

Supporting Information for

Nanoporous hybrid CuO/ZnO papers used as ultrasensitive non-enzymatic electrochemical sensors

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Supporting figures

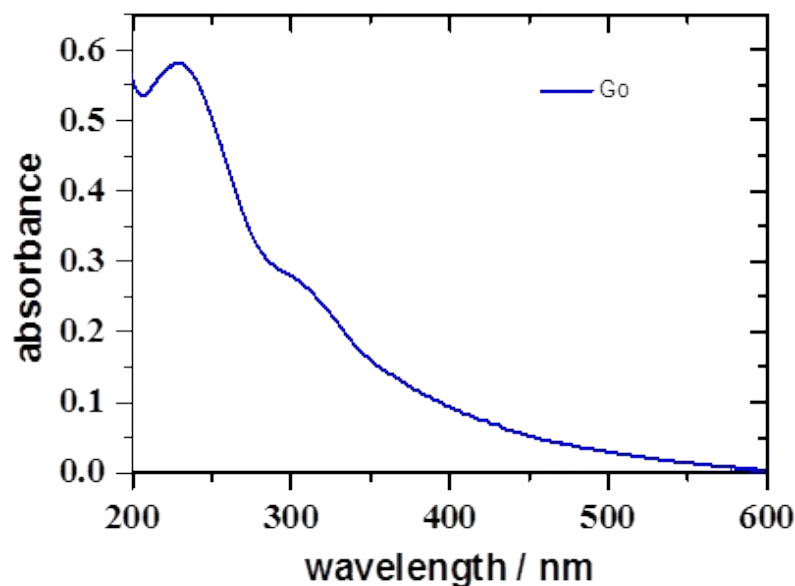


Fig. S1 the absorption spectrum of graphene oxide solution.

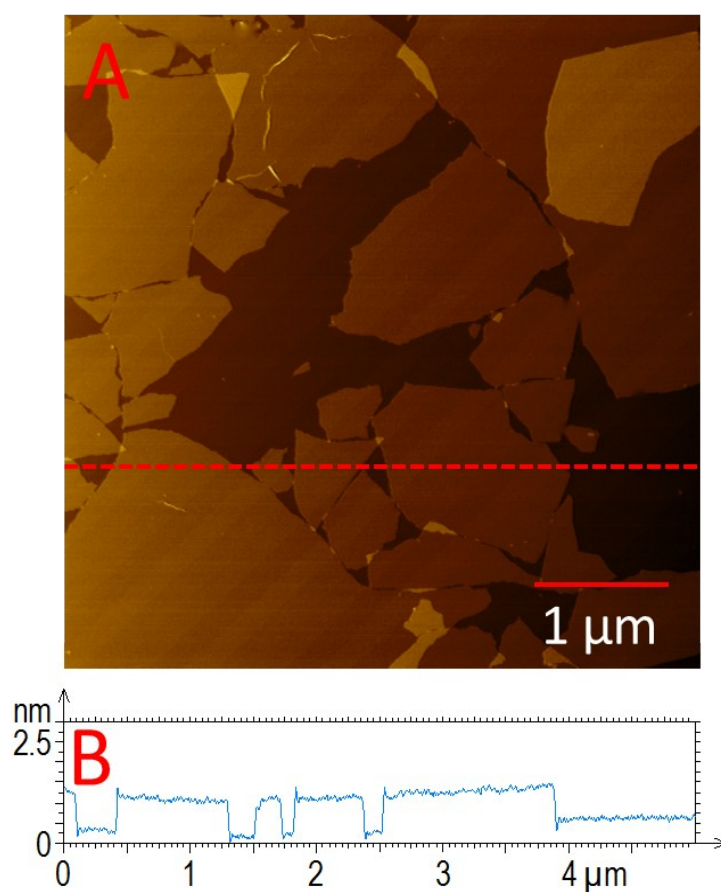


Fig. S2 A) AFM image of GO nanosheets and (B) corresponding cross-sectional profile to the line marked in the AFM image (A).

