

Supporting Information

Simultaneous deposition of cerium oxide and gold nanostructures- characterization and analytical properties toward glucose electrooxidation and sensing

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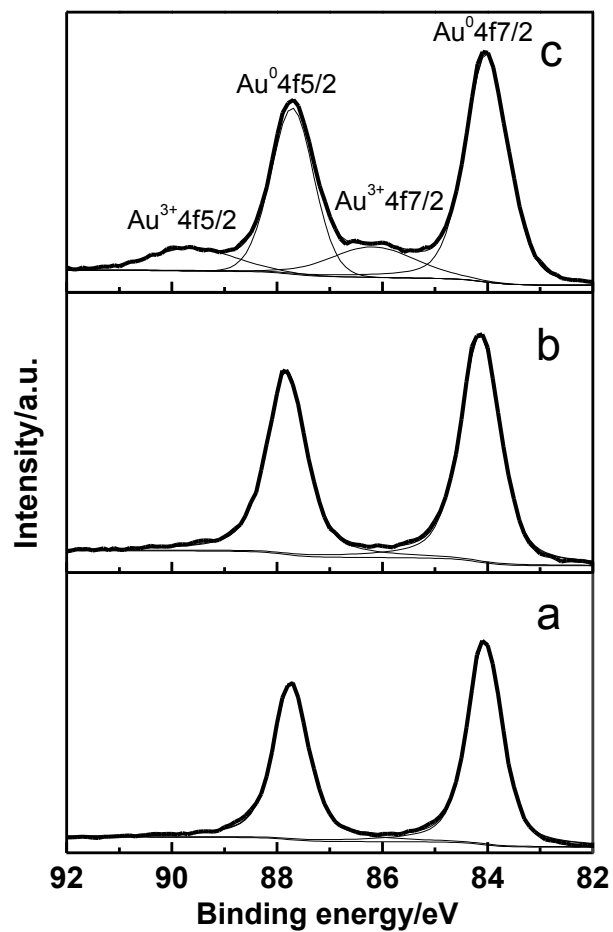


Figure S1 High-resolution XPS spectra of the Au 4f region in CeO₂-Au nanocomposites deposited under different background atmospheres: (a) vacuum (b) 0.5 Torr of Helium, and (c) 10 mTorr of oxygen.

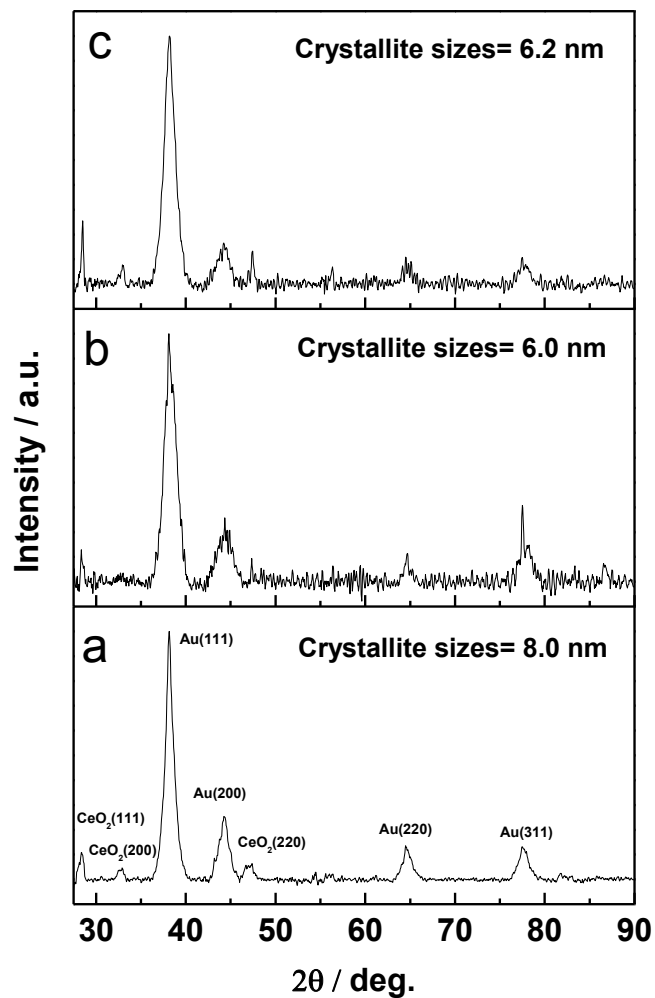


Figure S2 XRD profiles and crystallite sizes of Au in CeO_2 -Au nanocomposites deposited under different background atmospheres: (a) vacuum (b) 0.5 Torr of Helium, and (c) 10 mTorr of oxygen.

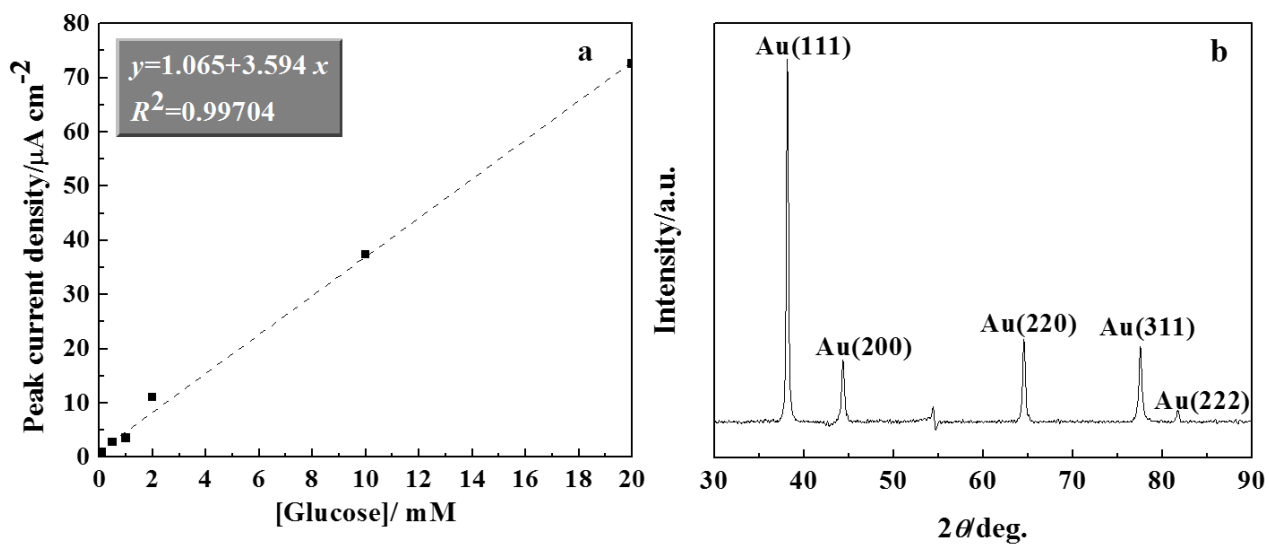


Figure S3 (a) Linearity domain obtained with CP/Au electrode in argon-saturated 0.01 M PBS solution at pH 7.2 containing various glucose concentrations (b) The XRD profile of gold deposited onto carbon paper substrate. The average crystallite sizes of Au calculated using the Debye-Scherrer equation and the most intense (111) diffraction peak is 34.8 nm.