

SUPPLEMENTARY DATA

In-situ growth of CuO nanostructures on ITO substrate and its application as highly sensitive electrode for the electrochemical determination of N-Acetyl-L-cysteine

Figure S1

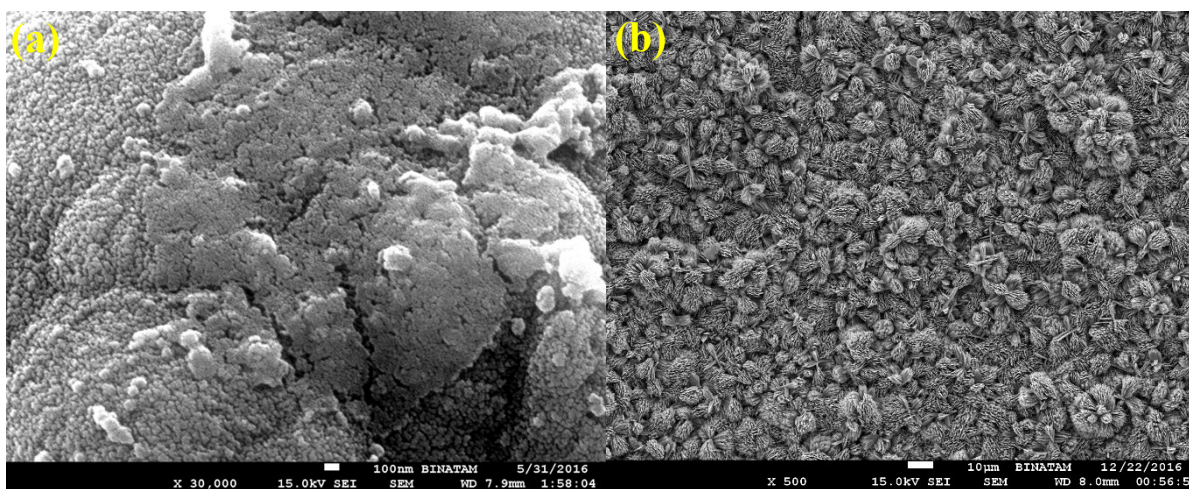


Figure S1 (a) HR-SEM image for in-situ grown CuO without the assistance of succinic acid as modifier and (b) CuO/ITO prepared under controlled experiment without the application of paper tape to cover the ITO electrode.

Figure S2

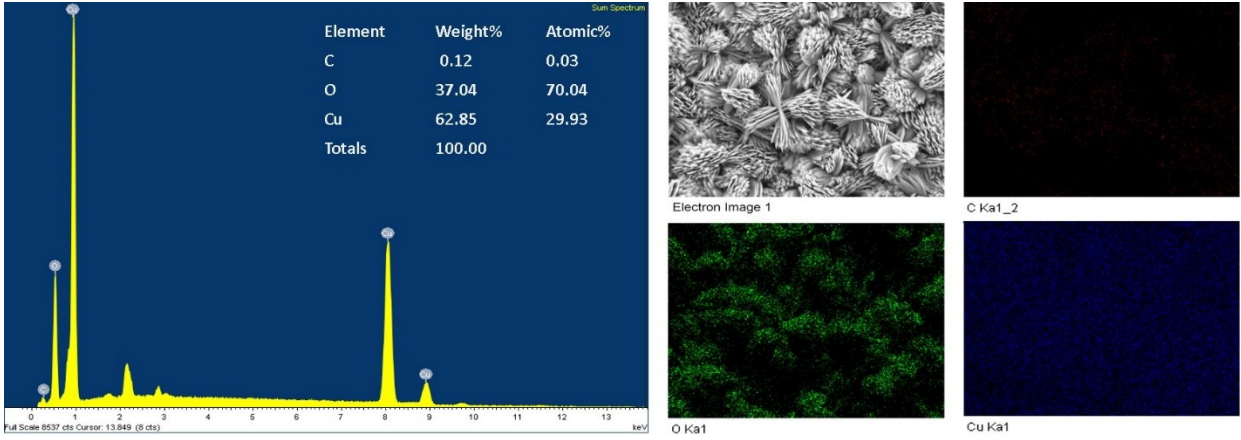


Figure S2 The EDX analysis with elemental mapping of in-situ grown CuO nanostructures.

