Electronic Supplementary Information (ESI)

A facile route to synthesis copper oxide/grapheme nanocomposites and its electrochemical detection of catechol organic pollutant

Youcheng Zhao, Xinyu Song, * Qisheng Song,* Zhilei Yin

Department of Chemistry, Shandong University, Jinan, 250100, P. R.China

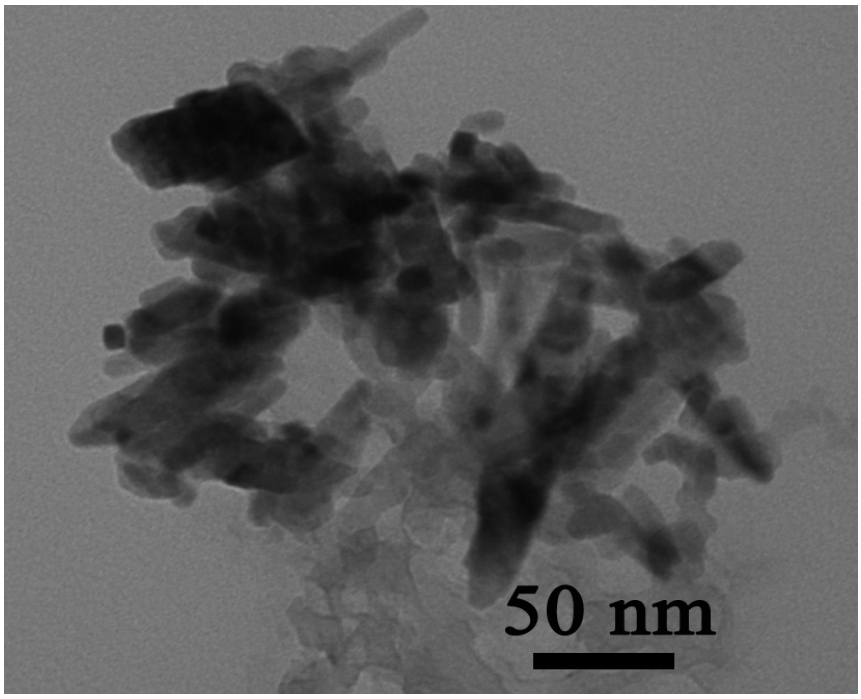


Fig. S1 TEM image of the as- prepared pure CuO.

* The corresponding authors： e-mail: songxy@sdu.edu.cn, sqs@sdu.edu.cn

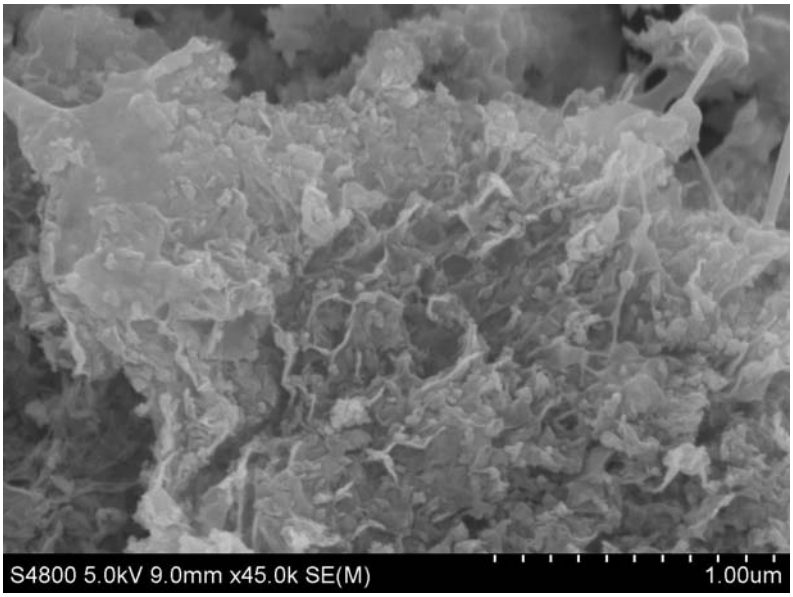


Fig. S2 SEM image of the CuO/rGO nanocomposite.

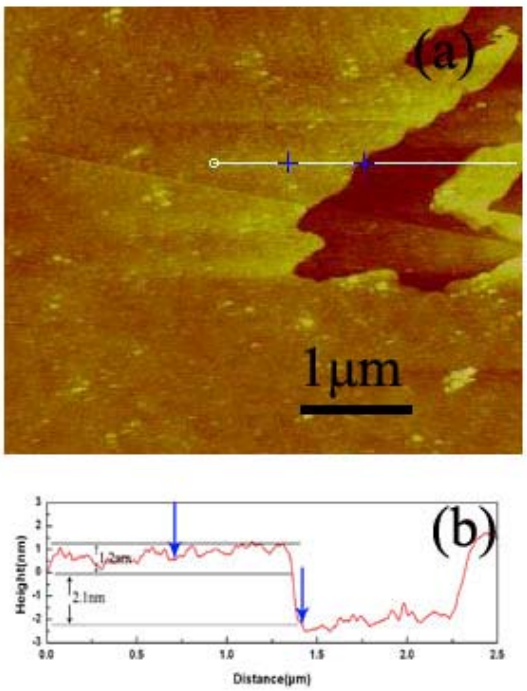


Fig. S3 (a) A tapping mode AFM image of CuO/rGO nanocomposite on Si surface**;** the height profile of the AFM image.