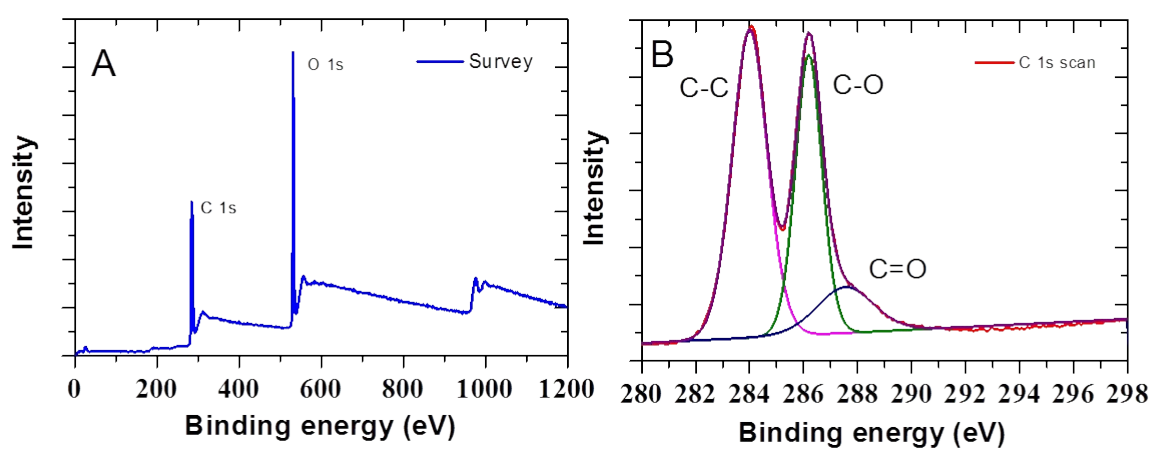


Fig. S3. XPS spectra of graphene oxide (GO) samples. (A) a survey spectrum (B) high resolution C1s scan.

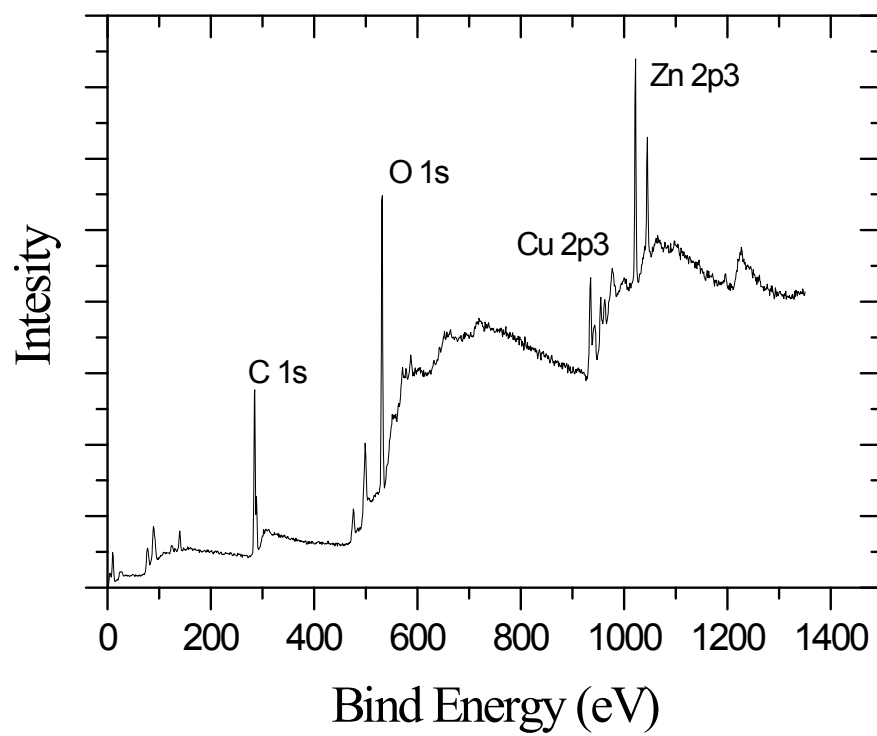


Fig. S4. XPS survey spectrum of 2D nanoporous GO paper with Cu^{2+} and Zn^{2+} .

