Supporting Information for

Improved Electrochemical Performance Based on Nanostructured SnS_2@CoS_2-rGO Composite Anode for Sodium-Ion Batteries

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Supplementary Figures

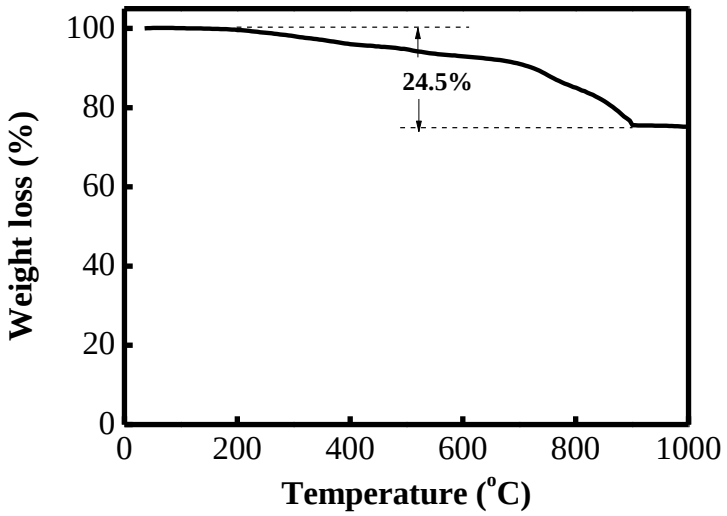

Fig. S1 Thermogravimetric analysis profile of the SnS_2@CoS_2-rGO composite

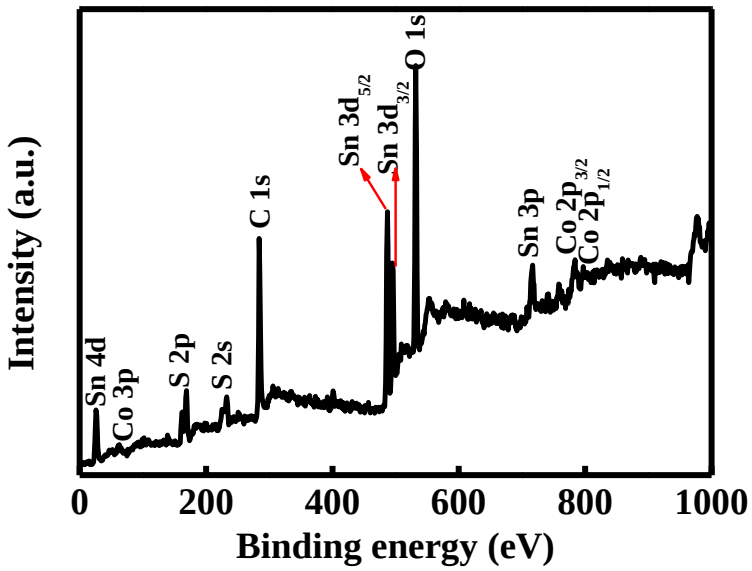

Fig. S2 Survey XPS spectra of the SnS_2@CoS_2-rGO composite

