Supporting Information

Bubble-Template-Assisted Synthesis of Hollow Fullerene-Like MoS_2 Nanocages as a Lithium Ion Battery Anode Material

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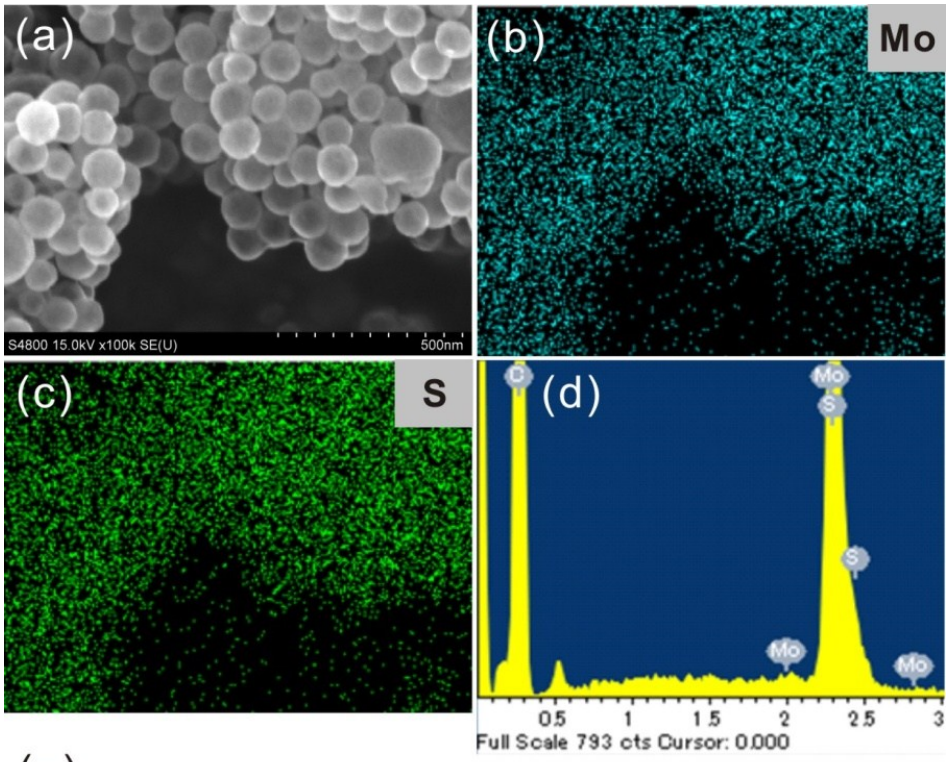

(e) Element Composition of IF-MoS_2 nanocage

Element	Intensity	Weight%	Atomic%
C K	0.5220	80.65	94.59
S K	1.0190	8.77	3.65
Mo L	0.8140	10.57	1.75
Totals		100.00	

Figure S1. EDX data of IF-MoS_2 nanocages: (a) selected FESEM image, (b) Mo (L) element mapping, (c) S (K) element mapping, (d) EDX spectrum, and (e) element composition analysis results, where the C element signal came from the substrate.

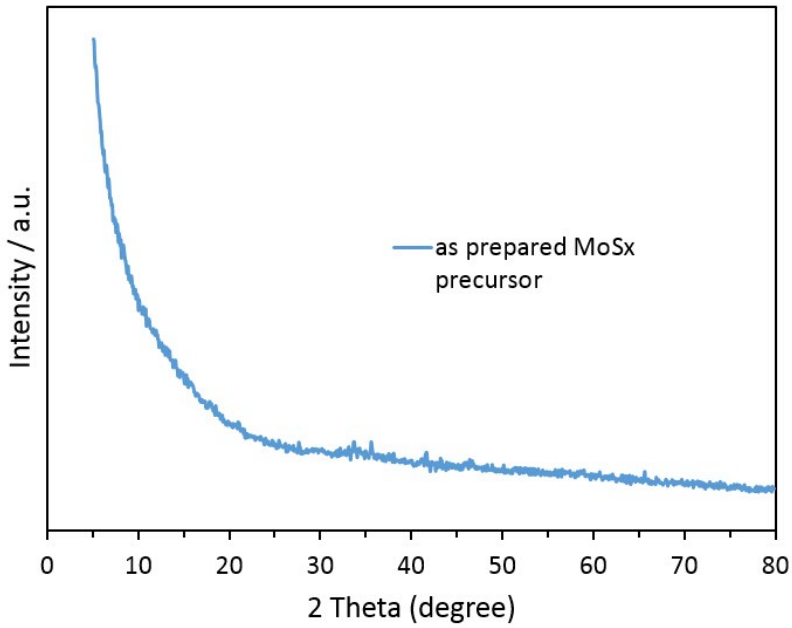

Figure S2. XRD pattern of as-prepared MoS_x precursor before annealing process.

