Supporting Information

Oxidized Multiwall Carbon Nanotube Modified Separator for High Performance Lithium-Sulfur Batteries with High Sulfur Loading

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Figure S1. TGA curves of sulfur composite materials from 30 °C to 500 °C at a heating rate of 10 °Cmin⁻¹ under N₂ atmosphere.

Figure S2. Cross sectional SEM image of the cathode
**Figure S3.** Cross sectional SEM observation and elemental mappings of the cycled o-MWCNT-coated separator.

**Figure S4.** SEM images of the cycled Li foil in the cells utilizing (a) pristine separator and (b) o-MWCNT-coated separator.