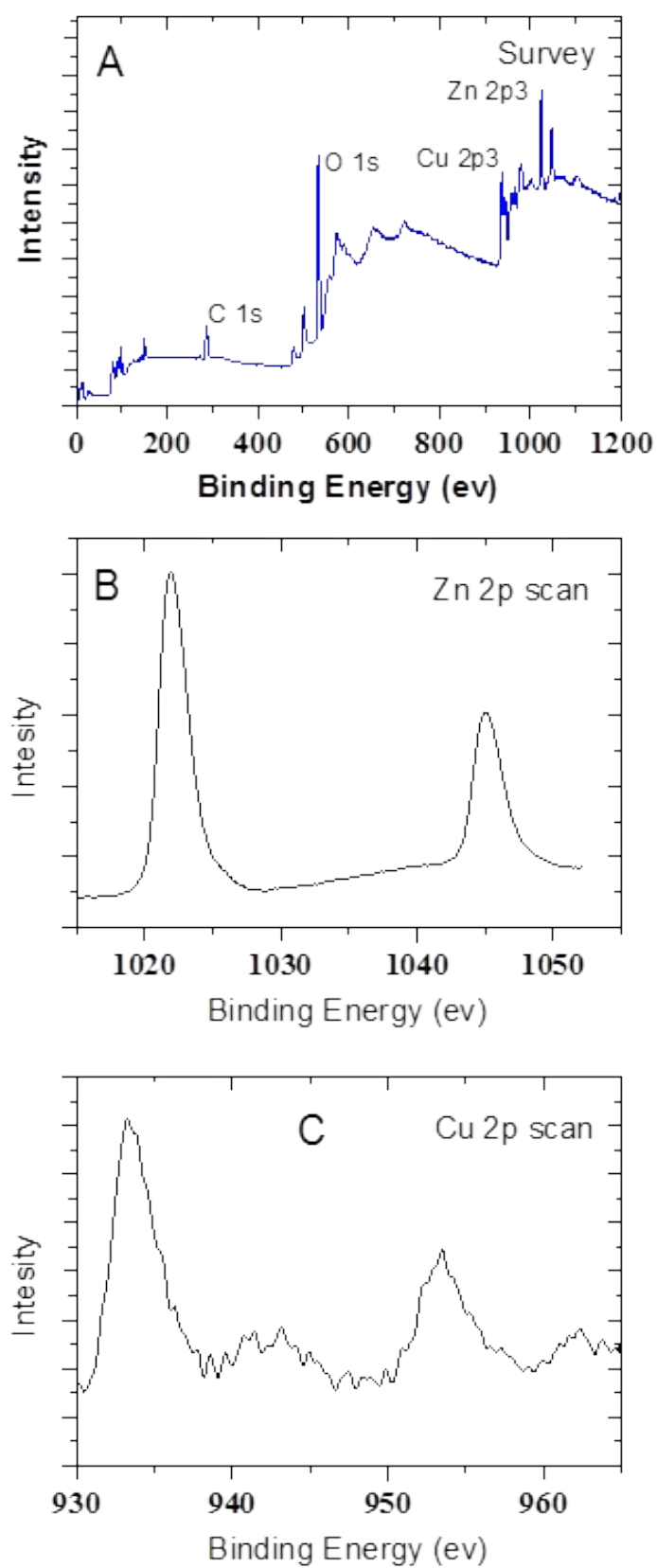


Fig. S5. XPS spectra of 2D nanoporous CuO-ZnO/carbon paper samples. (A) a survey spectrum (B) high resolution Zn 2s scan and (C) high resolution Cu 2s scan.