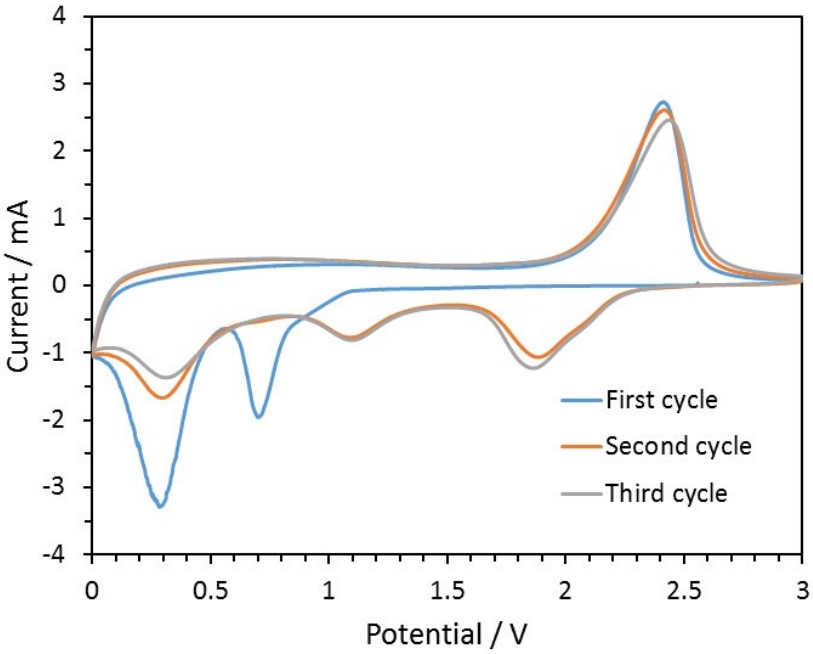

Figure S3. Cyclic voltammogram of commercial MoS_2 electrode at a scan rate of 0.1 mV during the first three cycles.

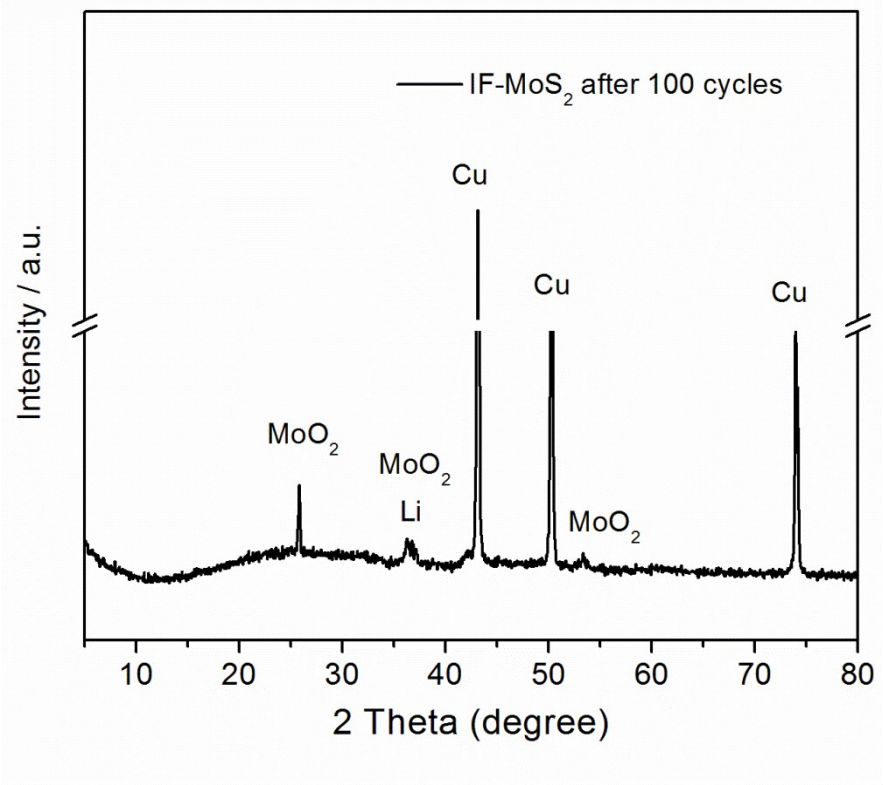

Figure S4. *Ex-situ* XRD pattern of IF-MoS_2 electrode after 100 cycles of charge and discharge, the diffraction peaks of MoO_2 is caused by the oxidation of amorphous Mo metal placed in the air.