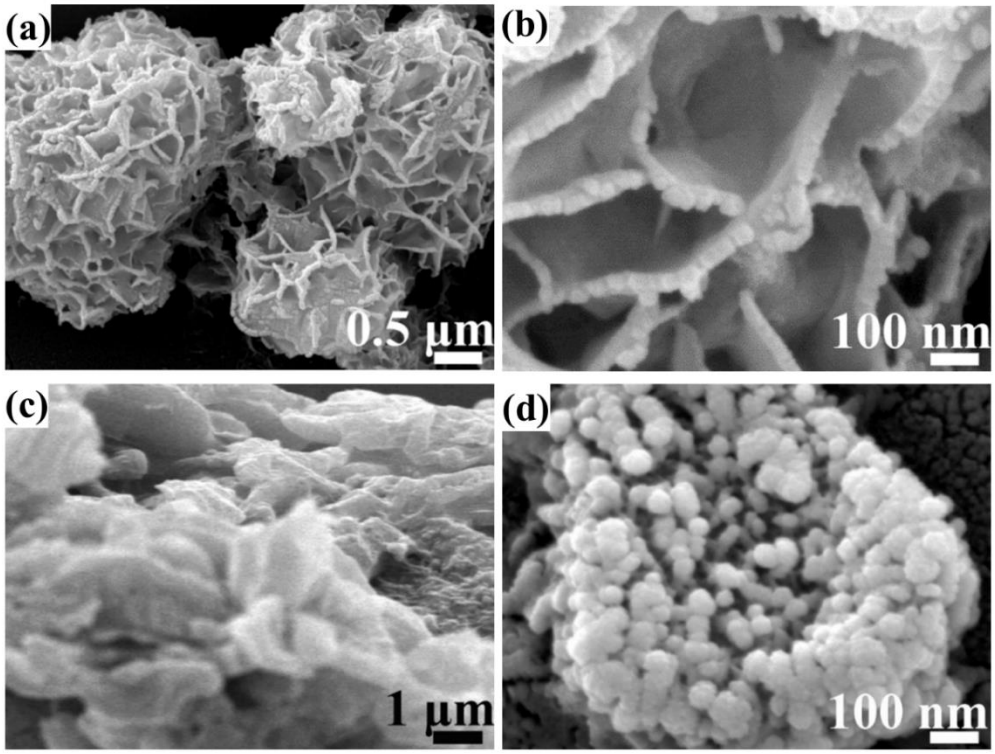

Fig. S3 Low- and high- magnification SEM images of **a, b** SnS_2-rGO composite and **c, d** CoS_2-rGO composite

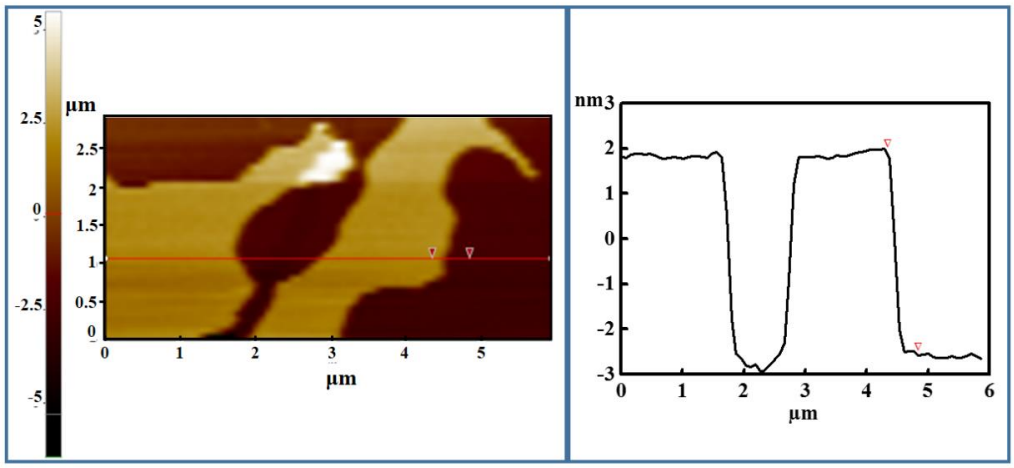

Fig. S4 AFM image and corresponding height image of the rGO

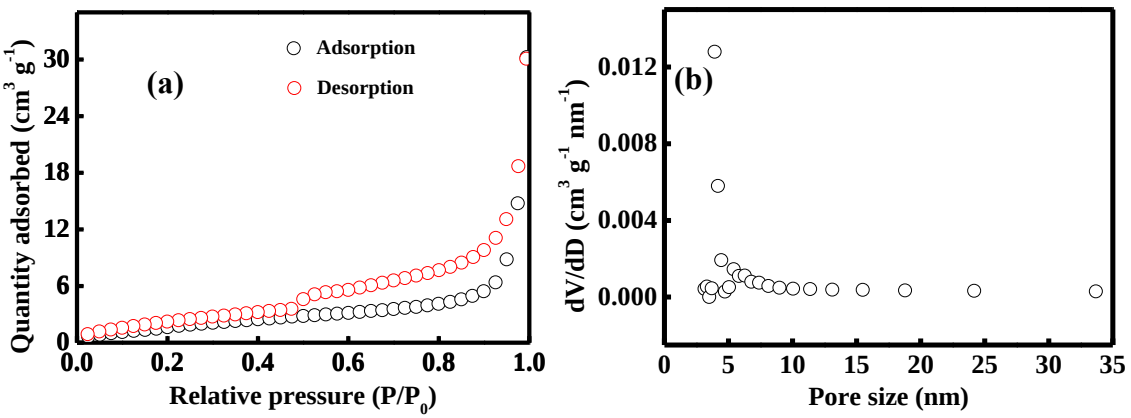

Fig. S5 a N_2 adsorption–desorption isotherms and **b** pore size distribution curves of the SnS_2@CoS_2-rGO composite

