Crystallization Behavior and Formation Mechanism of Dendrite Cu_2O Crystals

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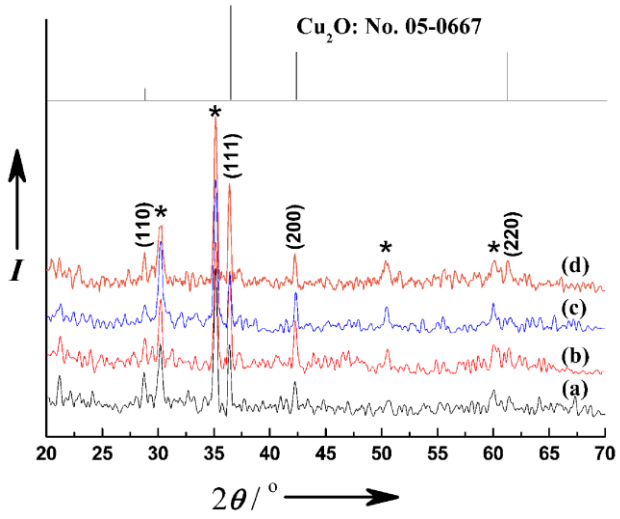

Figure S1. XRD pattern of Cu_2O particles deposited on ITO substrates with current density of a) J=0.5mA/cm^2 in static electrolyte (S5), b) J=0.7 mA/cm^2 in static electrolyte (S7), c) J=0.5 mA/cm^2 in stirred electrolyte (A5), d) J=0.7 mA/cm^2 in stirred electrolyte (A7), containing 0.02 M cupric acetate (* represents ITO' s diffraction peaks).

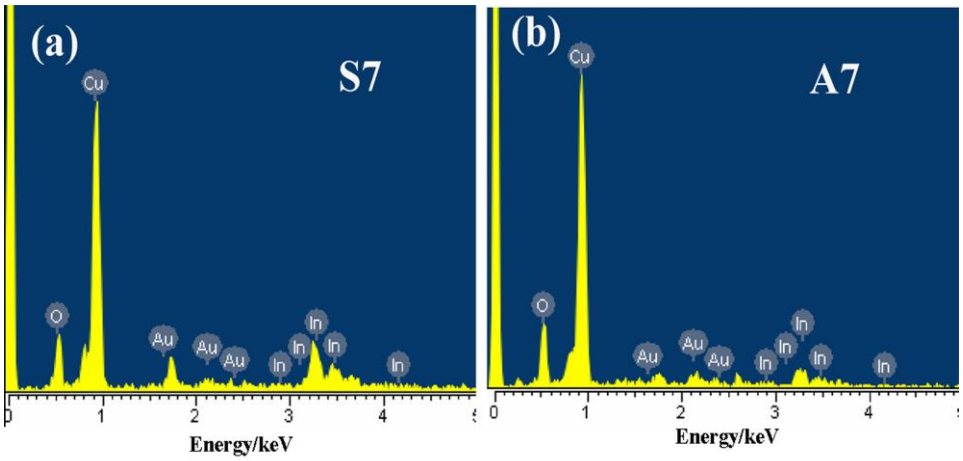

Figure S2. Energy disperse spectrum (EDS) of Cu_2O particles deposited on ITO substrates with current densities of 0.7 mA/cm^2 a) in static electrolyte (S7), b) in stirred electrolyte (A7).

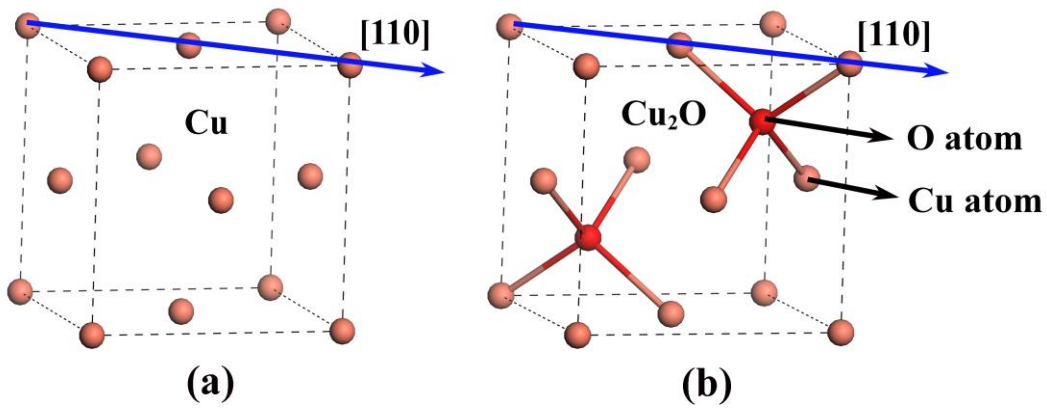

Figure S3. Crystal structures of Cu (a) and cuprite Cu_2O(b)

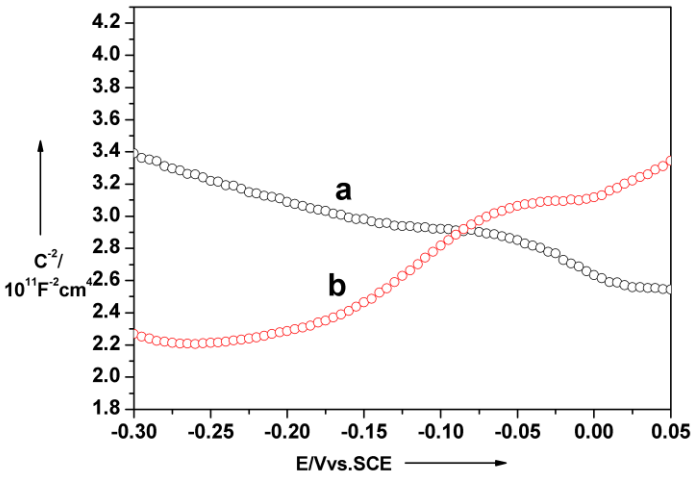

Figure S4. Mott–Schottky plots of Cu_2O samples measured in 0.5 M Na_2SO_4 solution with 2 kHz: (a) Deposited in static electrolyte; (b) Deposited in stirred electrolyte.