Supporting Information

Atomic Layer Deposited Tungsten Nitride Thin Films as New Lithium-ion Battery Anode

Dip K Nandi, Uttam K. Sen, Soumyadeep Sinha, Arpan Dhara, Sagar Mitra* and Shaibal K Sarkar*


*email: shaibal.sarkar@iitb.ac.in
Fig. S1 XPS survey of the as-grown WN$_x$ film in a complete binding energy range of 0-1000 eV

Fig. S2(a) HR-TEM image of ALD WN$_x$ on ZnO and (b) surface AFM of the as-grown film
Fig. S3 X-ray diffraction of MWCNT-WN\textsubscript{x} film on SS substrate

Fig. S4 Cyclic Voltammetry of MWCNT with scan rate of 0.2 mV s\textsuperscript{-1} against Li/Li\textsuperscript{+}
Fig. S5 CV of first two cycles for the as-grown film and film on MWCNT showing the capacity increment of the MWCNT-WN$_x$ assembly.

Fig. S6 Discharge capacity with cycle index for MWCNT at a scan rate of 50 $\mu$A cm$^{-2}$ against Li/Li$^+$.