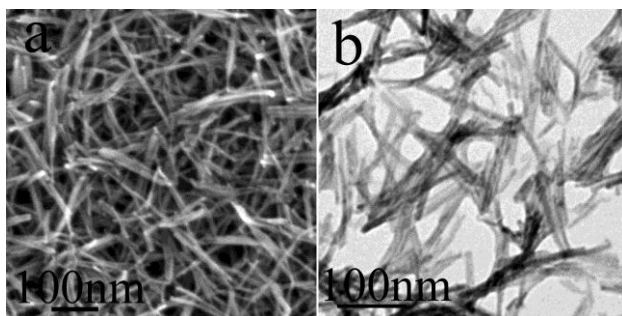


## Electronic Supplementary Information

### Facile Synthesis of Novel Tunable Highly porous CuO Nanorods for High Rate Lithium Battery Anode with Realized Long Cycle Life and High Reversible Capacity

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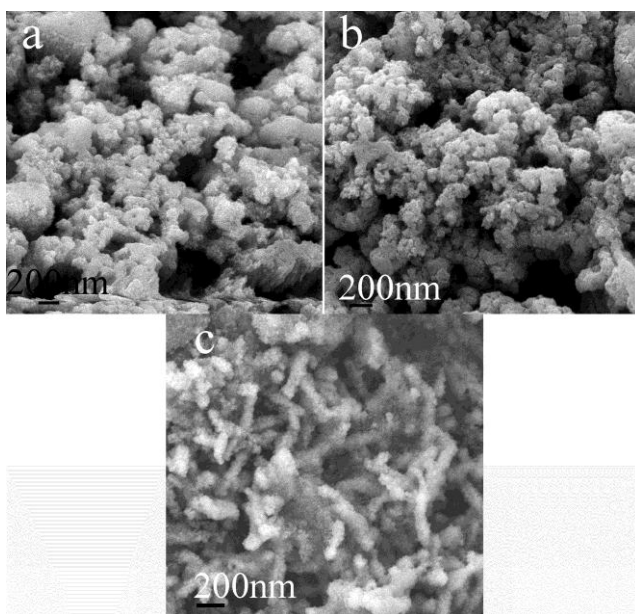
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Sciences at the Microscale. Department of Chemistry, University of Science and  
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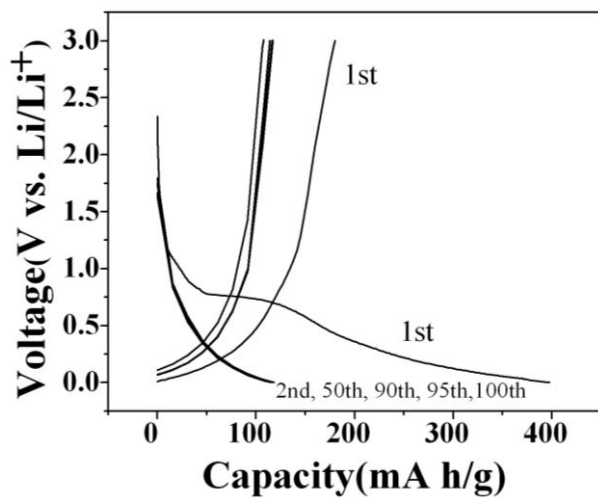
**Fig. S1** (a) SEM image of Cu(OH)<sub>2</sub> nanorods; (b) TEM image of Cu(OH)<sub>2</sub> nanorods

**Fig. S2** The results obtained by  $\text{Cu}(\text{OH})_2$  nanorods directly calcined at different temperatures

Sample	Heat-treatment temperature( $^{\circ}\text{C}$ )	The target products
$\text{Cu}(\text{OH})_2$ nanorods	50	$\text{Cu}(\text{OH})_2$ nanorods
	100	$\text{Cu}(\text{OH})_2$ nanorods
	200	$\text{CuO}$ particles (most)+ $\text{CuO}$ nanorods (little)
	400	$\text{CuO}$ particles



**Fig. S3** The SEM images of the three electrodes after cycling: (a) sample A; (b) sample B; (c) sample C.



**Fig. S4** The discharge-charge profiles of acetylene black.