

Single-step Electrospun TiO₂-Au Hybrid Electrodes for High Selectivity Photoelectrocatalytic Glutathione Bioanalysis

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S1. X-ray diffraction analysis

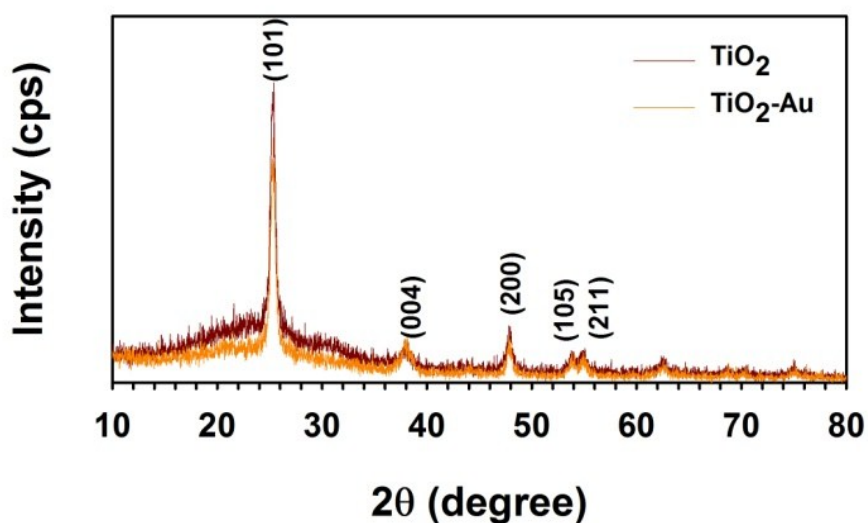


Fig.S1. XRD spectra of TiO₂ and TiO₂-Au composite NFs.

S2. TEM analysis

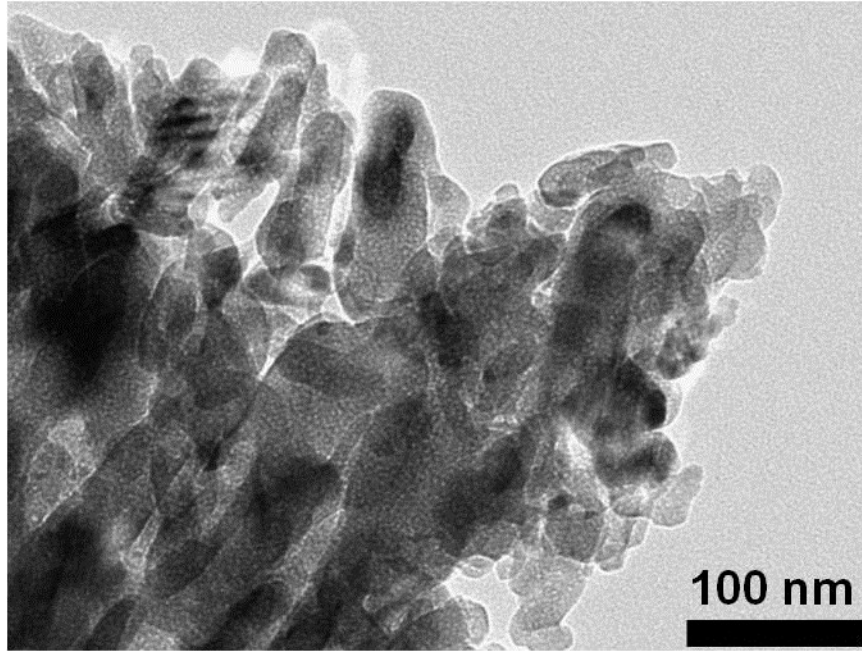


Figure S2. HRTEM image of electrospun TiO_2 nanofiber calcinated at 500 °C for 1 hr.

