Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2014

Supporting Information

Reticular-vein-like Cu@Cu2O/reduced graphene oxide

nanocomposites for non-enzymatic glucose sensor

Huanhuan Huo, Chunyan Guo, Guilin Li, Xu Han, Cailing Xu*

State Key Laboratory of Applied Organic Chemistry, Key Laboratory of Nonferrous Metal Chemistry

and Resources Utilization of Gansu Province, College of Chemistry and Chemical Engineering,

Lanzhou University, Lanzhou, 730000, China

*Corresponding author:

Cailing Xu: Tel: +86-931-891-2589, FAX: +86-931-891-2582, Email: xucl@lzu.edu.cn



Fig. S1 XRD pattern of Cu.



Fig. S2 Electrochemical impedance spectroscopy (EIS) of $Cu@Cu_2O/rGO$ electrode and Cu electrode in the frequency range 0.01 to 100 kHz. An enlargement at the high frequency region is shown in the inset.



Fig. S3 Amperometric response of $Cu@Cu_2O/rGO$ electrode at different potentials from 0.45 V to 0.60 V with successive additions of 0.5 mM glucose.



Fig.S4 Long-term stability of the Cu@Cu₂O/rGO modified electrode stored at ambient conditions and tested every two days over two weeks in 0.5 M NaOH with addition of 1.0 mM glucose at 0.5 V. The RSD is calculated from three repeated measurements. Inset shows the amperometric response towards 1.0 mM glucose over a period of 2000 s.