Supporting Information

Three-Dimensional Nanotubes Composed of Carbon-anchored Ultrathin MoS₂ Nanosheets with Enhanced Lithium Storage

Fenglian Yi,^{a,b,‡} Yubin Niu,^{a,b,‡} Sangui Liu,^{a,b} Junke Hou,^{a,b} Shujuan Bao^{a,b,*} and

Maowen Xu^{a,b,*}

a Institute for Clean Energy & Advanced Materials, Faculty of Materials and Energy,

Southwest University, Beibei, Chongqing 400715, P. R. China

b Chongqing Key Laboratory for Advanced Materials & Technologies of Clean Energies, Beibei, Chongqing 400715, P. R. China

[‡]Fenglian Yi and Yubin Niu contributed equally to this work.

*Authors to whom correspondence should be addressed. Email: baoshj@swu.edu.cn; xumaowen@swu.edu.cn



Figure S1. Low and high-magnification FESEM images of the MoS2 NTs@Octylamine



Figure S2. FT-IR spectrum of MoS₂ nanotubes@Octylamine and MoS₂ nanotubes@C



Figure S3. TGA analysis of of MoS_2 nanotubes@Octylamine and MoS_2 nanotubes@C in air at a heating rate of 5°C min⁻¹ to 650°C.



Figure S4. BET spectra of (a) C-MoS₂ and (b)MoS₂ NTs@C; the inset shows the pore size distribution.



Figure S5. FESEM images of MoS₂ NTs@C after cycling for 150 cycles.



Figure S6. CV curves at different scan rate of (a) C-MoS₂and (b) MoS₂ NTs@C. Log i vs. logv plots at different oxidation and reduction states of (c) C-MoS₂ and (d) MoS₂ NTs@C. NTs@C.