Supplementary Materials

Self-assembly of porous CuO nanospheres decorated on reduced graphene oxide with enhanced lithium storage performance

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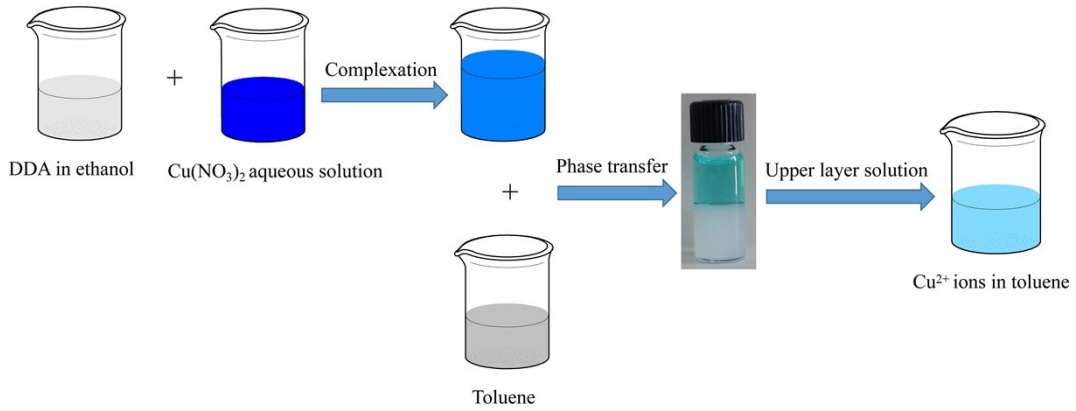

Fig. S1. Schematic diagram for illustrating the preparation procedure of solution of Cu^{2+} ions in toluene.

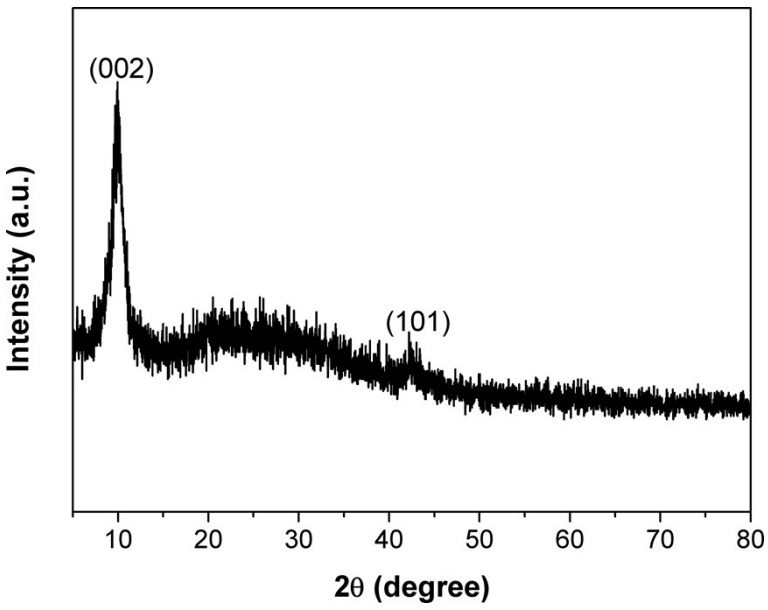

Fig. S2. XRD pattern of GO.

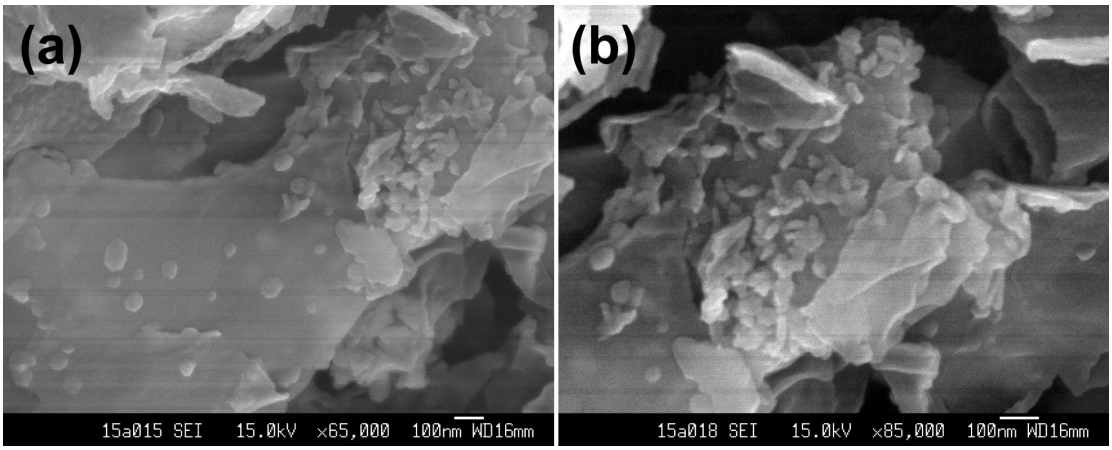

Fig. S3 SEM images of Cu_2O/RGO composite.