S3. XPS analysis

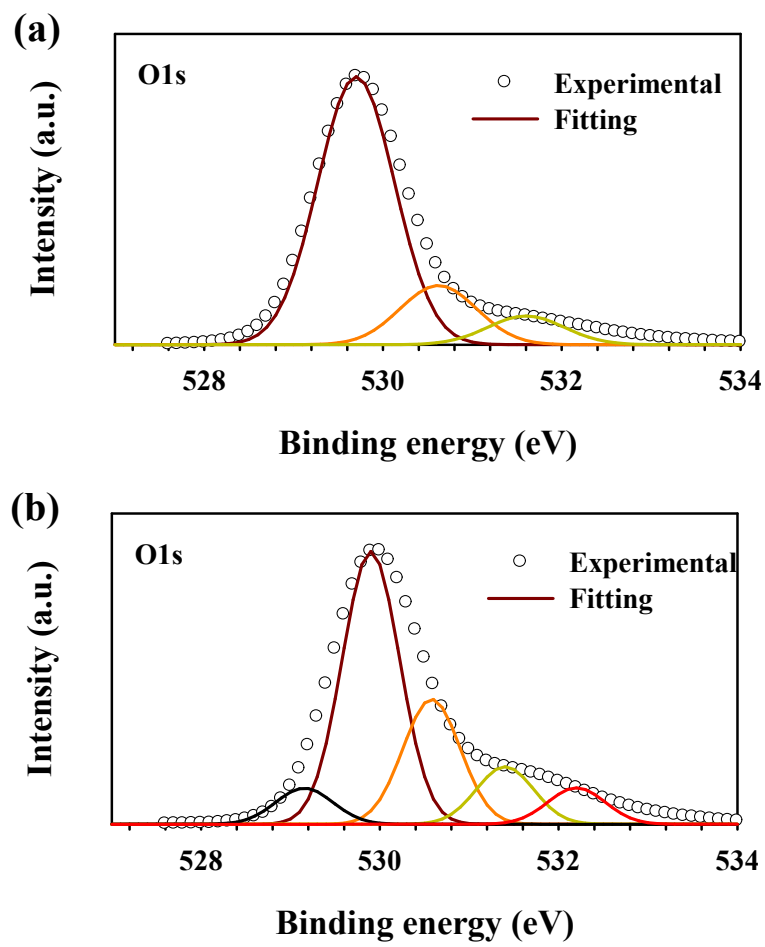


Figure S3. XPS O1s core spectra of (a) TiO₂ and (b) TiO₂-Au electrodes.

Table 1. Atomic concentration of TiO₂ and TiO₂-Au electrodes

Electrodes	atomic concentration (%)		
	Ti	O	Au
TiO ₂	31.0	68.9	-
TiO ₂ -Au	28.5	70.4	1.0

S4. Plasmonic effect Analysis

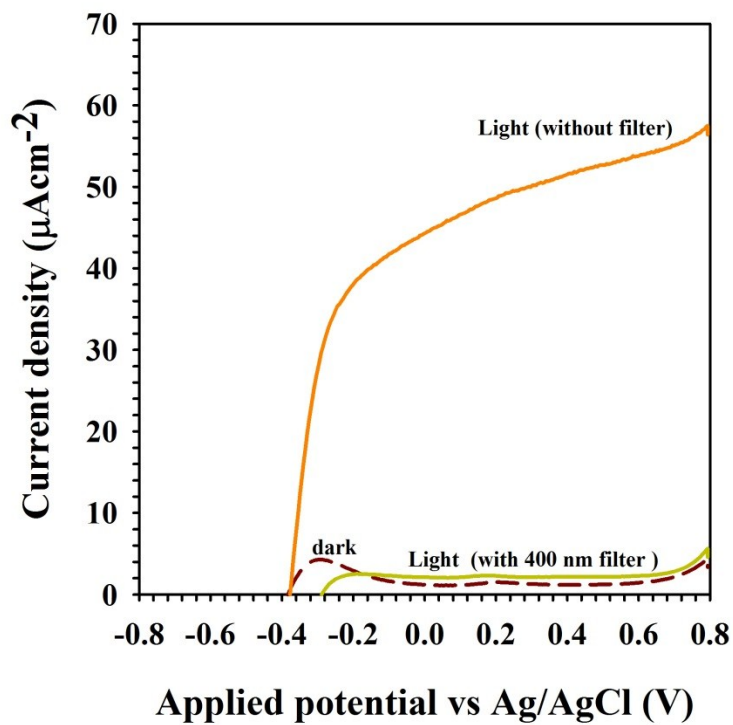


Figure S4: Voltammetric analysis of TiO_2 -Au electrode with and without 400 nm cut filter.

