Supporting Information

Synergistic ZnS/MWCNT Heterostructure as Advanced Electrode for High-Performance, Long-Cyclic Lithium-Ion Batteries: Experimental and DFT Insights

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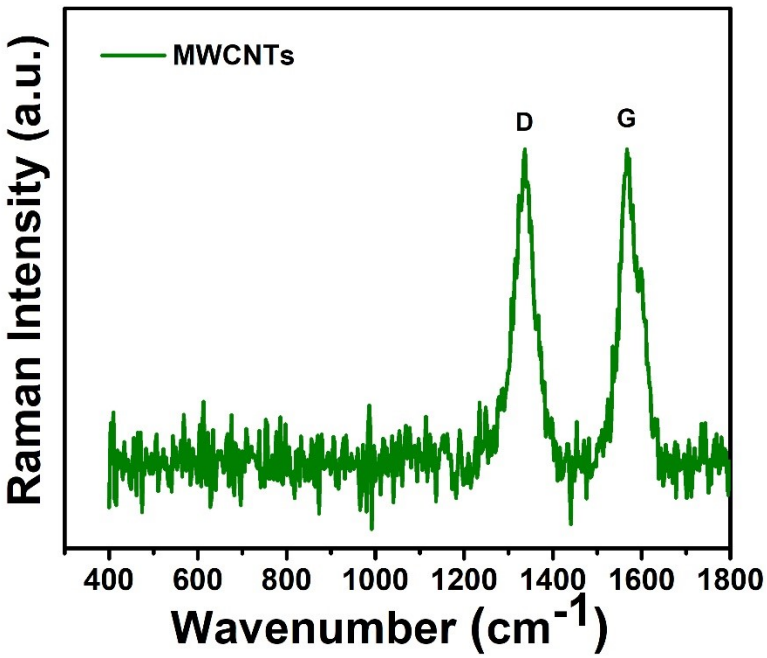

Figure S1. Raman spectrum of pure MWCNTs.

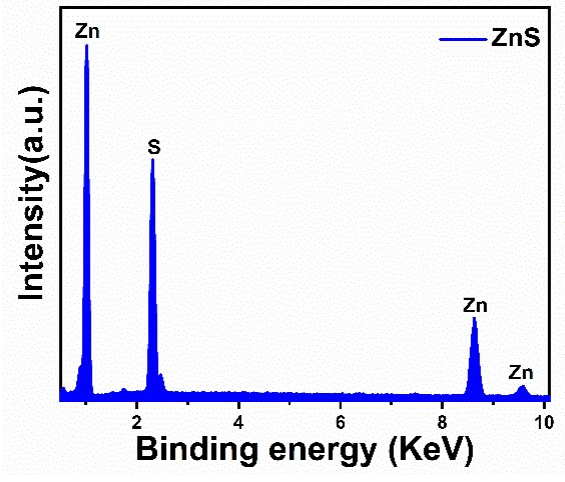

Figure S2. EDX Spectra of pristine ZnS

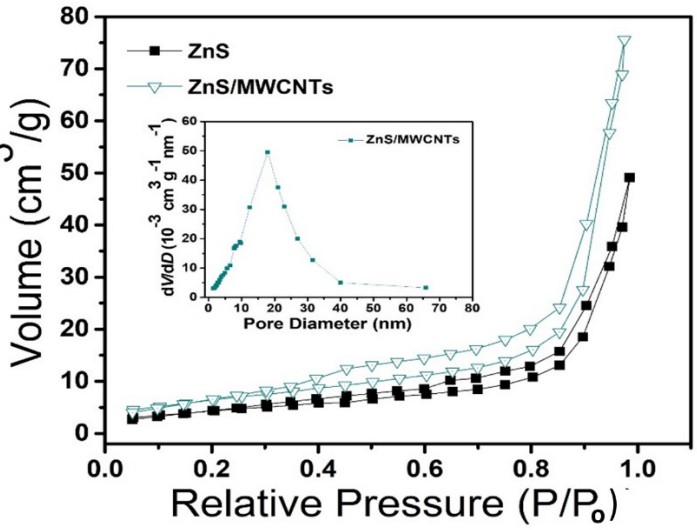

Figure S3. BET specific surface area of ZnS and ZnS/MWCNTs; Inset is the pore size distribution of ZnS/MWCNTs heterostructure.

