

Supporting Information

Green and high-efficient microwave synthesis route for sulfur/carbon composite for Li-S battery

Chun-Han Hsu^{a}, Cheng-Han Chung^b, Tzu-Hsien Hsieh^c and Hong-Ping Lin^{b*}*

a. National Tainan Junior College of Nursing, Tainan 700, Taiwan. b. Department of chemistry, National Cheng Kung University, Tainan 70101, Taiwan. c. Green Technology Research Institute, CPC Corporation, Kaohsiung 81126, Taiwan

*Corresponding author: hplin@mail.ncku.edu.tw; chunhanhsu@gmail.com

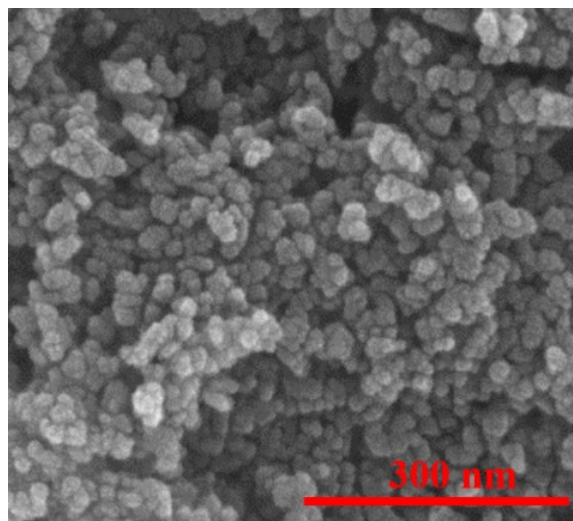


Figure S1. SEM image of ZnO nanoparticle.

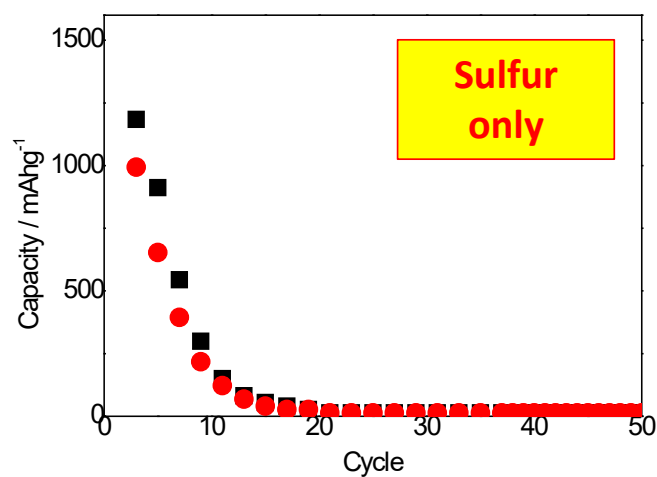


Figure S2. Cyclic performance of sulfur electrode.

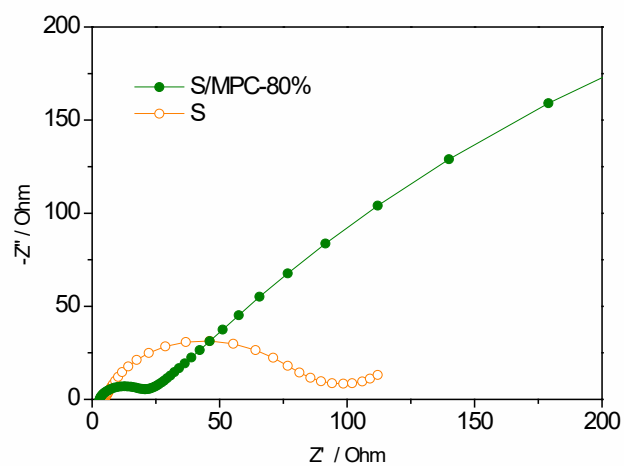


Figure S3. EIS spectra of cell made by S/MPC-80% and sulfur electrode.

Table S1. The weight data of S/MPC samples before and after microwave treatment.

Condition	MPC / g	Sulfur / g	Weight / g (after Microwave treatment)	Sulfur contain/%
<i>Raw MPC</i>	1.0	0	1.0 (<i>300 W* 60 s</i>)	0
<i>100 W * 60 s</i>	0.2	0.8	1.0	80%
<i>200 W * 60 s</i>	0.2	0.8	0.74	73%
<i>300 W * 60 s</i>	0.2	0.8	0.67	70%