Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Novel Au nanorod/Cu_2O composite nanoparticle for high-performance supercapacitor

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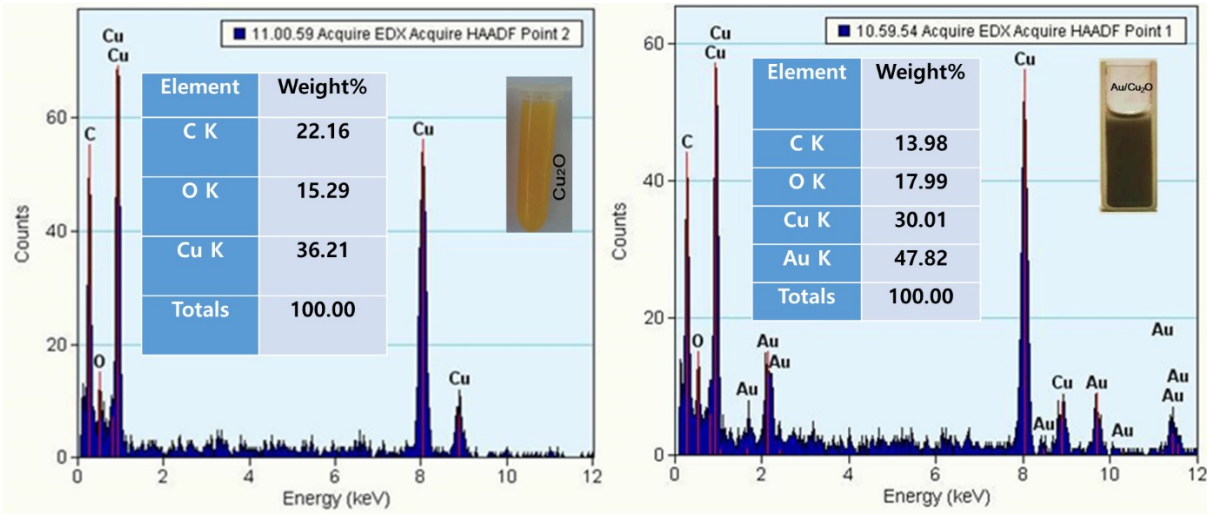


Figure S1. EDX analyses of (i) Cu_2O NC and (ii) Au/Cu_2O composite.