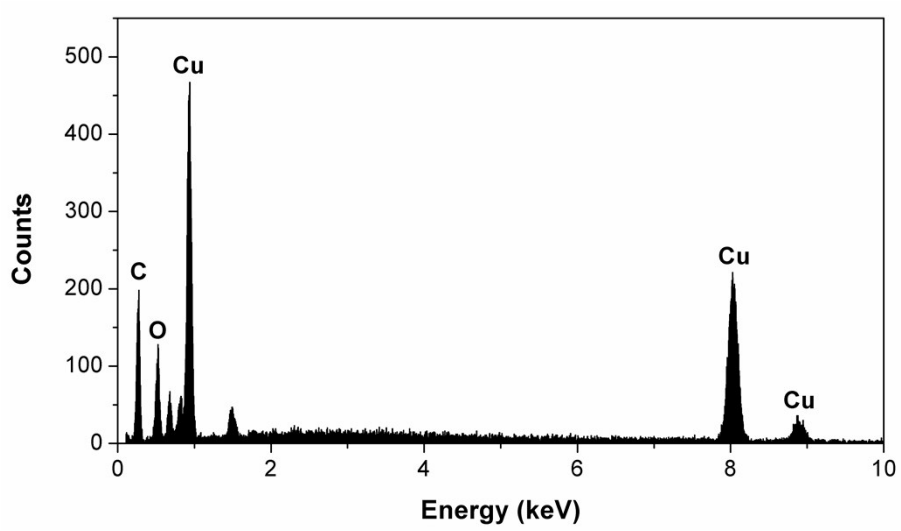

Fig. S4 EDS pattern of the porous CuO-NSs/RGO composite.

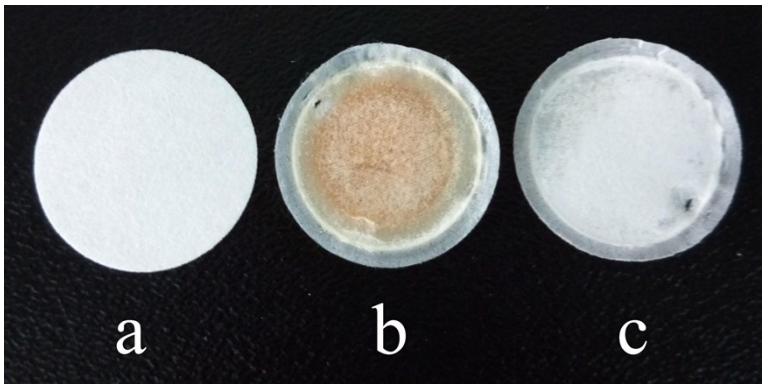

Fig. S5 Digital photographs of the separators obtained from (a) pristine separator, (b) pristine CuO cell, and (c) CuO-NSs/RGO composite cell.

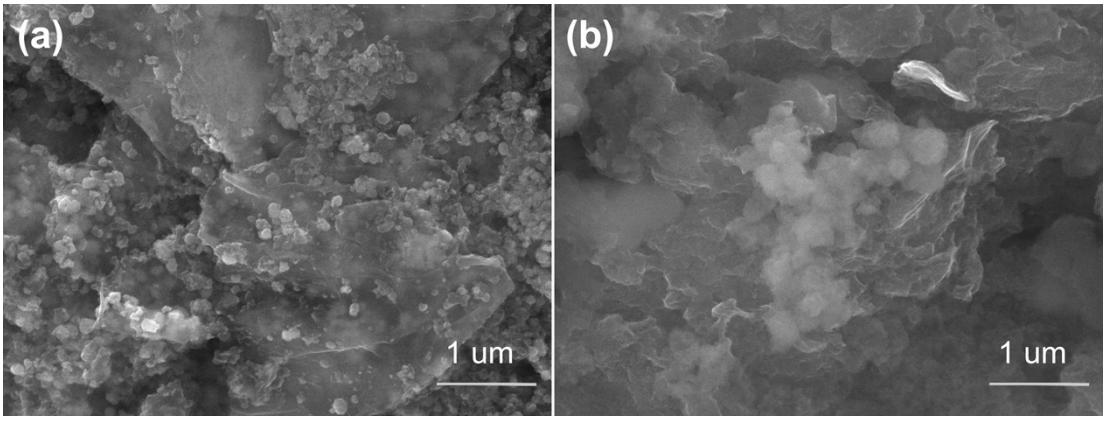

Fig. S6 (a) SEM images of the CuO-NSs/rGO composite before cycling and (b) after 200 cycles at a current density of 0.5 A g^{-1}.

Table S1 Comparison of various CuO/carbon materials for LIB anodes.

Materials	Rate	Cycle number	Specific capacity (mA h g^{-1})	Reference
CuO@carbon octahedra	0.5 A g^{-1}	300	512	[1]
	3 A g^{-1}	—	365	
Nanoleaf-on-sheet CuO/graphene	100 mA g^{-1}	50	600	[2]
	800 mA g^{-1}	—	280	
CuO nanorods/graphene	0.1 C	50	692.5	[3]
	5 C	—	262	
CuO nanorod/rGO	70 mA g^{-1}	50	480	[4]
	700 mA g^{-1}	—	250	
CuO/rGO paper	67 mA g^{-1}	50	736.8	[5]
	3.35 A g^{-1}	—	~ 250	
CuO/RGO	0.1 mA cm^{-2}	45	516.4	[6]
	6.4 mA cm^{-2}	—	201.1	
CuO hollow nanoparticles/graphene	50 mA g^{-1}	50	743	[7]
	1 A g^{-1}	500	281	
	2 A g^{-1}	—	396	
Porous CuO-NSs/RGO	0.1 A g^{-1}	50	692.8	This work
	0.5 A g^{-1}	200	616.2	
	1 A g^{-1}	300	446	
	5 A g^{-1}	—	329.4	

References

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