

**Electronic Supplementary Information for**

**Improving the performance of PEDOT-PSS coated**

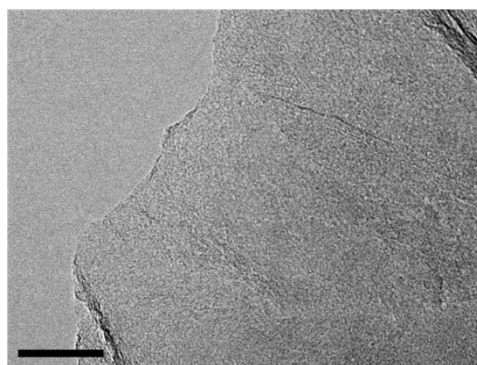
**sulfur@activated porous graphene composite cathodes for**

**lithium-sulfur batteries**

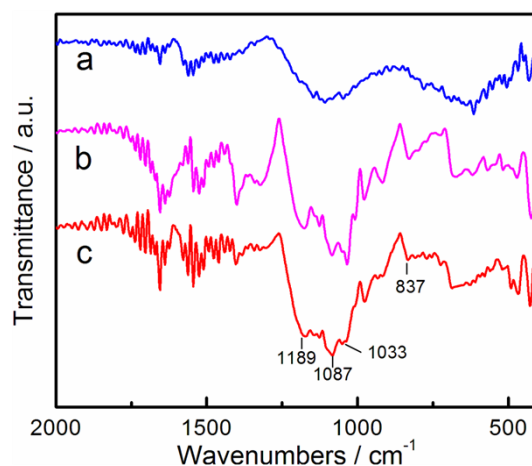
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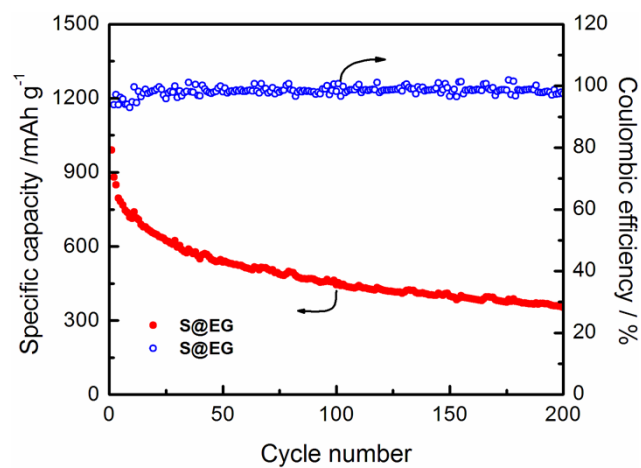
\*Email: [gengchaow@ecust.edu.cn](mailto:gengchaow@ecust.edu.cn)



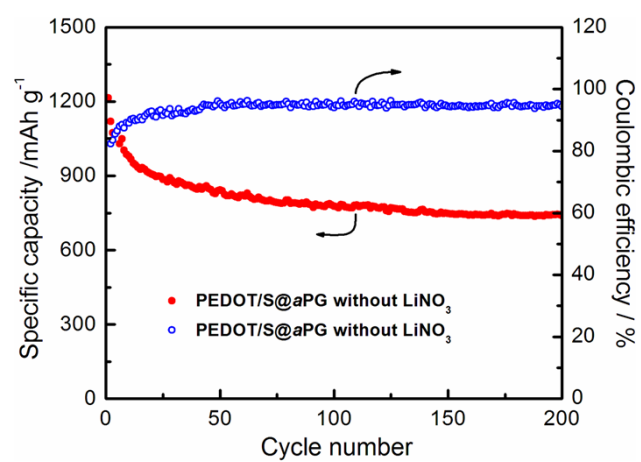
**Fig. S1** FE-SEM image of EG with high magnification (scale bars: 50 nm).



**Fig. S2** FTIR spectra of (a) S@aPG, (b) PEDOT-PSS and (c) PEDOT/S@aPG.



**Fig. S3** Cycling performance and coulombic efficiency of S@EG.



**Fig. S4** Cycling performance and coulombic efficiency of PEDOT/S@aPG without  $\text{LiNO}_3$ .