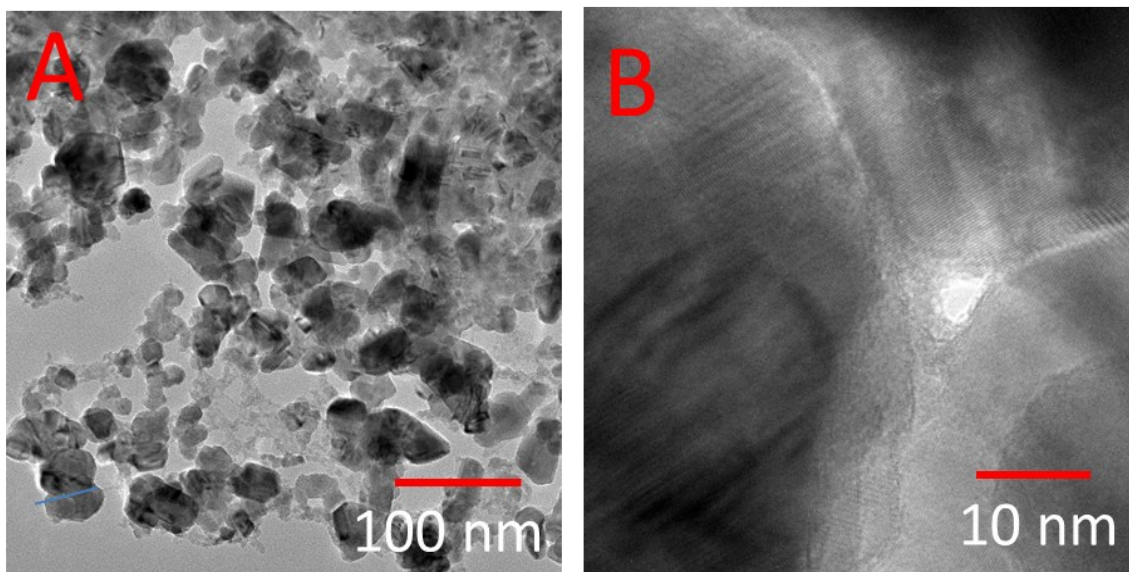


Fig S6. The TEM image of 2D porous CuO nanosheet with different magnifications.

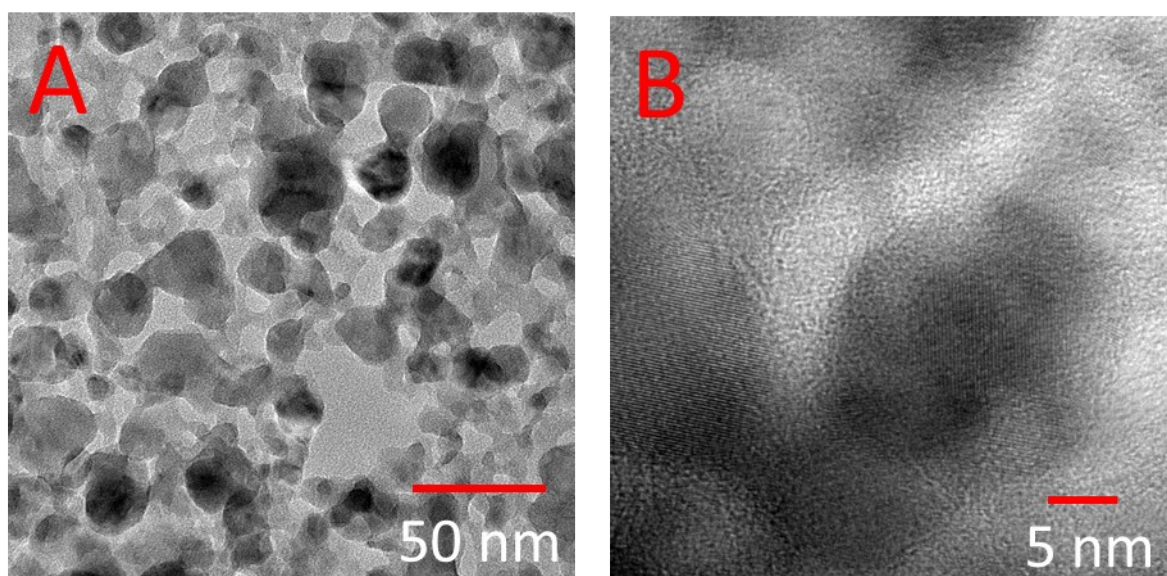


Fig. S7. The TEM image of 2D porous ZnO nanosheet with different magnifications.

