

Supplementary Information

Controllable synthesis of various kinds of copper sulfides (CuS , Cu_7S_4 , Cu_9S_5) for high-performance supercapacitors

Ying Wang, Fuyang Liu, Ying Ji, Min Yang, Wei Liu, Wei Wang, Qiushi Sun, Ziqing

Zhang, Xudong Zhao* and Xiaoyang Liu*

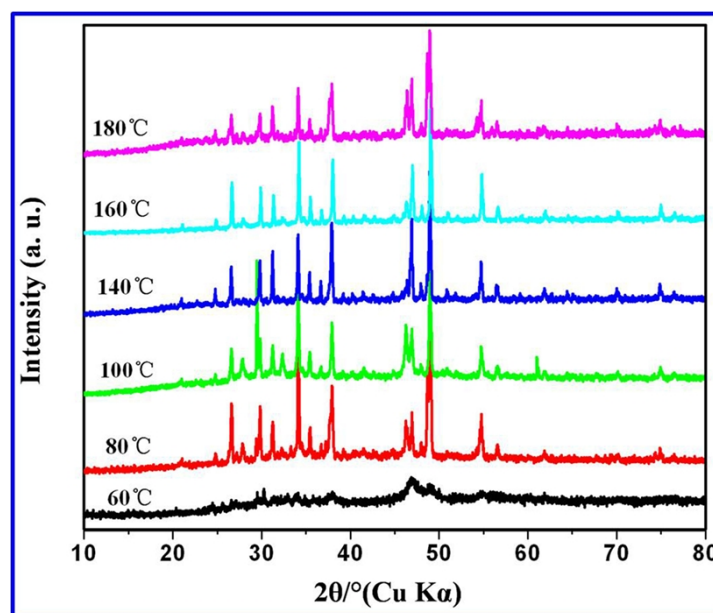


Figure S1. XRD patterns of the synthesized products at different temperature.

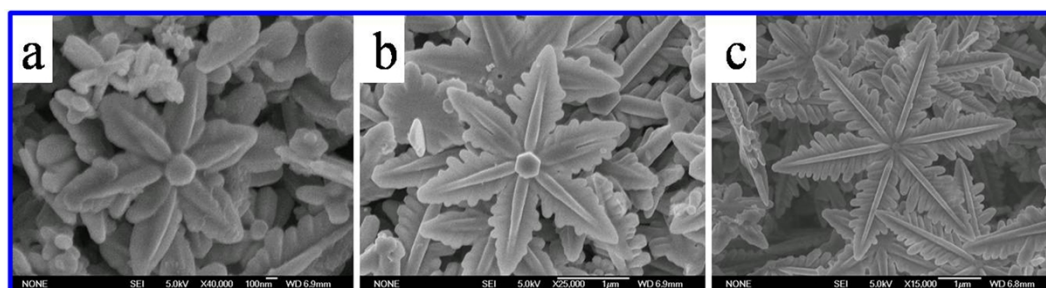


Figure S2. SEM images of the products obtained at different times. (a) 0.5 h, (b) 1 h, (c) 2 h.

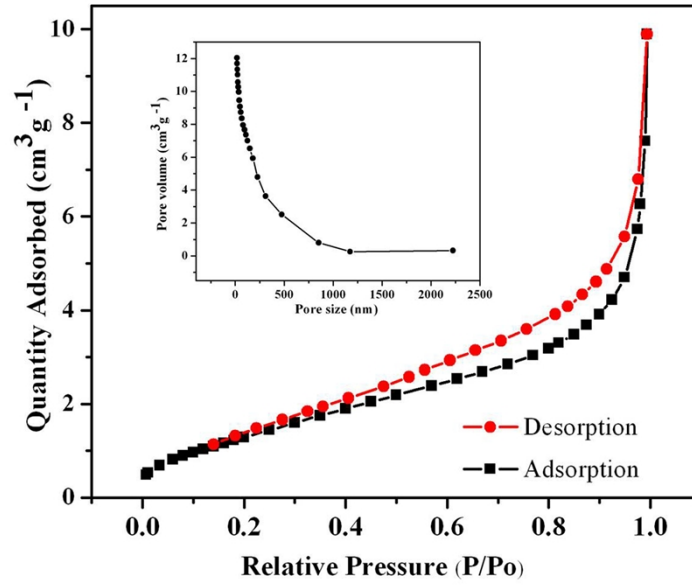


Figure S3. N₂ adsorption/desorption isotherms and BJH pore size distribution (inset) of the Cu₇S₄.

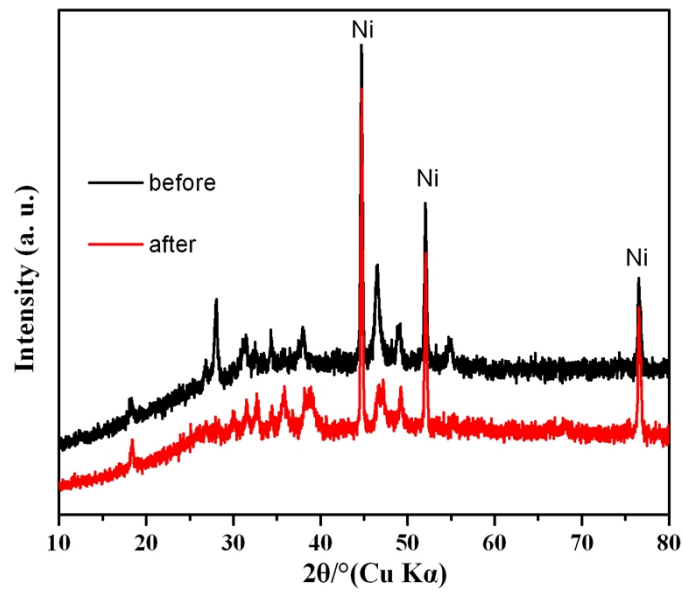


Figure S4. XRD patterns of the Cu₇S₄ electrode before charge/discharge test and after 1000 cycles.

Table S1-The values of R_s , R_{ct} , Z_w , C_{ps} and C_{dl} were calculated from the EIS result of the Cu₇S₄

$R_s(\Omega)$	$R_{ct}(\Omega)$	Z_w	$C_{ps}(F)$	$C_{dl}(\Omega)$
1.74	0.68	0.36	0.82	0.05