

Supporting Information

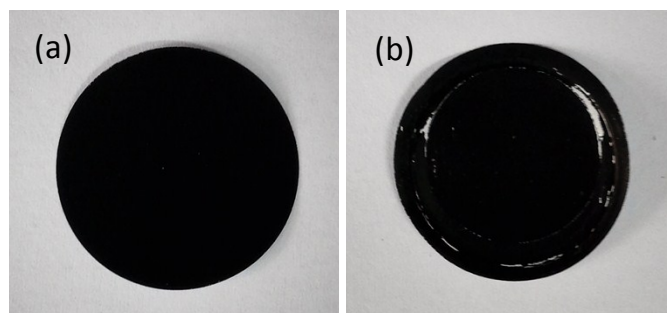
High Performance Lithium-Sulfur Batteries with a Permselective Sulfonated Acetylene Black Modified Separator

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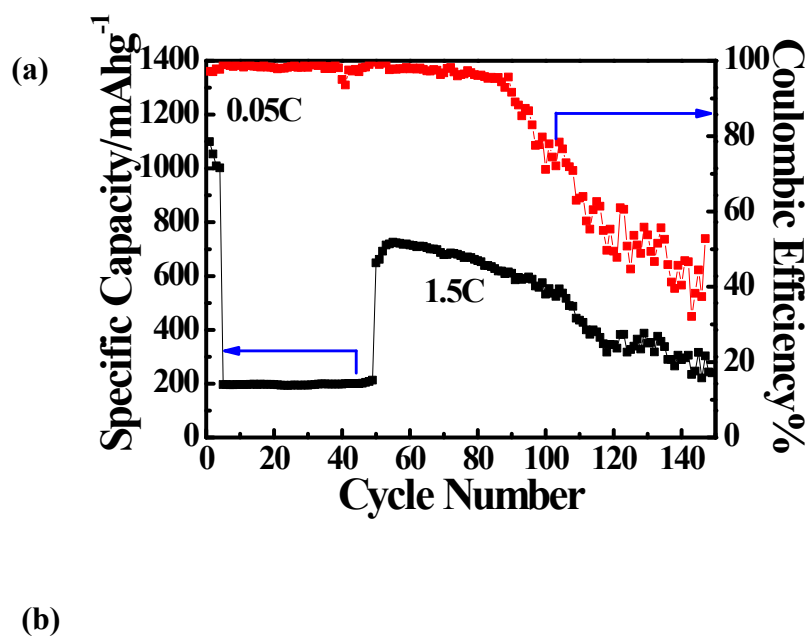
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Figures S1 The AB-SO₃⁻ coated separator (a) before and (b) after cycling.



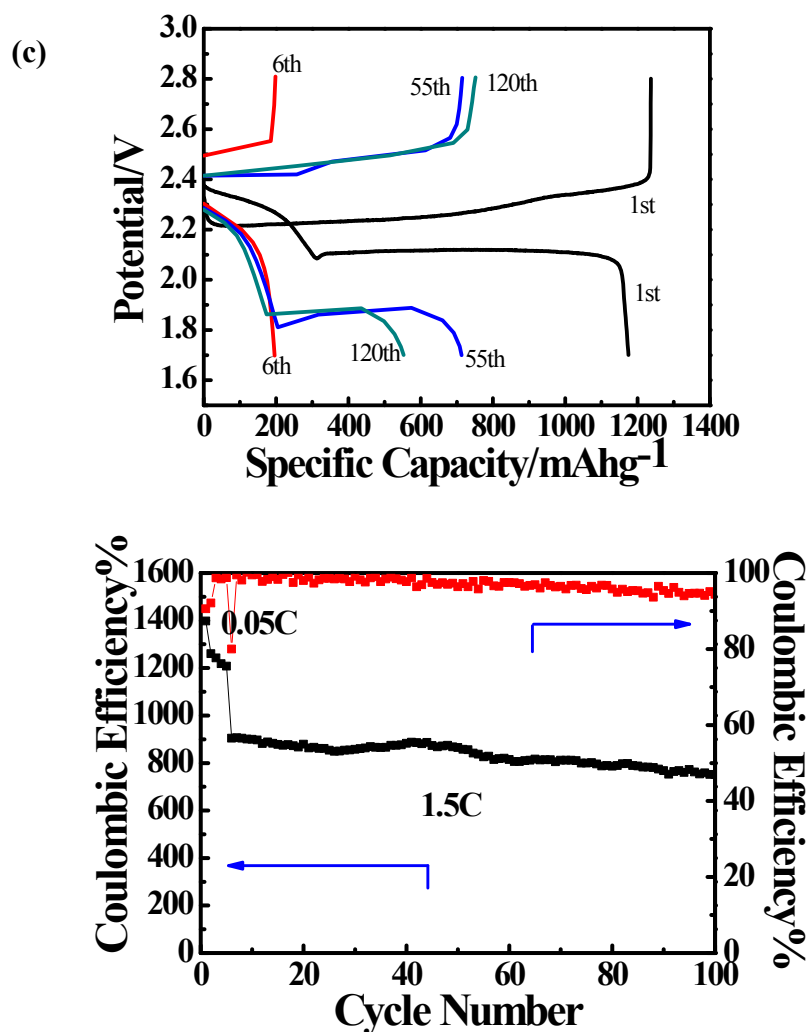


Figure S2 (a) Cycle performances and Coulombic efficiency of Li-S cell using the pristine Celgard separator at 1.5 C. (b) Charge-discharge curves of Li-S cell using the pristine Celgard separator at 1.5 C. (c) Cycle performances and Coulombic efficiency of Li-S cell using AB-SO₃⁻ modified separator at 1.5 C.

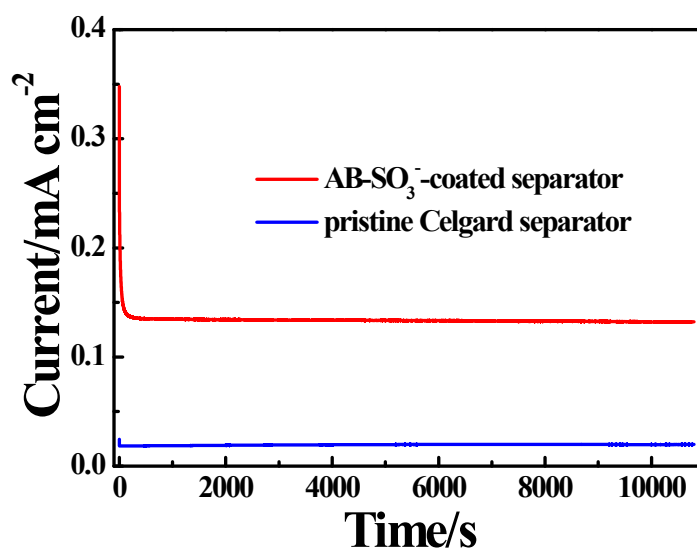


Figure S3 The potentiostatic polarization curves of Li-S cell with Pristine Celgard separator and AB-SO₃⁻ modified separator.