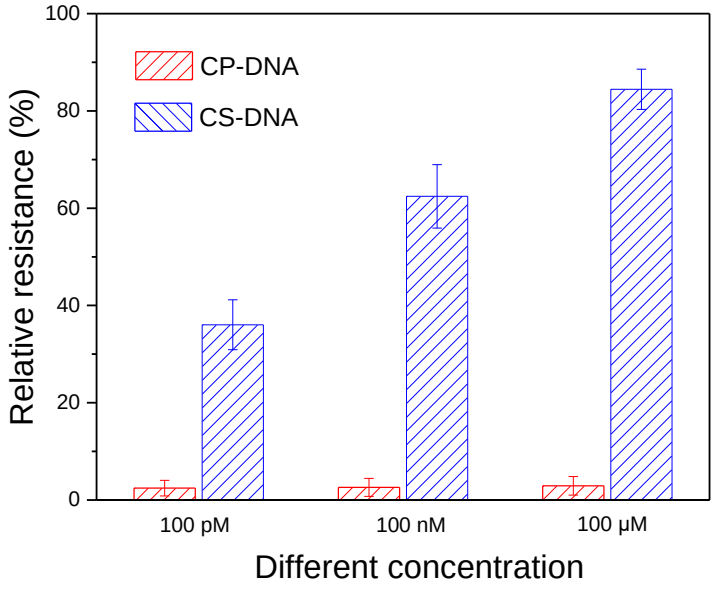

Figure S2. Effect of the 'A' base type of the Ag cleavage junction on the performance of the biosensor with the three Ag(I) concentrations (100 pM, 100 nM, 100 μM).

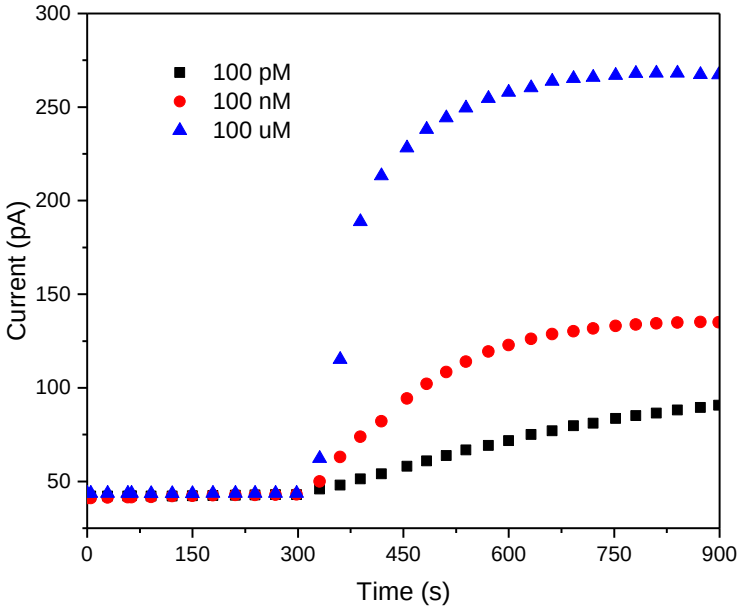

Figure S3. The relationship between current and incubation time on the performance of the biosensor with the three Ag(I) concentrations (100 pM, 100 nM, 100 μM) at V_G=0 V.