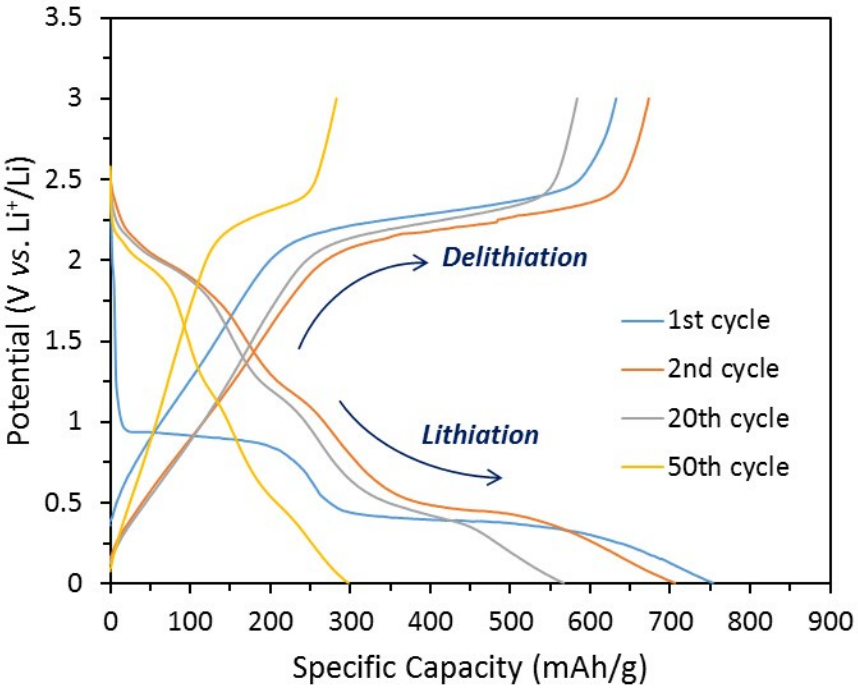

Figure S5. Charge and discharge curves of commercial MoS_2 at different cycles under a current density of 100 mAh/g.

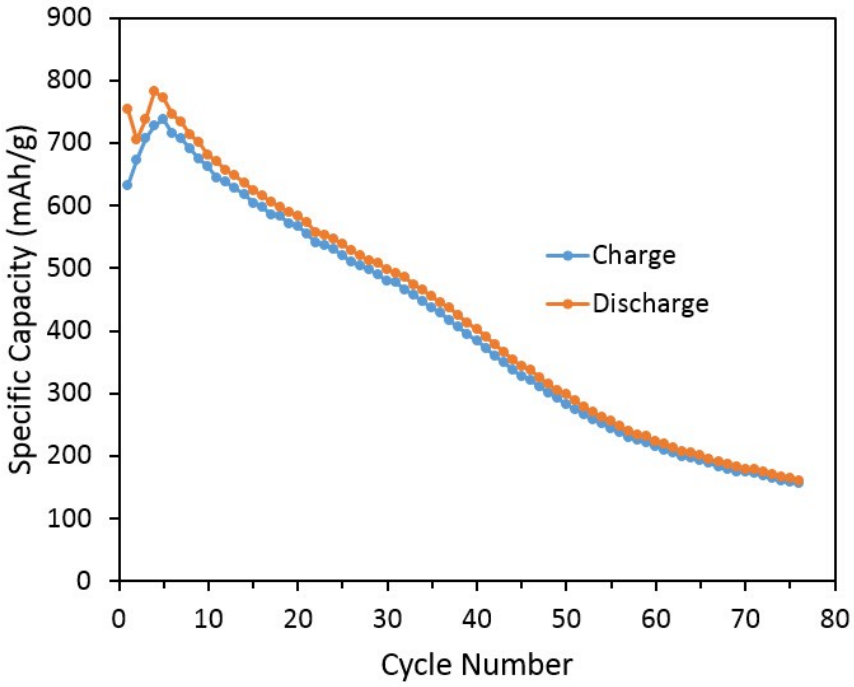

Figure S6. Cycling behavior of the commercial MoS_2 electrode at a current density of 100 mAh/g.