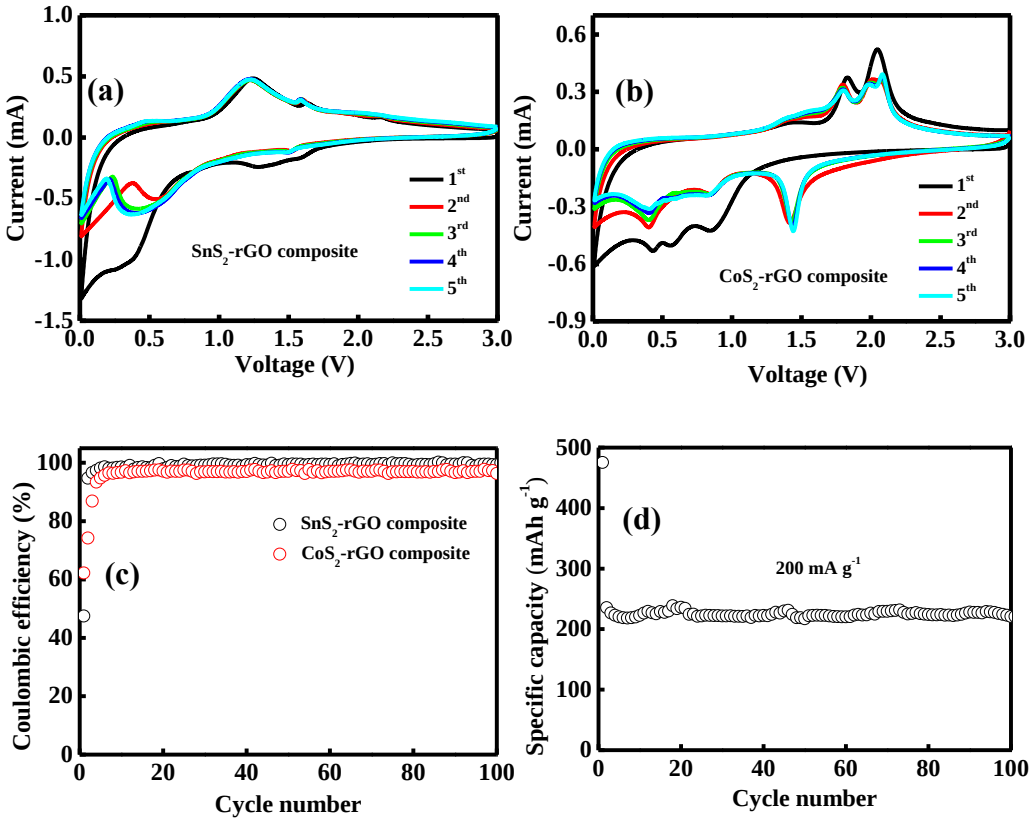

Fig. S6 a, b CV curves of the SnS_2-rGO composite and CoS_2-rGO composite, respectively. **c** Initial Coulombic efficiency of the SnS_2-rGO and CoS_2-rGO composites at 200 mA g^{-1}. **d** Cycling performance of the rGO at a current density of 200 mA g^{-1}

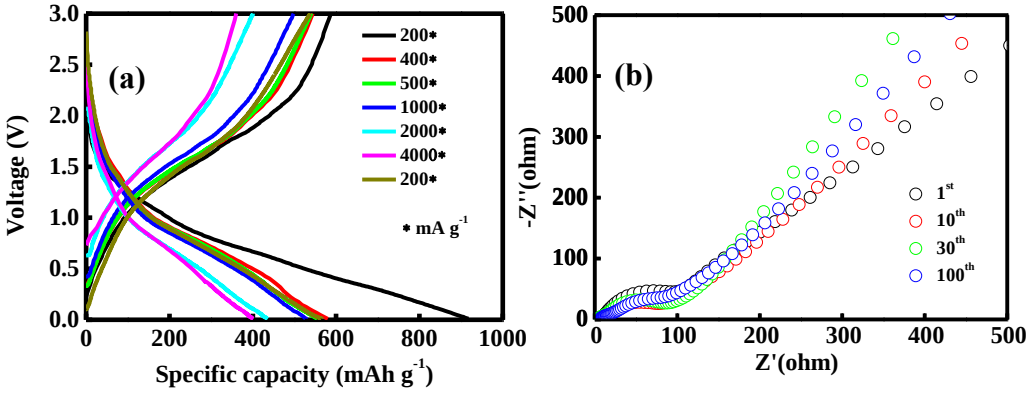

Fig. S7 a Charge/discharge profiles of the SnS_2@CoS_2-rGO composite at various current densities. **b** Nyquist plots of the SnS_2@CoS_2-rGO composite after 1st, 10th, 30th, and 100th cycles at a current density of 1000 mA g^{-1}