Figure S3

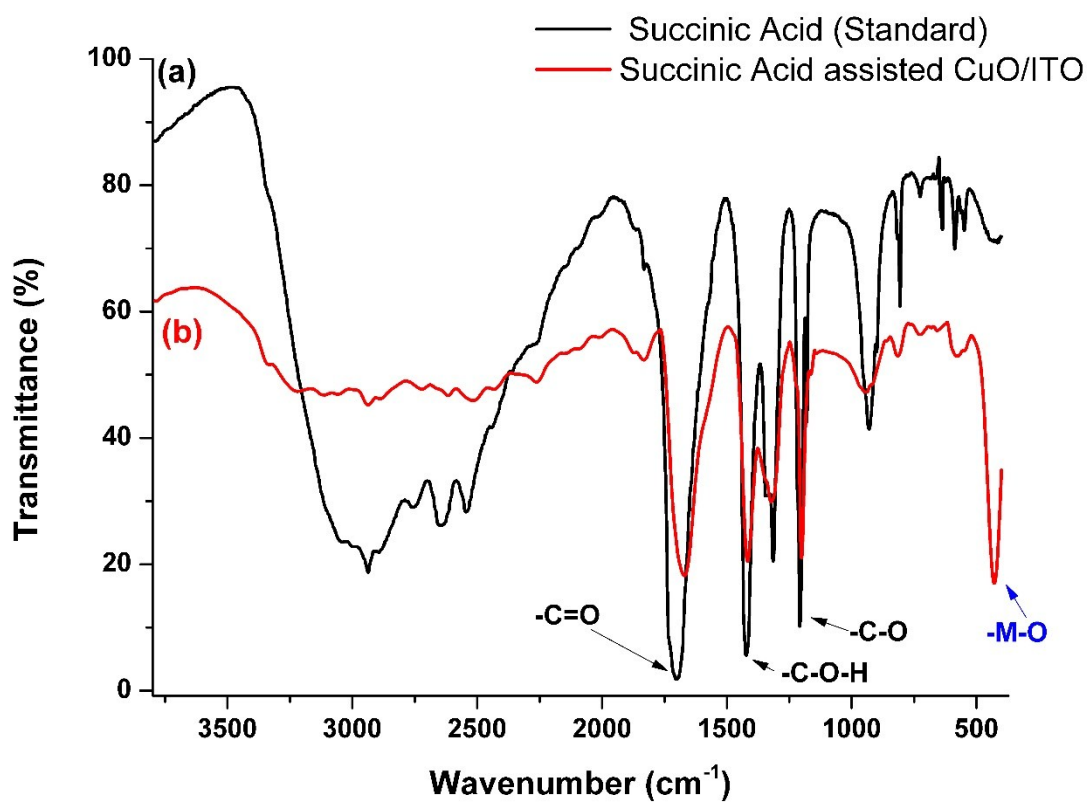


Figure S3 FTIR spectrum of (a) pure succinic acid in comparison to (b) succinic acid assisted CuO nanostructures.

Figure S4

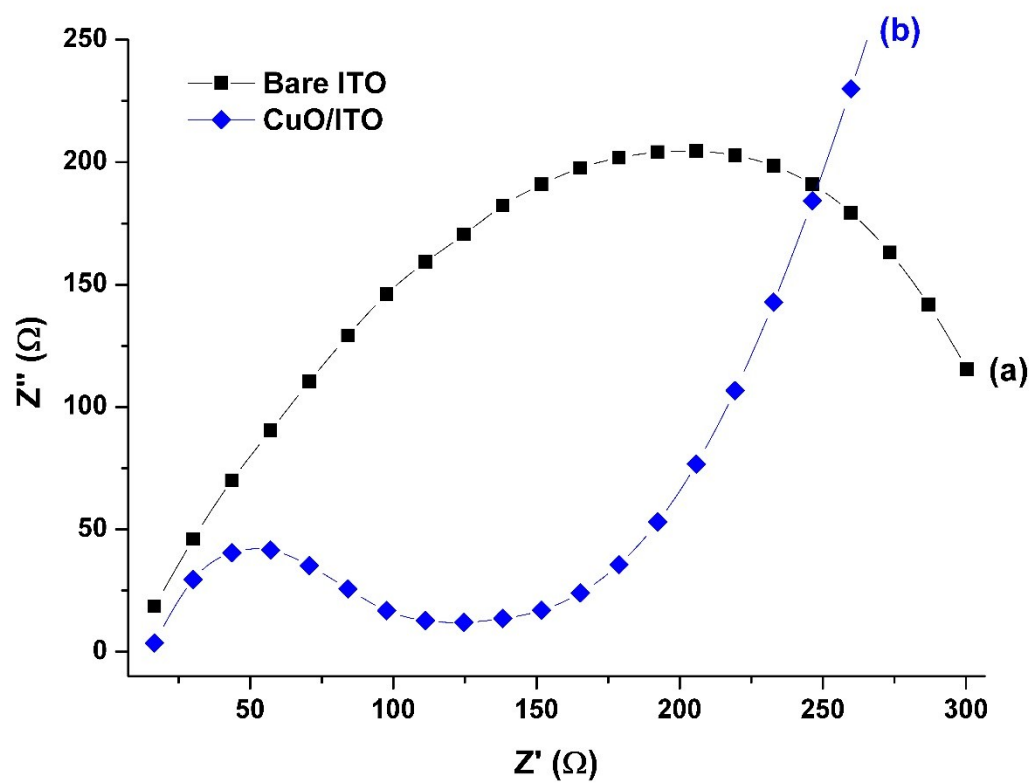


Figure S4 Electrochemical impedance spectra in $0.01\mu\text{M}$ NAC with 0.1 M PBS (pH 5.5) at (a) bare ITO and (b) CuO/ITO