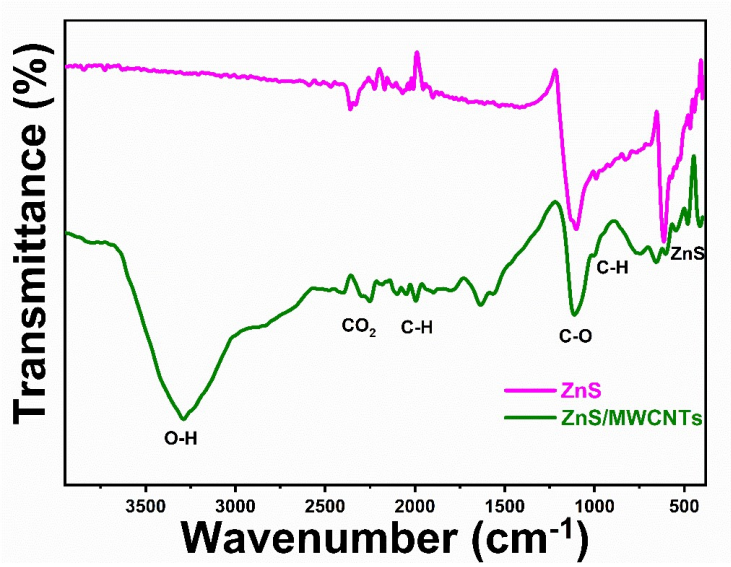

Figure S4. FTIR spectrum of pristine ZnS and heterostructured ZnS/MWCNTs

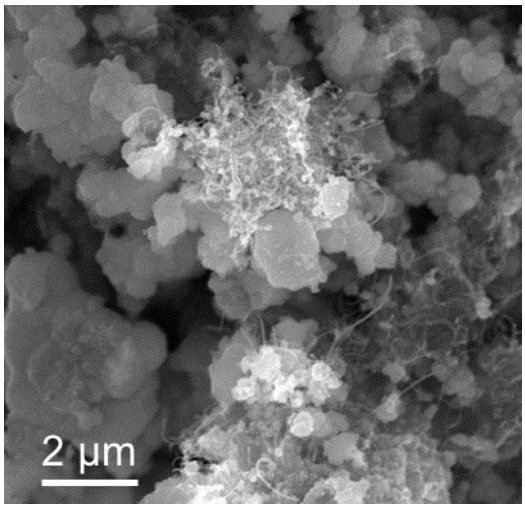

Figure S5. SEM of the ZnS/MWCNT structure after 1000 charge–discharge cycles.

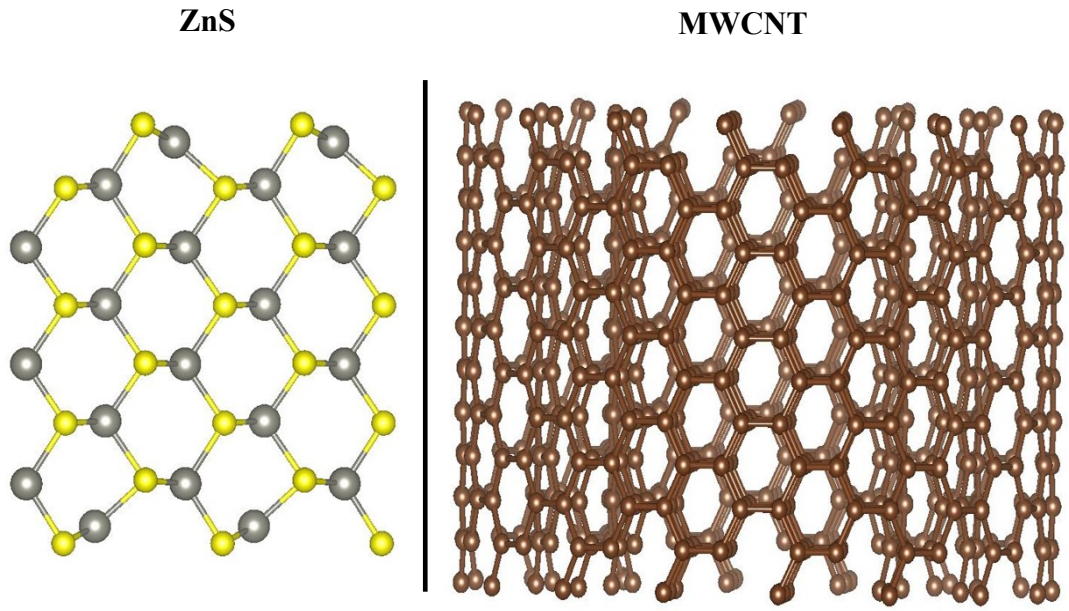

Fig.S6: A schematic depiction of heterostructure between MWCNT and ZnS (110) surface.