

Electronic Supplementary Information

for

Electrochemical deposition of Cl-doped n-type Cu₂O on reduced graphene oxide electrodes

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(1) Characterizations of the rGO electrodes

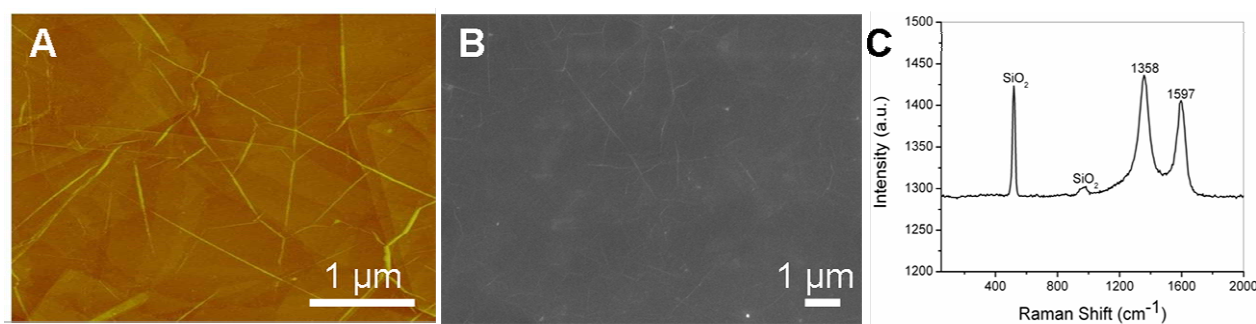


Figure 1S. (A) AFM image, (B) SEM image and (C) Raman spectrum of the rGO film on SiO₂/Si.

The AFM and SEM images of the rGO film are similar to the previous reports.^{1,2} The Raman spectrum of the rGO film exhibits D and G bands of rGO at 1358 and 1597 cm⁻¹, respectively.

(2) Mott-Schottky (MS) plot of undoped Cu₂O

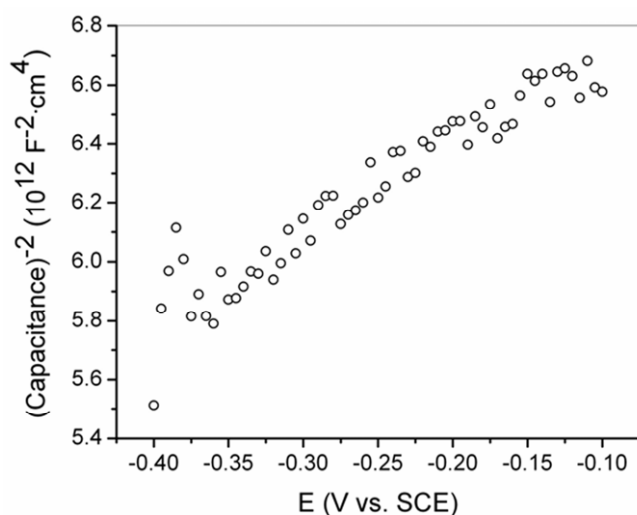


Figure 2S. MS plot of undoped Cu₂O on the rGO electrode in 0.1 M Na₂HPO₄ solution at pH 10 (the amount of CuCl₂ is 0 mmol).

5

Reference:

¹ Z. Y. Yin, S. X. Wu, X. Z. Zhou, X. Huang, Q. C. Zhang, F. Y. C. Boey, H. Zhang, *Small*, 2010, **6**, 307.

² S. X. Wu, Z. Y. Yin, Q. Y. He, X. Huang, X. Z. Zhou, H. Zhang, *J. Phys. Chem. C*, 2010, **114**, 11816.

10