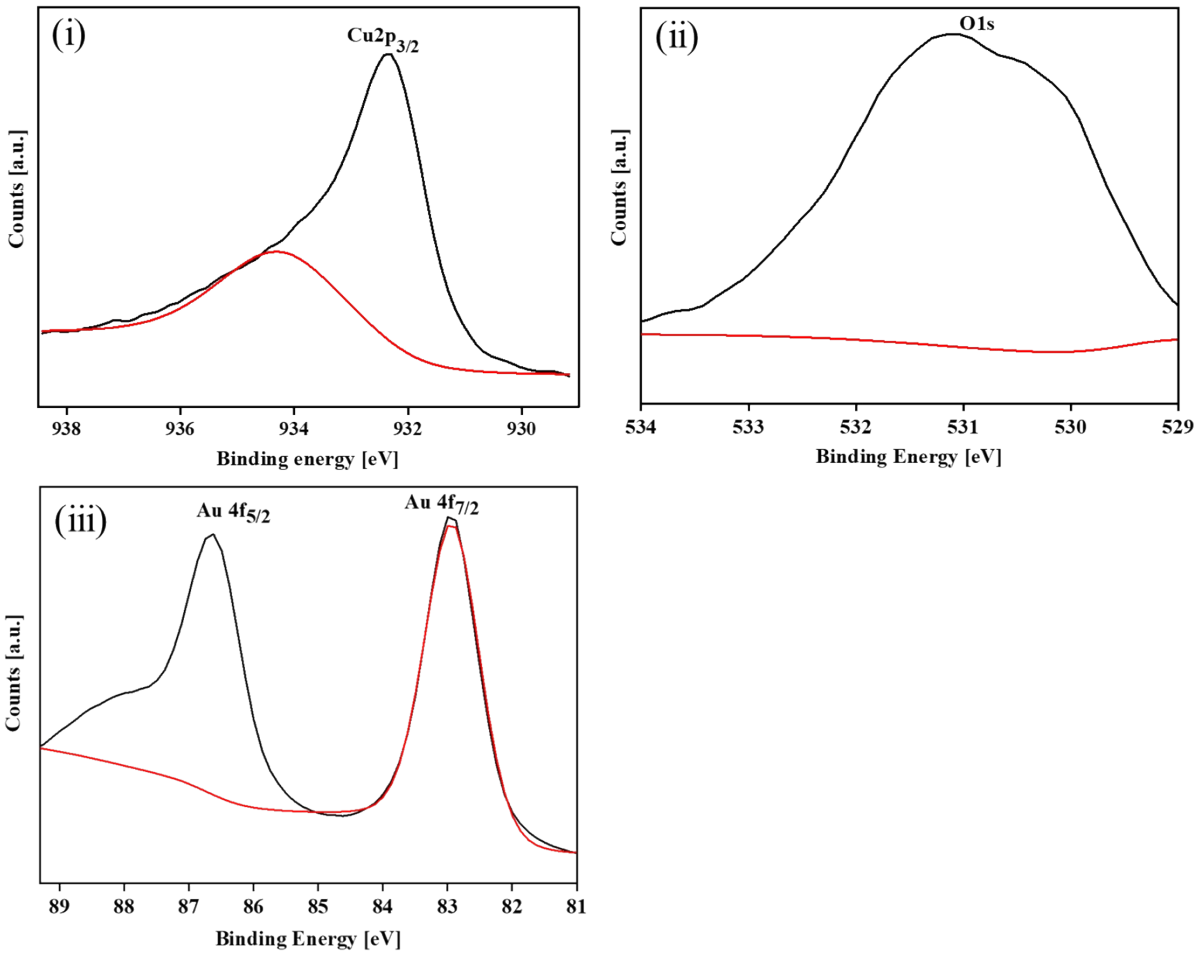


Figure S2. XPS analysis results indicating the peaks at (i) Cu2p3/2 (ii) O1s and (ii) Au4f of the core-shell Au/Cu_2O composite.

