Supporting Information

## Hollow Cu-doped NiO microspheres as anode materials with enhanced lithium storage performance

Qiwen Hu,<sup>a</sup> Wenyao Li<sup>\*</sup>,<sup>a</sup> Dina Ibrahim Abouelamaiem,<sup>b</sup> Chaoting Xu,<sup>c</sup> Haishun Jiang,<sup>a</sup> Weihua Han<sup>d\*</sup> and Guanjie He<sup>\*b</sup>

<sup>a</sup>School of Material Engineering, Shanghai University of Engineering Science, Shanghai 201620, China.

<sup>b</sup> Materials Chemistry Centre, Department of Chemistry, University College London,

20, Gordon Street, London WC1H 0AJ, UK.

<sup>c</sup> State Key Laboratory for Modification of Chemical Fibers and Polymer Materials,

College of Materials Science and Engineering, Donghua University, Shanghai 201620, China

<sup>d</sup> School of Physical Science and Technology, Lanzhou University, Lanzhou 730000, China

E-mail: liwenyao314@gmail.com; guanjie.he.14@ucl.ac.uk; hanwh@lzu.edu.cn



Fig. S1 Low magnification SEM images of (a) NiO and (b) Cu-doped NiO.



Fig. S3 First three consecutive CV curves of Cu-doped NiO at 0.1 mV s<sup>-1</sup> scan rate.



Fig. S4 First three consecutive CV curves of NiO at 0.1 mV s<sup>-1</sup>.



Fig. S5 Galvanostatic discharge and charge profiles of the  $1^{st}$ ,  $2^{nd}$  and  $3^{rd}$  cycles of NiO at a current density of 100 mA g<sup>-1</sup>,