Supplementary materials for

A simple "on-off-on" ECL sensor for glucose determination

based on Pd nanowires and Ag doped g-C₃N₄ nanosheets

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The cyclic voltammetry (CV) measurements were performed in 5.0 mM $[Fe(CN)_6]^{3-/4-}$ to characterize the eletroconductivity behavior of PdNWs of the sensor. As shown in the following Fig. S1, compared with the Ag-g-C₃N₄/GCE (curve b), the

redox current of PdNWs-Ag-g-C $_3N_4/GCE$ (curve a) increased due to the good

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eletroconductivity of PdNWs that could accelerate the electron transfer.

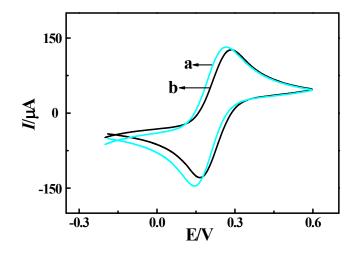


Fig. S1. CVs of PdNWs-Ag-g- C_3N_4 /GCE (a), Ag-g- C_3N_4 /GCE (b) in 5.0 mM

 $K_3[Fe(CN)_6]/K_4[Fe(CN)_6].$

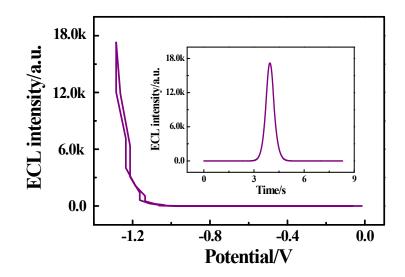


Fig.S2. The plots of ECL intensity versus potential: PdNWs-Ag-C₃N₄/GCE in PBS (pH 7.4)

containing 0.10 M K₂S₂O₈. Scan rate: 300 mV/s. Scan voltage: -1.30 V~0.0 V.

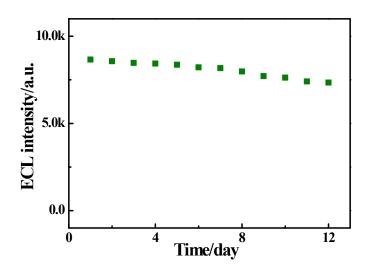


Fig. S3. (A) Long-term storage stability of the sensor incubated with 2.0×10^{-8} M glucose in PBS (pH 7.4) containing 0.10 M K₂S₂O₈.