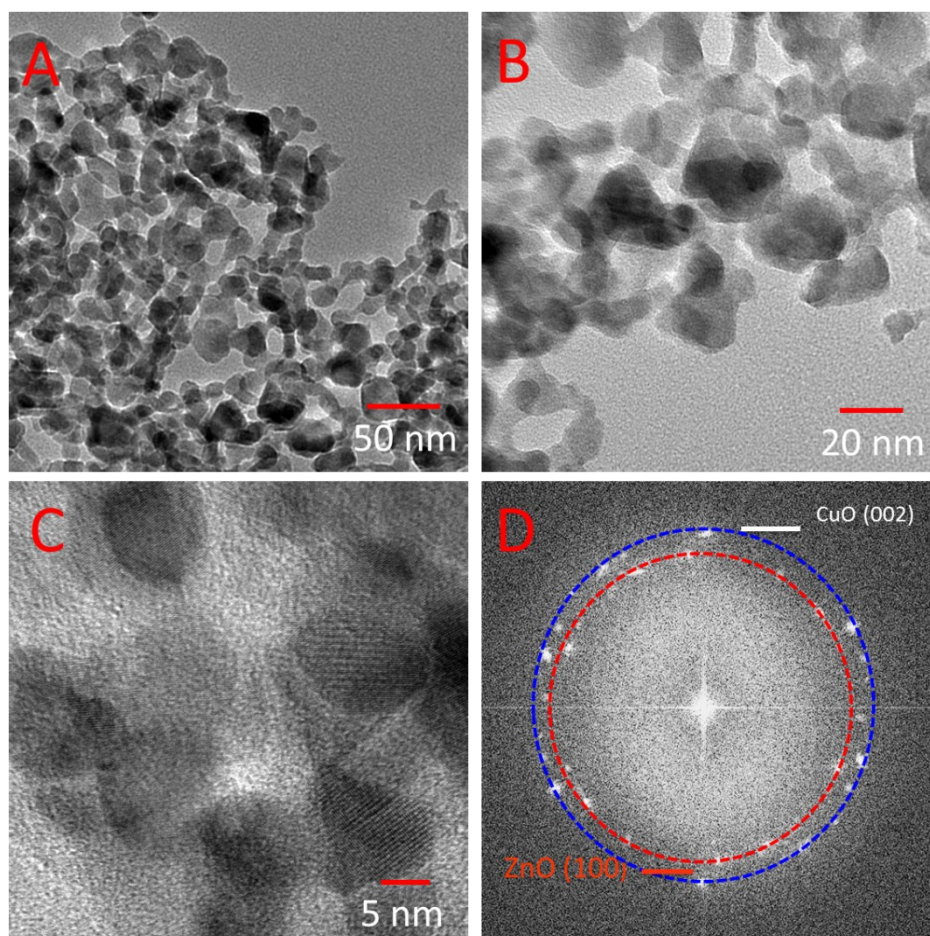


Fig. S8. A-C: The TEM image of 2D porous CuO-ZnO nanosheet with different magnifications. D: FFT images of HRTEM image.

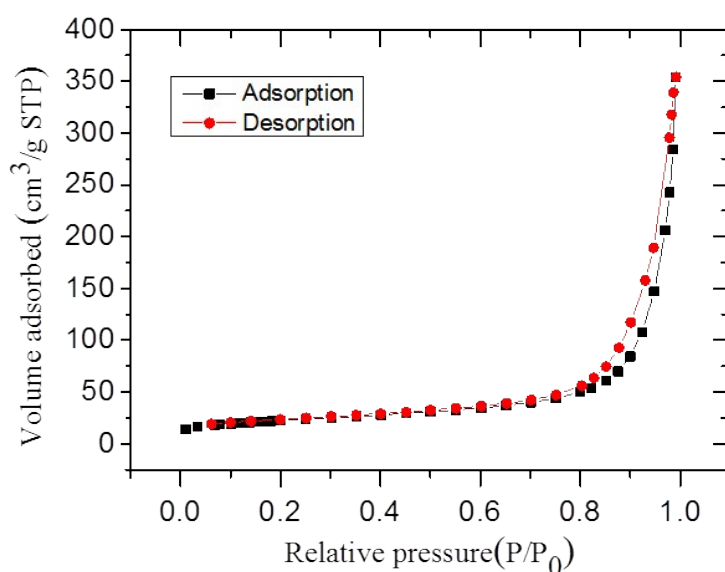


Fig. S9. The Nitrogen adsorption-desorption isotherms of CuO/ZnO papers. The BET surface area, pore volume and pore size were determined to be $80 \text{ m}^2 \text{ g}^{-1}$, $0.18 \text{ cm}^3 \text{ g}^{-1}$, and 100 \AA , respectively.

