

## Supporting Information

for

# **Synthesis and characterization of electrospun molybdenum dioxide–carbon nanofibers as sulfur matrix additives for rechargeable lithium–sulfur battery applications**

Ruiyuan Zhuang<sup>1‡</sup>, Shanshan Yao<sup>\*1‡</sup>, Maoxiang Jing<sup>1</sup>, Xiangqian Shen<sup>1,2</sup>,  
Jun Xiang<sup>3</sup>, Tianbao Li<sup>2</sup>, Kesong Xiao<sup>2</sup> and Shibiao Qin<sup>2</sup>

Address: <sup>1</sup>Institute for Advanced Materials, College of Materials Science and Engineering, Jiangsu University, Zhenjiang, 212013, P. R. China, <sup>2</sup>Hunan Engineering Laboratory of Power Battery Cathode Materials, Changsha Research Institute of Mining and Metallurgy, Changsha, 412212, P. R. China and <sup>3</sup>School of Mathematics and Physics, Jiangsu University of Science and Technology, Zhenjiang, 212013, P. R. China

Email: Shanshan Yao\* -yaosshan@ujs.edu.cn

\* Corresponding author

‡These authors contributed equally to this work.

## Additional experimental data and experimental schemes

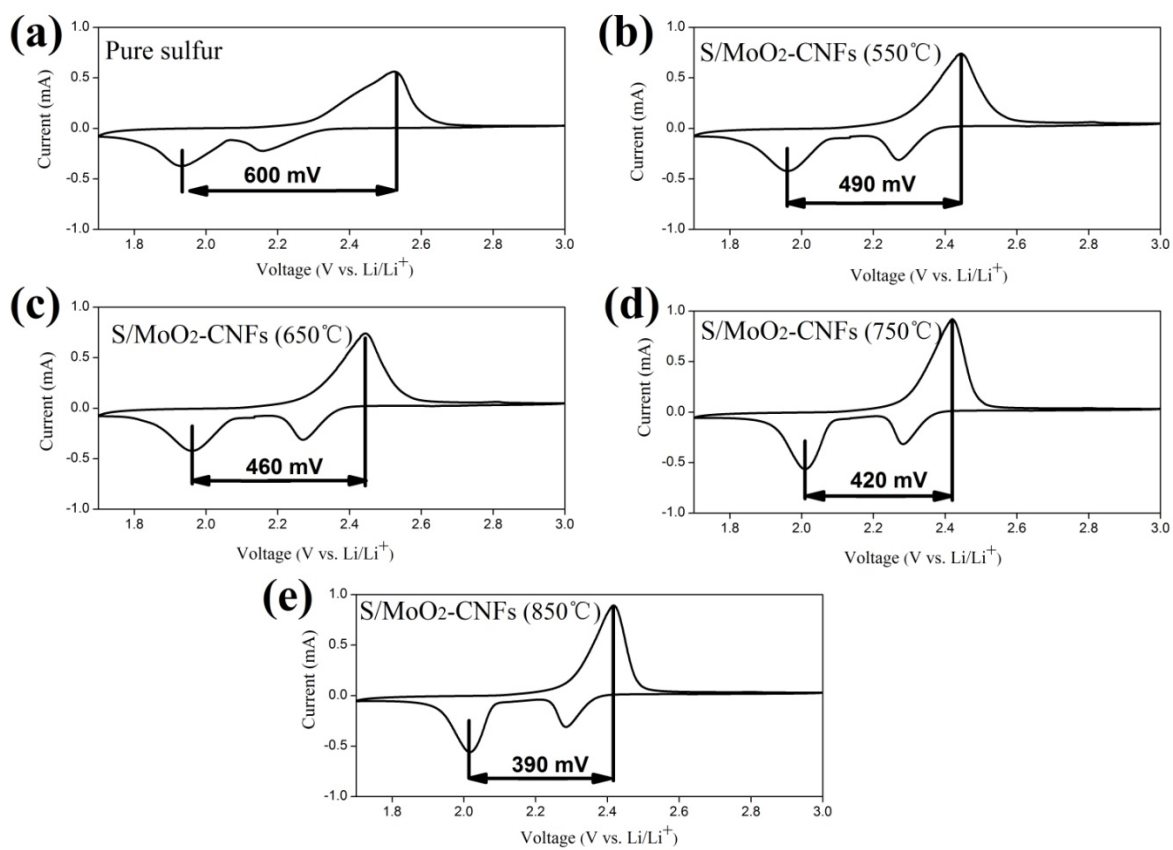
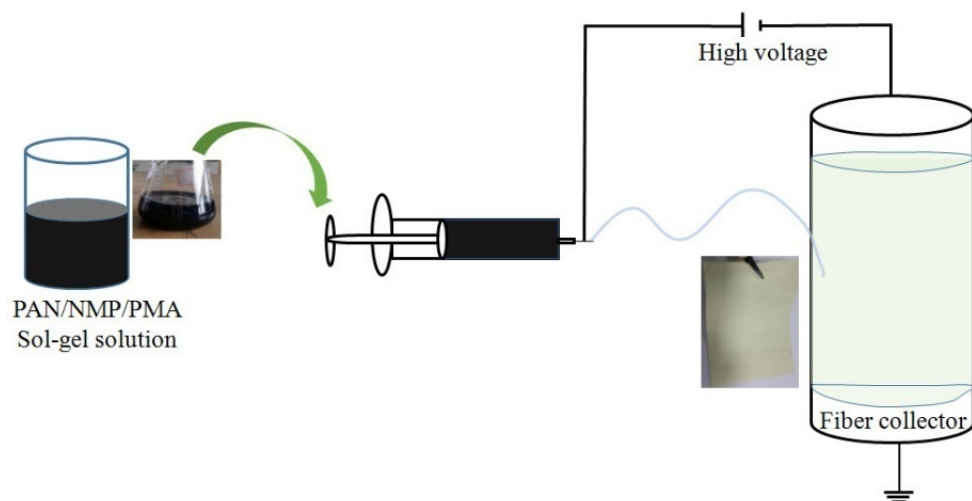
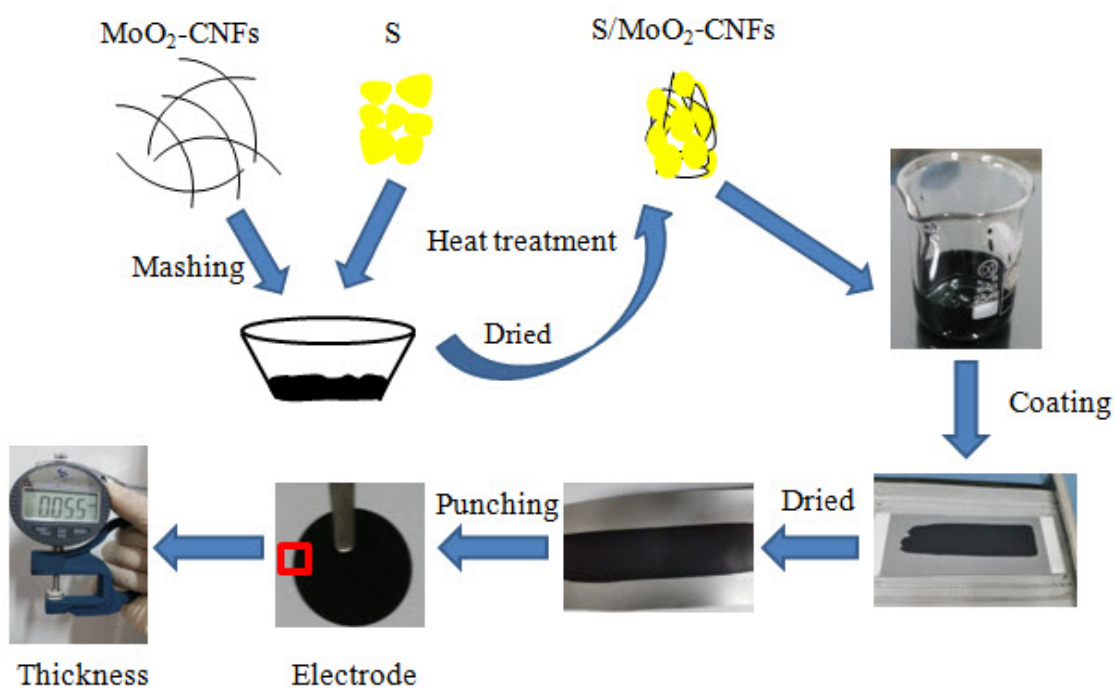


Figure S1: CV curves of Li-S cells with (a) pure sulfur electrode, (b-e) sulfur/MoO<sub>2</sub>-CNF composite electrodes.



Scheme S1: The schematic illustration of the procedure used to prepare MoO<sub>2</sub>-CNFs.



Scheme S2: A schematic representation of the S/MoO<sub>2</sub>-CNF electrodes.