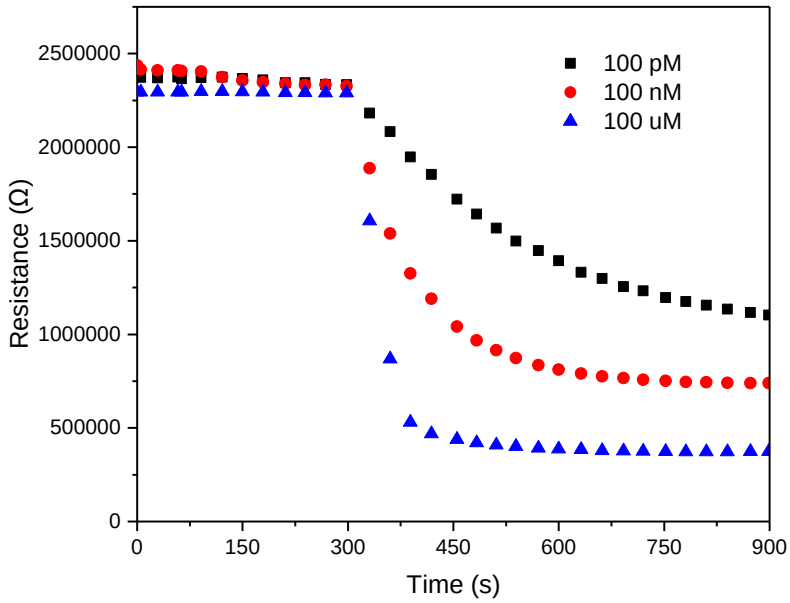

Figure S4. The relationship between resistance and incubation time on the performance of the biosensor with the three Ag(I) concentrations (100 pM, 100 nM, 100 μM) at V_G=0 V.

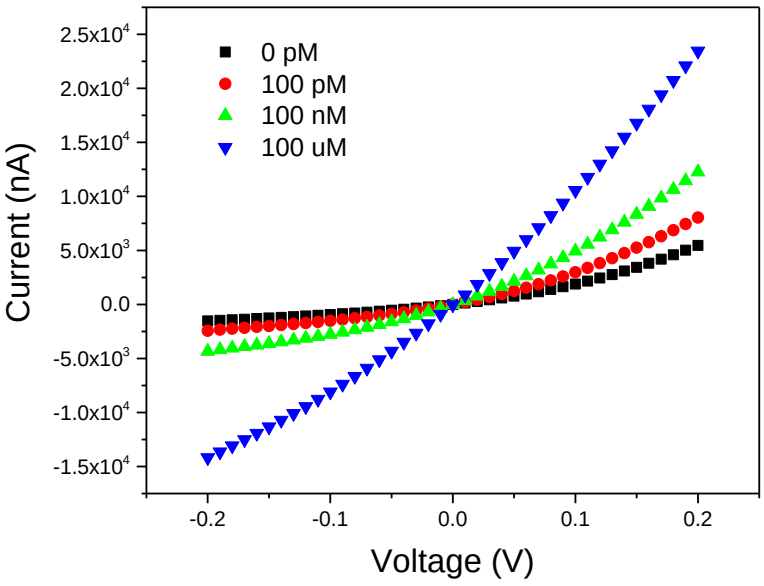

Figure S5. The effect of the voltage ranging from -0.2 V to 0.2 V on the performance of the biosensor with the three Ag(I) concentrations (0 pM, 100 pM, 100 nM, 100 μM).

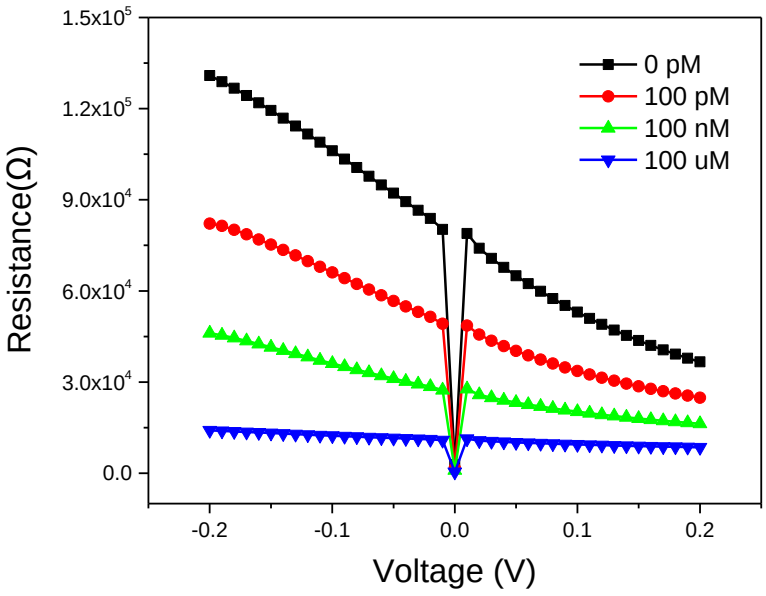

Figure S6. The resistance of the biosensor with the different Ag(I) concentrations (100 pM, 100 nM, 100 μM).