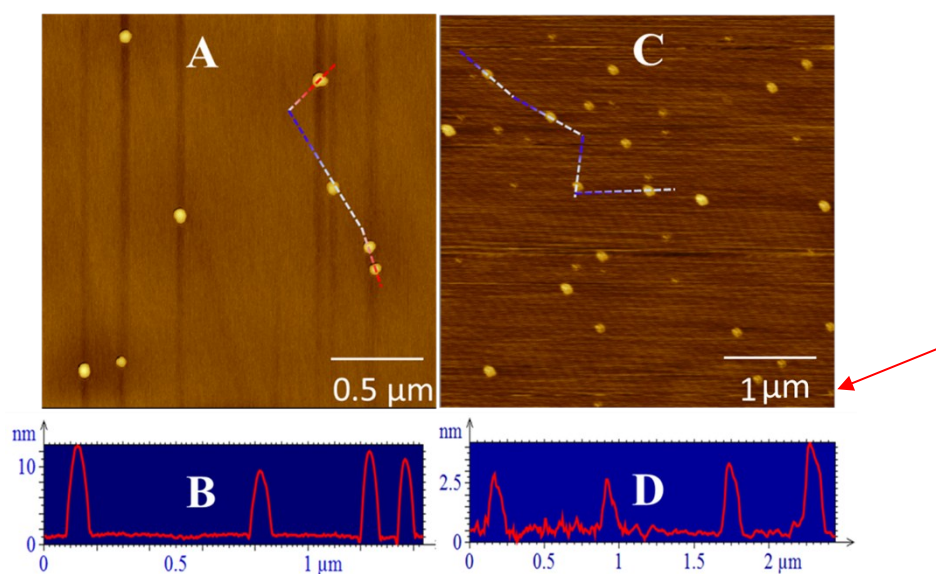


Fig.S10 A) AFM image of CuO nanosheets and (B) corresponding cross-sectional profile to the line marked in the AFM image (A). C) AFM image of ZnO nanosheets and (D) corresponding cross-sectional profile to the line marked in the AFM image (C).

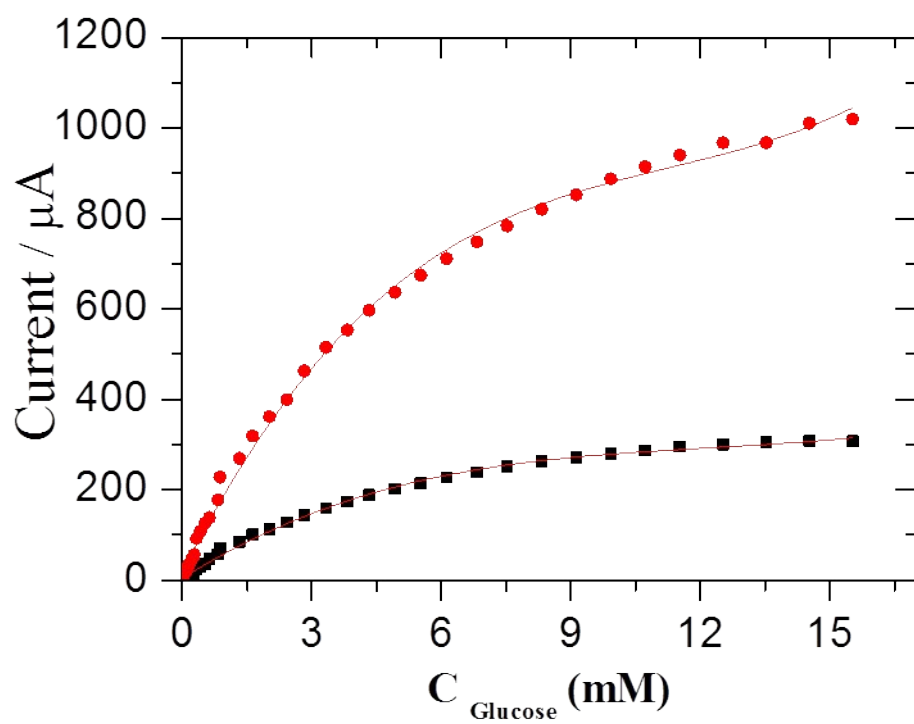


Fig.S11 The relationship of glucose concentration with current which was fitting by electrochemical version of Michaelies-menten equation.