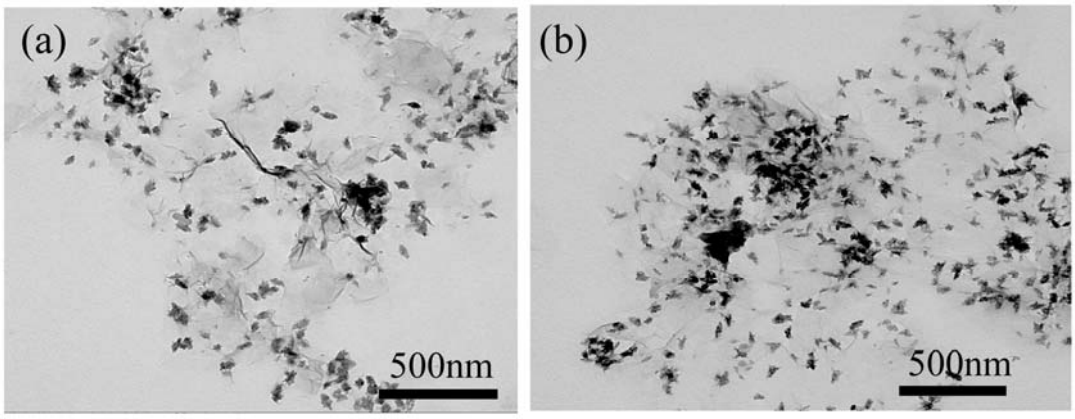


Fig. S4 TEM images of CuO/rGO nanocomposite prepared with different amount of ammonia solution: (a) 2.0 mL (2.5%) ,(b) 4.0 mL (2.5%).

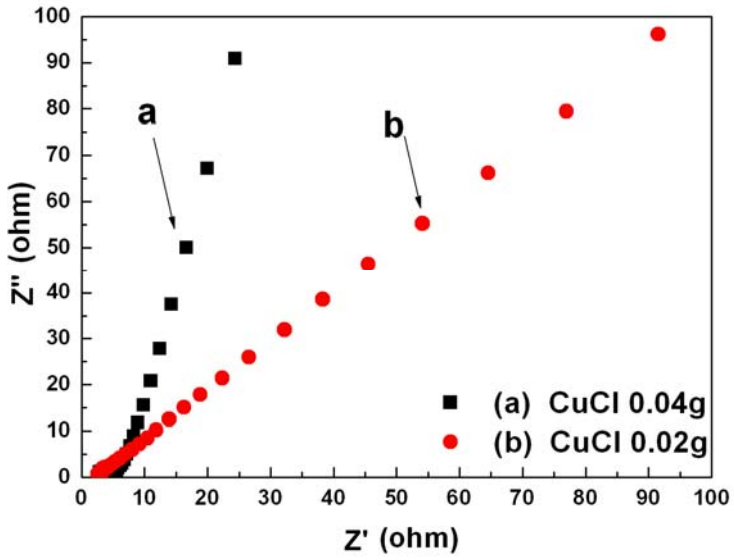
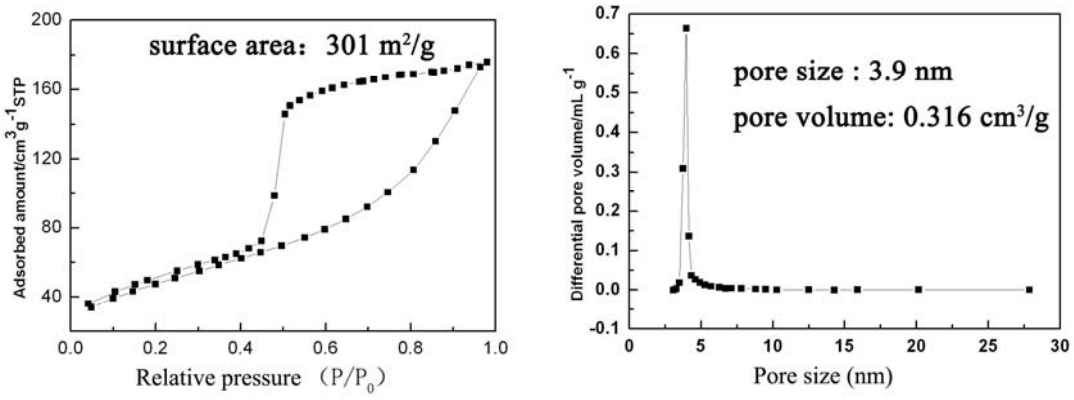


Fig. S5 EIS plots of using rGO/CuO nanocomposites with different weight percentage of CuCl at the open circuit voltage in 10mM $K_3Fe(CN)_6$ in 0.5M KCl solution.



(**a**) (**b**)

Fig. S6 N_2 adsorption–desorption isotherm of the rGO/CuO nanocomposite using 0.04g CuCl at a fixed amount of GO (**a**), and BJH pore size distribution (**b**).