S5. J-V measurement at dark

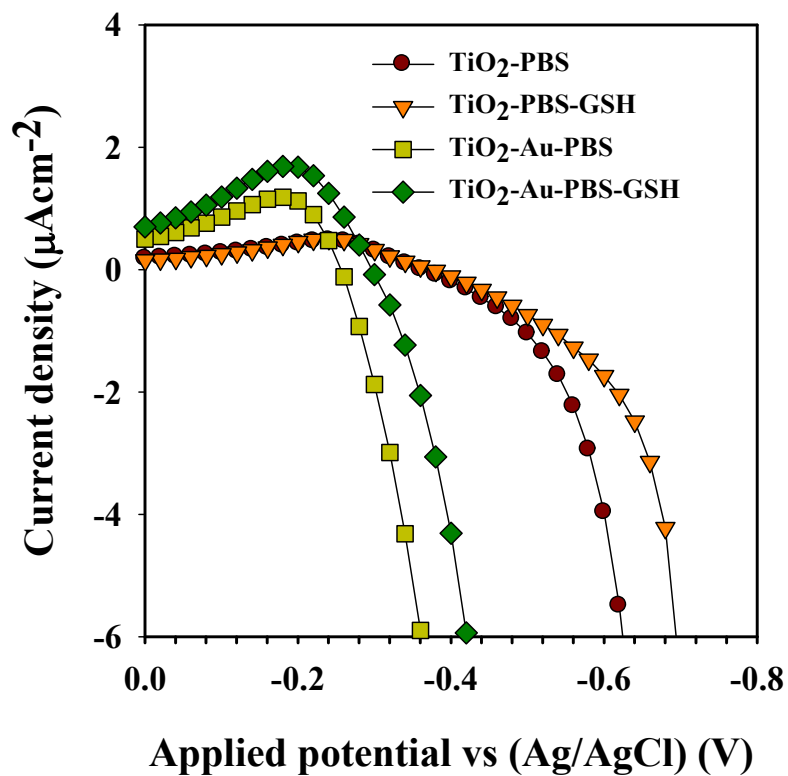


Figure S5. J-V plots of TiO₂ and TiO₂-Au electrodes measured under dark condition. The 0.1 M PBS electrolyte is used for experiments.

S6. Interference Analysis

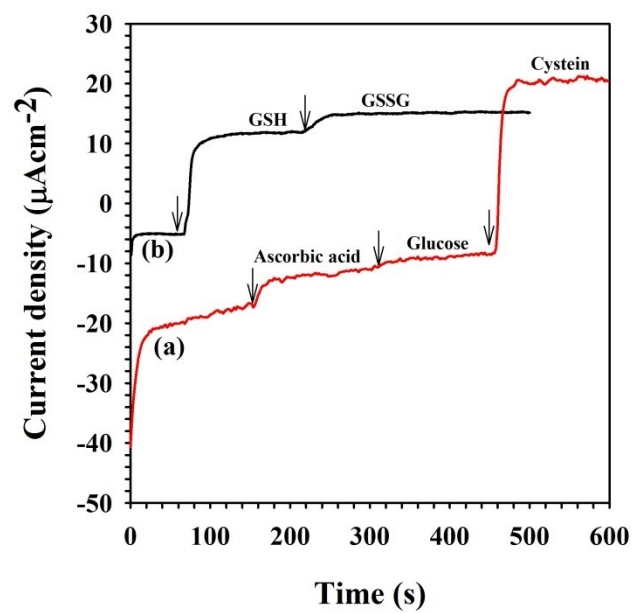


Figure S6: Chronoamperometric interference studies at $\text{TiO}_2\text{-Au}$ HNF. The 0.1 M PBS electrolyte is used for experiments.