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Supporting Information

Detection of human immunoglobulin G by label-free electrochemical immunoassay modified with ultralong CuS nanowires

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I. TEM images of CuS nanowires

Transmission electron microscopy (TEM) was utilized to demonstrate the stability of CuS nanowires after long-time rinse and ultrasonication both in water and organic solvents.

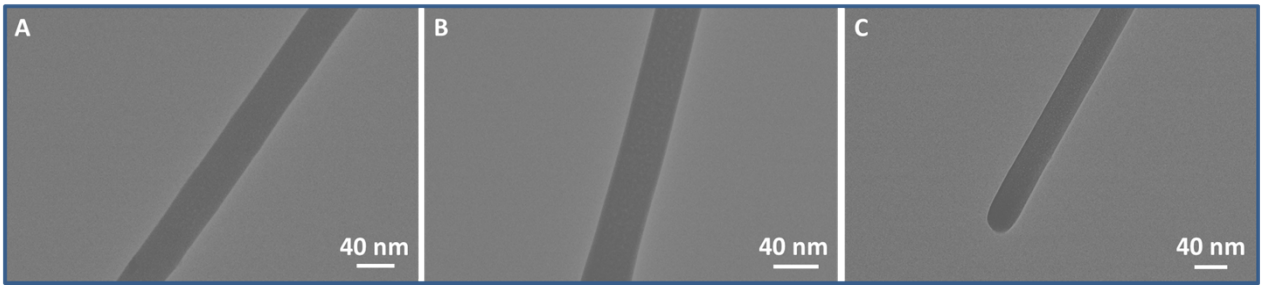

Figure S1. TEM images of CuS NW (A) Without ultrasonication after rinse for three times. (B) With ultrasonication after rinse for three times. (C) After long-time rinse and ultrasonication both in water and organic solvents.

II. Detection limit of the immunosensor

Based on S/N = 3, a detection limit (0.1 pg/mL) of the proposed immunosensor was obtained.

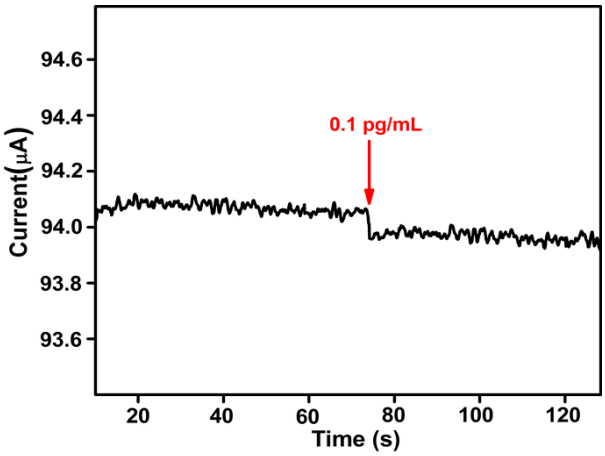

Figure S2. Determination limit of the proposed immunosensor shown by the chronoamperometric curve of the CuS/anti-IgG electrode with addition of 0.1 pg/mL IgG at a fixed potential of 0.01 V.