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Supporting Information

Synthesis of core-shell ZnS@C micron-rods as high performance anode materials for lithium ion batteries

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Fig. S1 SEM images of $ZnC_2O_4 \cdot 2H_2O$.







Fig. S3 SEM images of ZnO.



Fig. S4 The XRD patterns of ZnO.



Fig. S5 SEM images of ZnS.



Fig. S6 The XRD patterns of ZnS@C MRs and ZnS.



Fig. S7 The Raman Spectra of ZnS@C MRs and ZnS.



Fig. S8 The TGA analysis of ZnS@C MRs and ZnS.



Fig. S9 The CV spectrum of ZnS.



Fig. S10 Charge-discharge curves of ZnS in the initial three cycles.



Fig. S11 The discharge-charge curves of (a) ZnS@C MRs and (b) ZnS MRs under various current densities.



Fig. S12 The EIS curves of ZnS@C MRs and ZnS before cycle.



Fig. S13 The EIS curves of (a) ZnS@C MRs and (b) ZnS before cycle and after 200 cycles.