

Thiol for interfacial modification to improve the performance of lithium-sulfur batteries

Chenyang Shi ^a, Shiyu Shao ^a, Chuanxin Zong ^a, Jiahao Gu ^a, Zeyu Huang ^a, Qiyu Wang^{a,*}, Bo Hong ^{a,b}, Mengran Wang ^{a,b}, Zhian Zhang ^{a,b}, Jie Li ^{a,b}, Yanqing Lai ^{a,c}

^a School of Metallurgy and Environment, Central South University, Changsha 410083, Hunan, China

^b Engineering Research Centre of Advanced Battery Materials, The Ministry of Education, Changsha 410083, Huanan, China

^c Hunan Province Key Laboratory of Nonferrous Value-Added Metallurgy, Central South University, Changsha 410083, Hunan, China

*Corresponding authors.

E-mail address: wangqiyucusu@163.com

Supporting figures

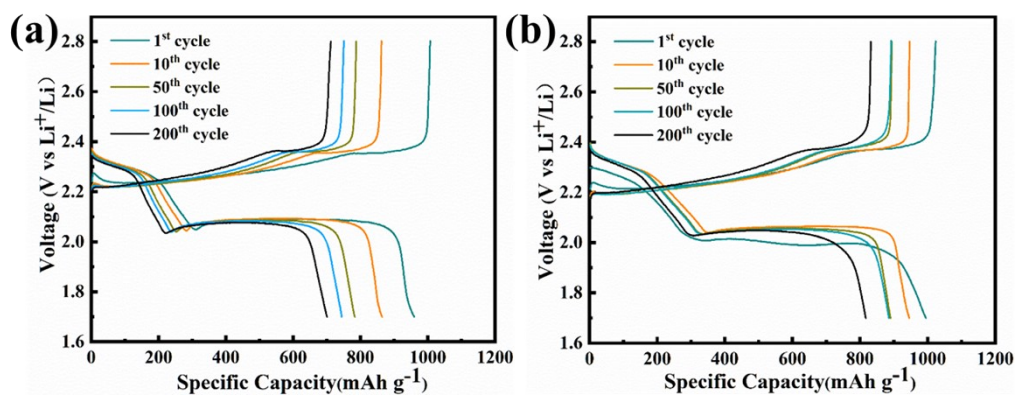


Fig S1. Charge/discharge curves of batteries with STD (a) and TBBT-containing electrolyte (b) at different number of cycles at 0.5C.

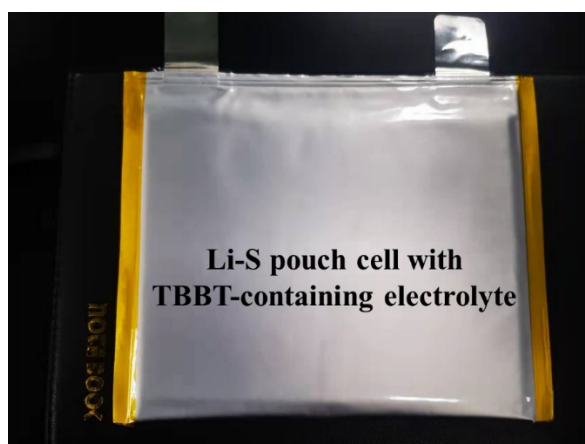


Fig S2. Image of the Li-S pouch cell with TMT-containing electrolyte.



Fig S3. Photograph of solution after increasing Li_2S_6 content into the TMT-containing electrolyte.



Fig S4. Digital image of the reaction solution between lithium and TBBT-containing electrolyte.

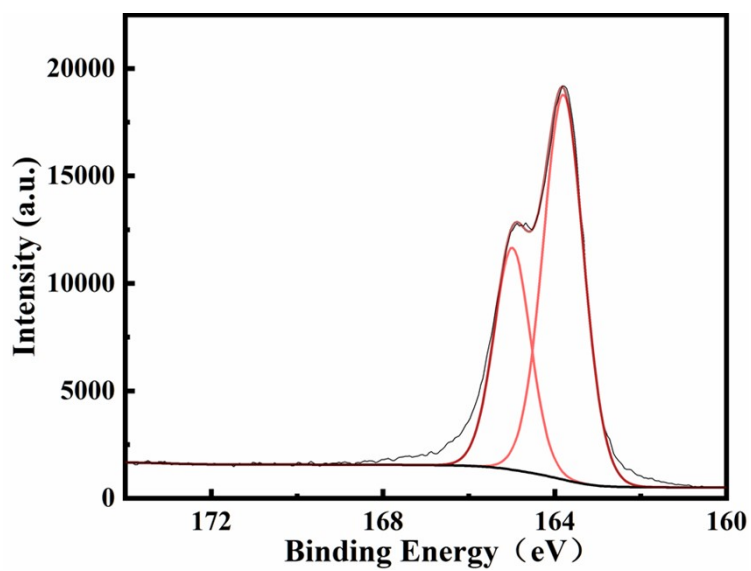


Fig S5. S 2p XPS spectra of TBBT-S_n.