Electronic Supplementary Information

Ultrafine Mo_2C nanoparticles encapsulated in N-doped carbon nanofibers with enhanced lithium storage performance

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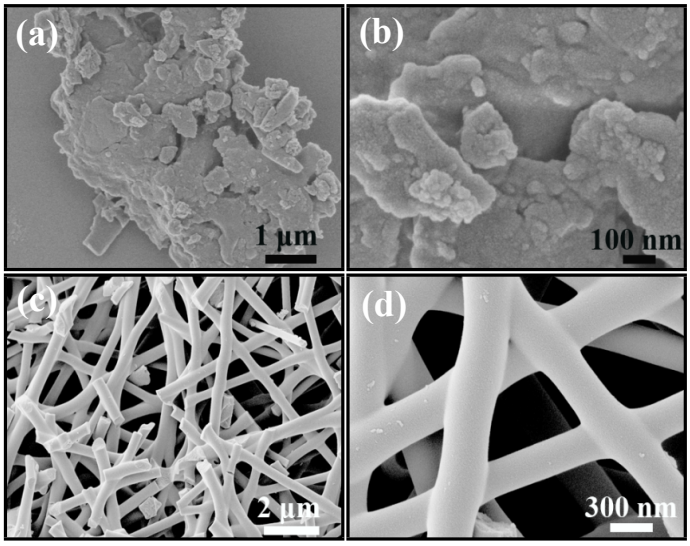

Fig. S1 FE-SEM images at low- and high-magnifications. (a,b) bulk Mo_2C and (c,d) N-CNFs obtained at 800 ^oC in N_2 atmosphere for 3 h.

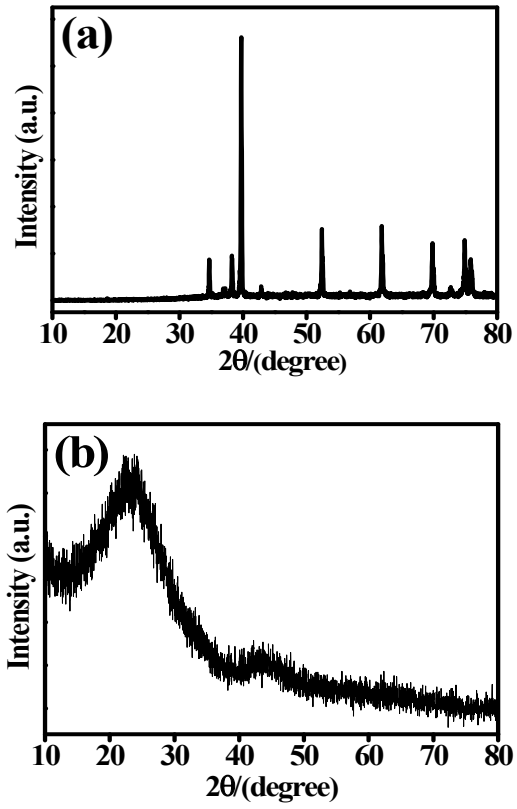

Fig. S2 XRD patterns of bulk Mo_2C (a) and N-CNFs (b).

Table S1. CHN elemental analysis data.

Samples	N %	C %	H %
Mo_2C-NCNFs	1.86	34.41	1.05
N-CNFs	6.37	86.15	1.32

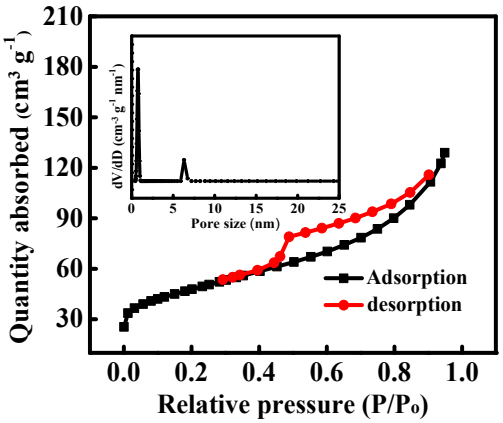

Fig. S3 Nitrogen adsorption–desorption isotherms of the Mo_2C-NCNFs hybrid. The inset shows the corresponding pore size distribution plot.

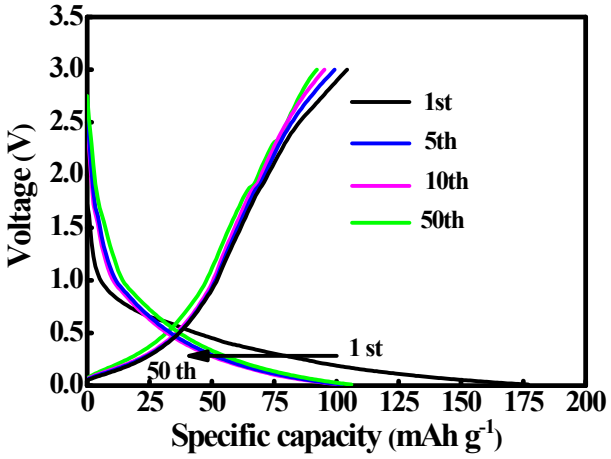

Fig. S4 Galvanostatic charge/discharge profiles of the bulk Mo_2C electrode at a current density of 100 mA g^{-1} between 0.01 and 3.0 V for the 1st, 5th, 10th, and 50th cycles.

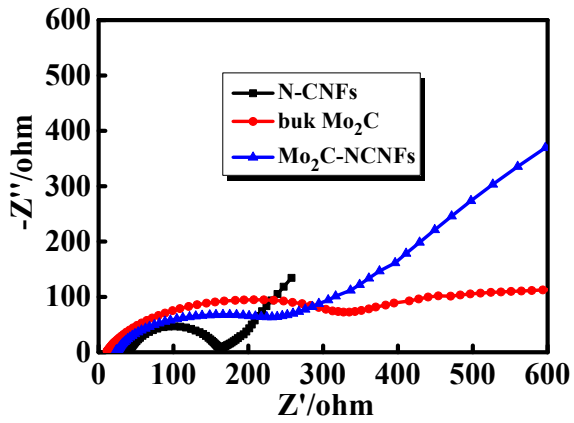

Figure S5. EIS curves of Mo_2C-NCNFs, N-CNFs and bulk Mo_2C electrodes before cell testing.

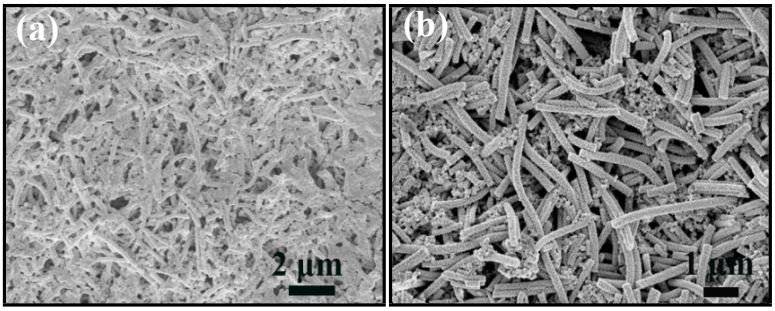

Fig. S6 FE-SEM images of Mo_2C-NCNFs hybrid after 50 charge–discharge cycles at a current density of 100 mA g^{-1}.