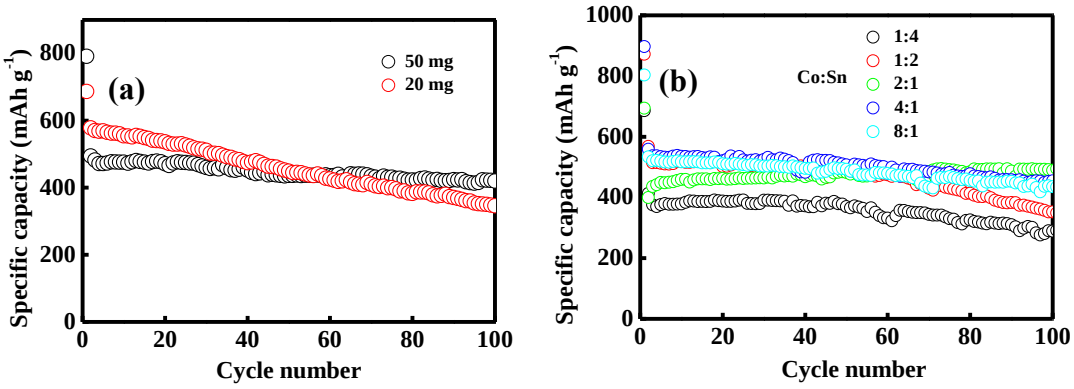

Fig. S8 Cycling performance of the SnS_2@CoS_2-rGO composite with different molar ratio of the $CoCl_2 \cdot 6H_2O$ to $SnCl_4 \cdot 5H_2O$ (**a**) and different amounts of rGO (**b**) at a current density of 200 mA g^{-1}

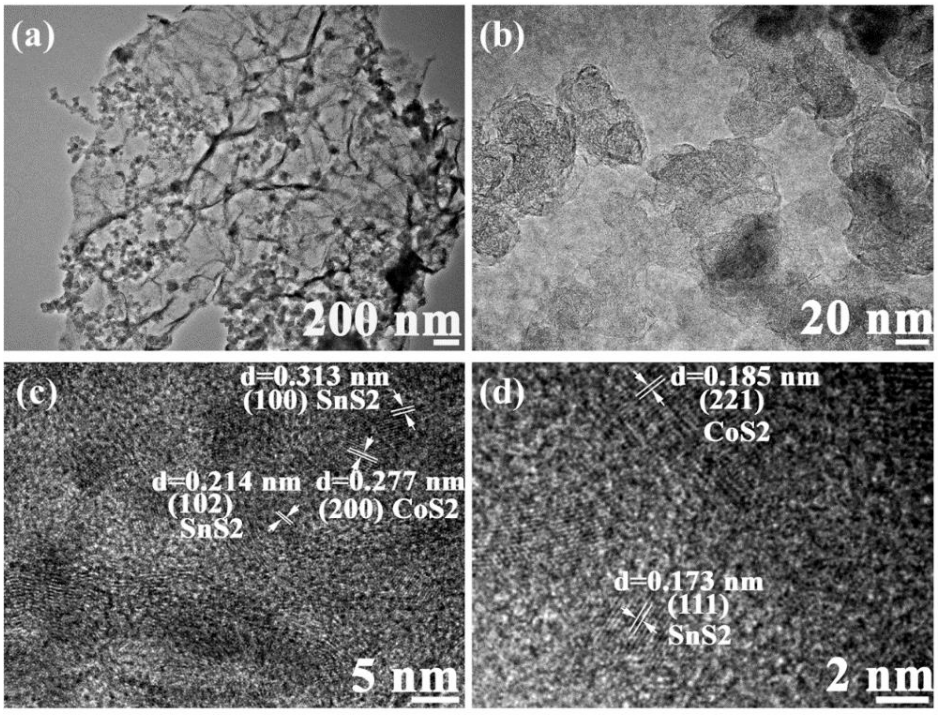

Fig. S9 TEM images of the SnS_2@CoS_2-rGO composite after 100 cycles at a current density of 200 mA g^{-1}