

Electronic Supplementary Information

A mango stone-derived activated carbon with high sulfur loading as a cathode material for lithium–sulfur batteries

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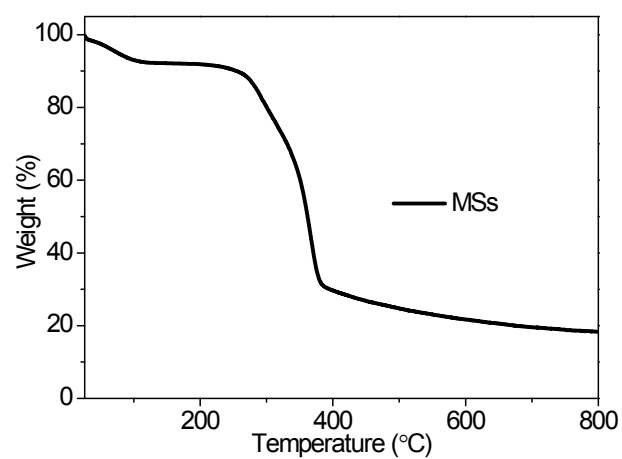


Fig. S1 TGA profile of dried MSs under a nitrogen flow.

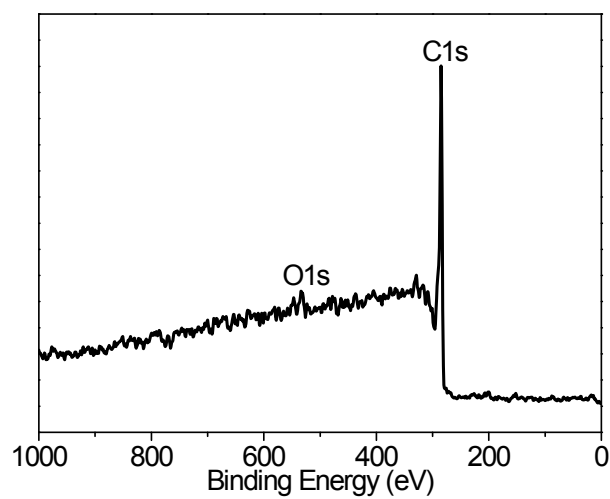


Fig. S2 XPS spectrum of the a-MSs-500-4 activated carbon.

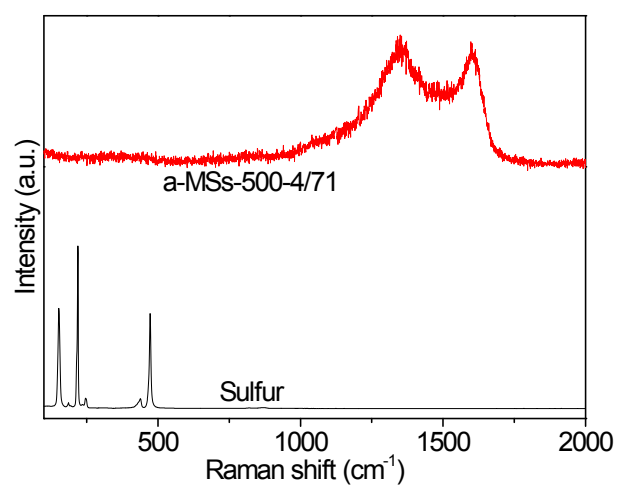


Fig. S3 Raman spectra of pristine sulfur and a-MSs-500-4/71 composite.

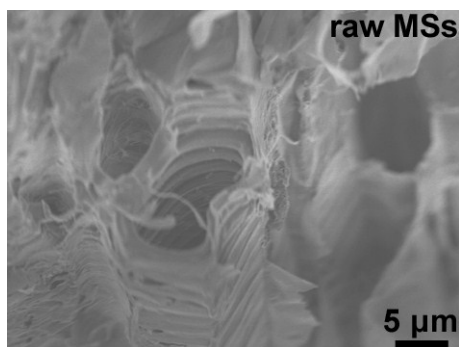


Fig. S4 SEM image of raw MSs.

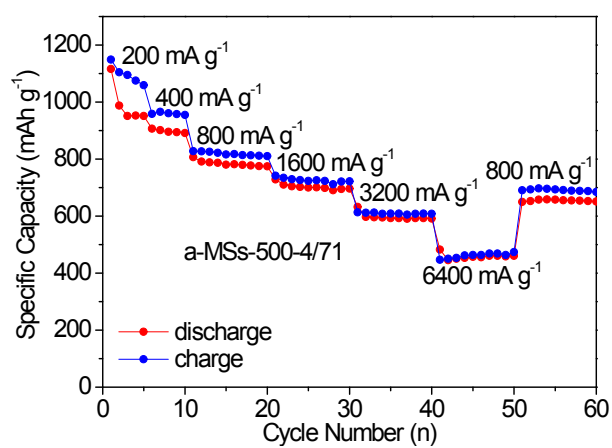


Fig. S5 Rate capability of the a-MSs-500-4/71 composite electrode from 200 mA g⁻¹ to 6400 mA g⁻¹.

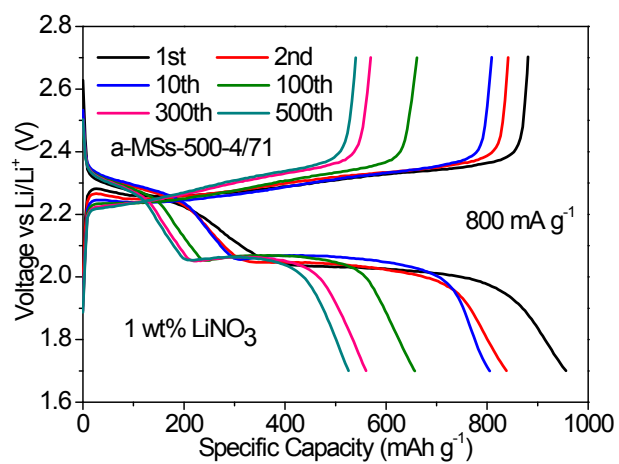


Fig. S6 Galvanostatic charge/discharge profiles at different cycles of the a-MSs-500-4/71 composite electrode at 800 mA g^{-1} with 1 wt% LiNO_3 as electrolyte additive.

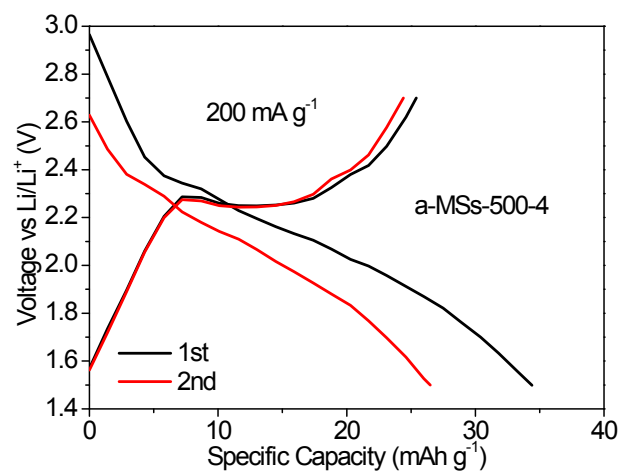


Fig. S7 Glavanostatic charge/discharge voltage profiles of the a-MSs-500-4 activated carbon for the first two cycles at 200 mA g⁻¹.