Figure S5

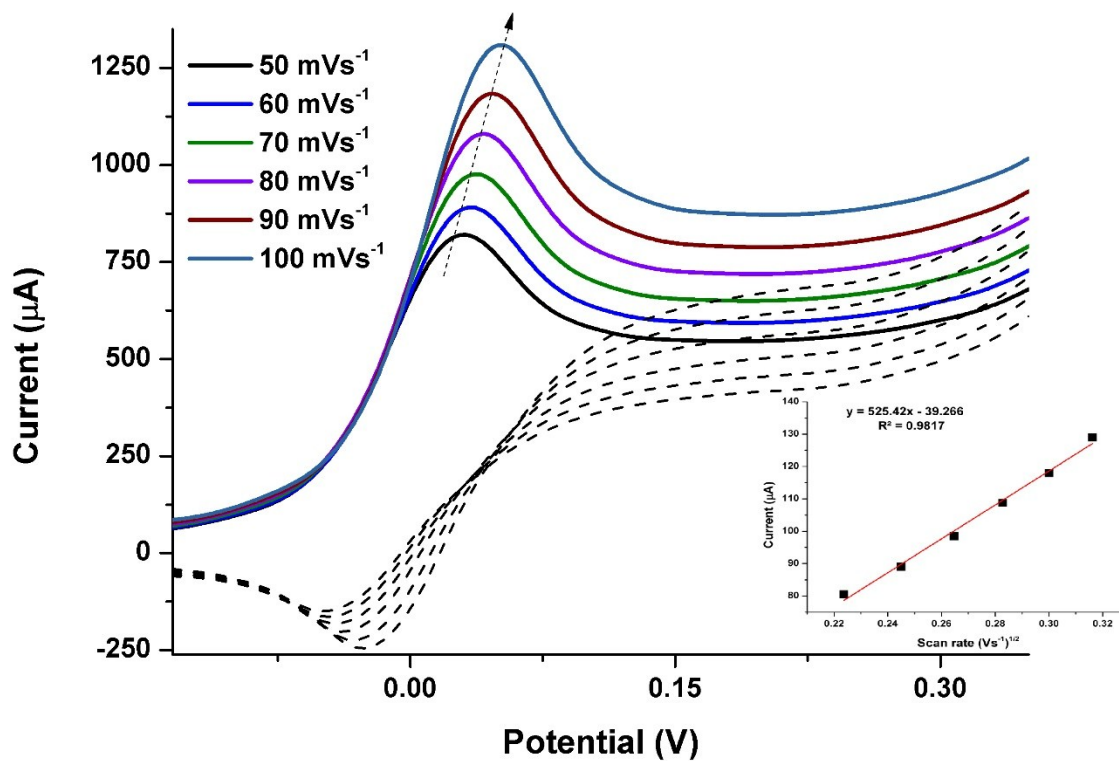


Figure S5 The scan rate measurement for CuO/ITO electrode for 0.01 μM NAC in 0.1 PBS (pH 5.5) in range of 50 to 100 mVs^{-1} .

Figure S6

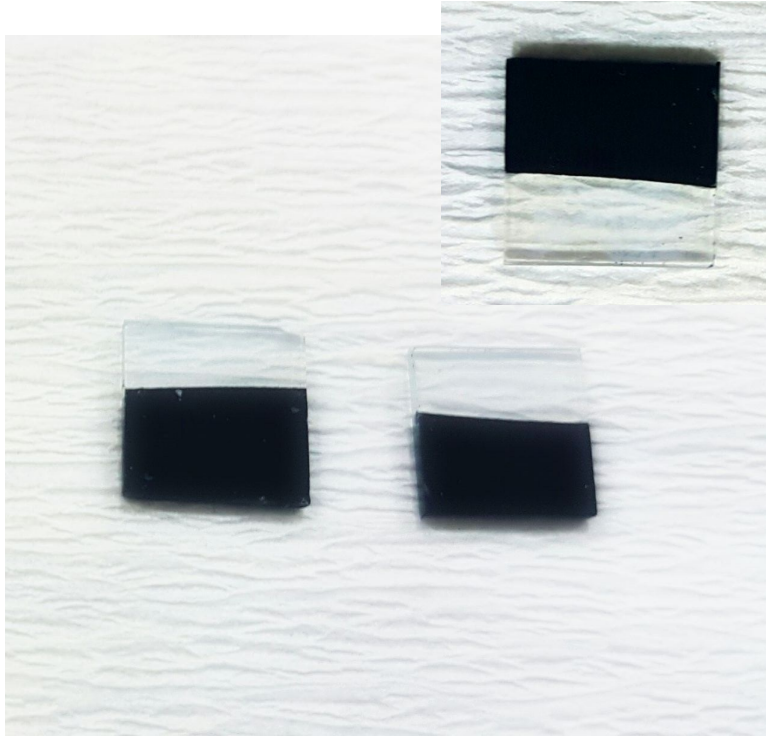


Figure S6 The microscopic view of the developed CuO/ITO substrates.