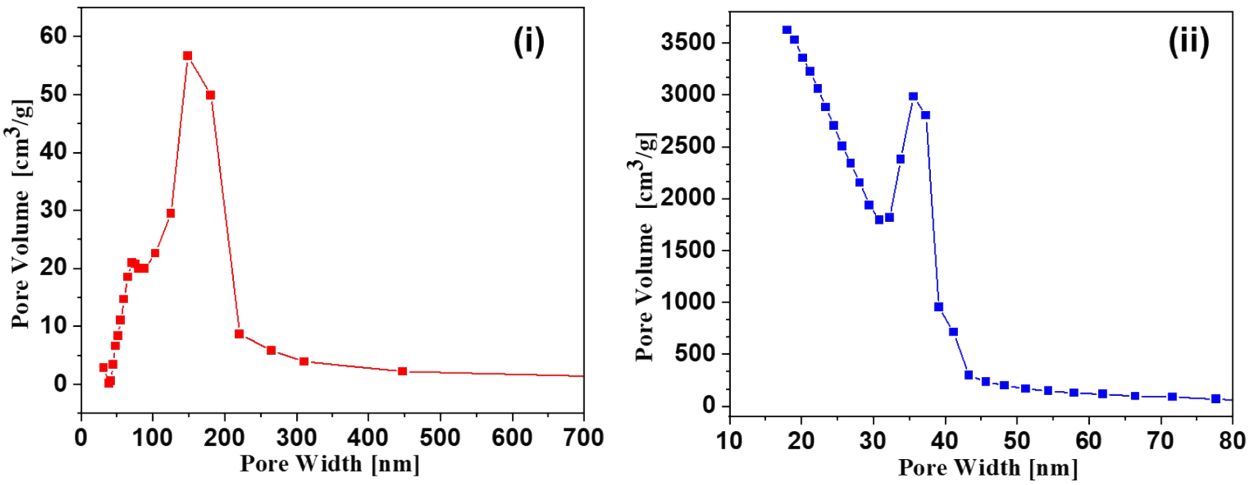
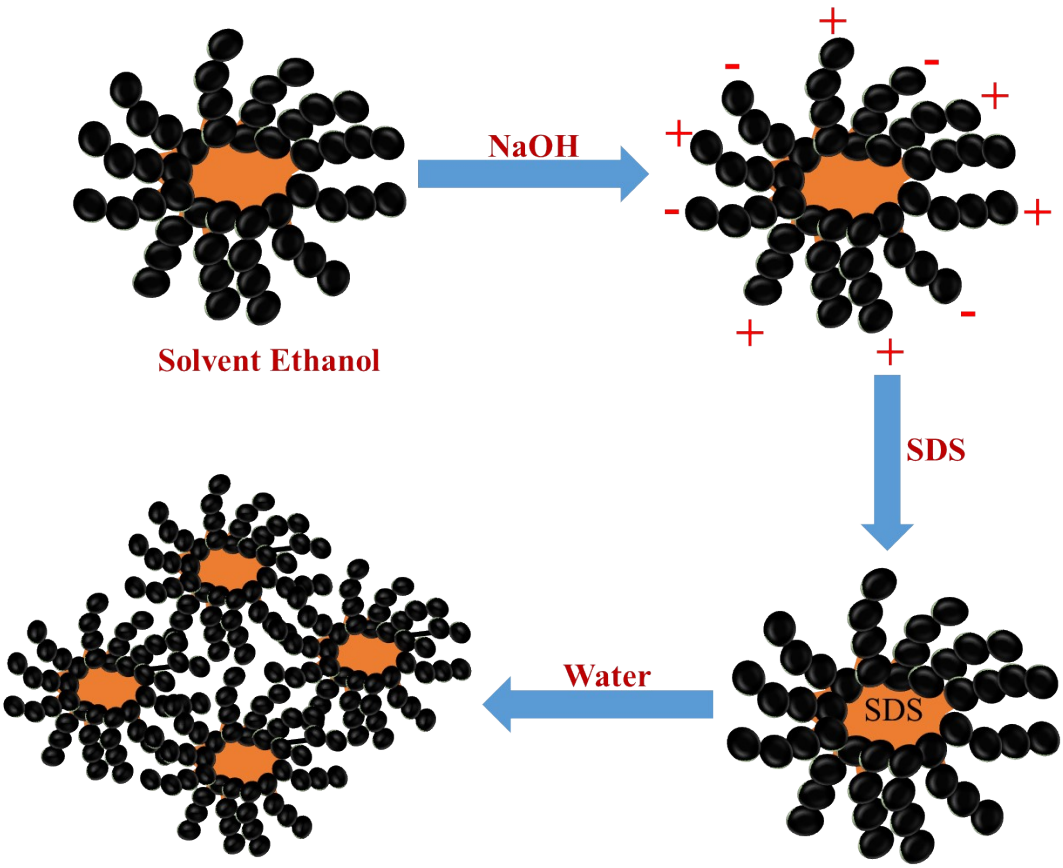


Figure S3. Pore size distribution analysis in the (a) Cu_2O NCs and (b) Au/Cu_2O composite.



Schematic 1. Porosity expansion in the Au/Cu_2O composite.

Table S1. Comparison among specific capacitances (C_s) of reported electrodes at different electrolyte concentrations and current densities.

Electrodes	Electrolyte concentration	Specific capacitance	Current density	Ref.
GrapheneCu_2O@	6 M KOH	161 $F \cdot g^{-1}$	1 $A \cdot g^{-1}$	11
Cu_2O@MnO_2	1 M KOH	371 $F \cdot g^{-1}$	0.5 $A \cdot g^{-1}$	17
Cu2O/Co_3O_4	1 M KOH	1,096 $F \cdot g^{-1}$	1 $A \cdot g^{-1}$	23
Ag-Cu_2O/RGO	6 M KOH	812 $F \cdot g^{-1}$	0.5 $A \cdot g^{-1}$	28
Cu_2O@Ni-Al	6 M KOH	475 $F \cdot g^{-1}$	10 $A \cdot g^{-1}$	33
Gr-Ag/PIn NCs	1 M KOH	914 $F \cdot g^{-1}$	0.5 $A \cdot g^{-1}$	37
Au/Cu_2O	1 M KOH	235 $F \cdot g^{-1}$	2 $A \cdot g^{-1}$	This work