Supporting Information

S,N Co-Doped Carbon Nanofibers Decorated by Ultrathin Molybdenum Disulfide Nanosheets with Highly Electrochemical Performance

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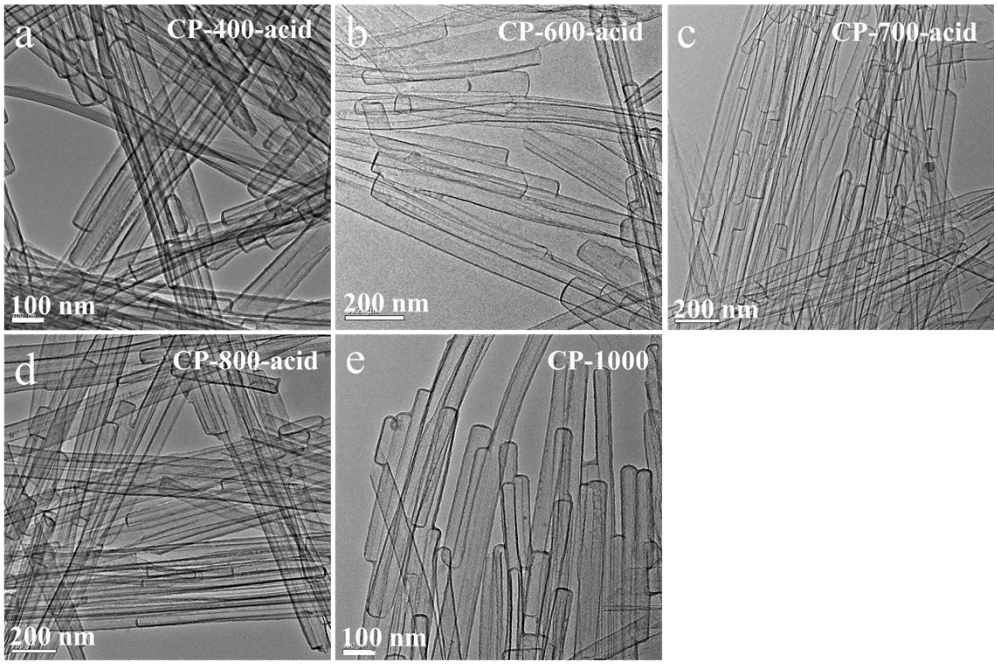

Fig. S1. TEM images of a: CP-400-acid, b: CP-600-acid, c: CP-700-acid, d: CP-800-acid, e: CP-1000.

Samples	CP-400-acid	CP-600-acid	CP-700-acid	CP-800-acid	CP-1000
BET Surface Areas ($m^2 g^{-1}$)	114	176	183	202	1055
Thickness of MoS_2 (layers)	> 10	10	7	4	< 4

Table S1. BET surface areas of CP-400-acid, CP-600-acid, CP-700-acid, CP-800-acid, CP-1000.

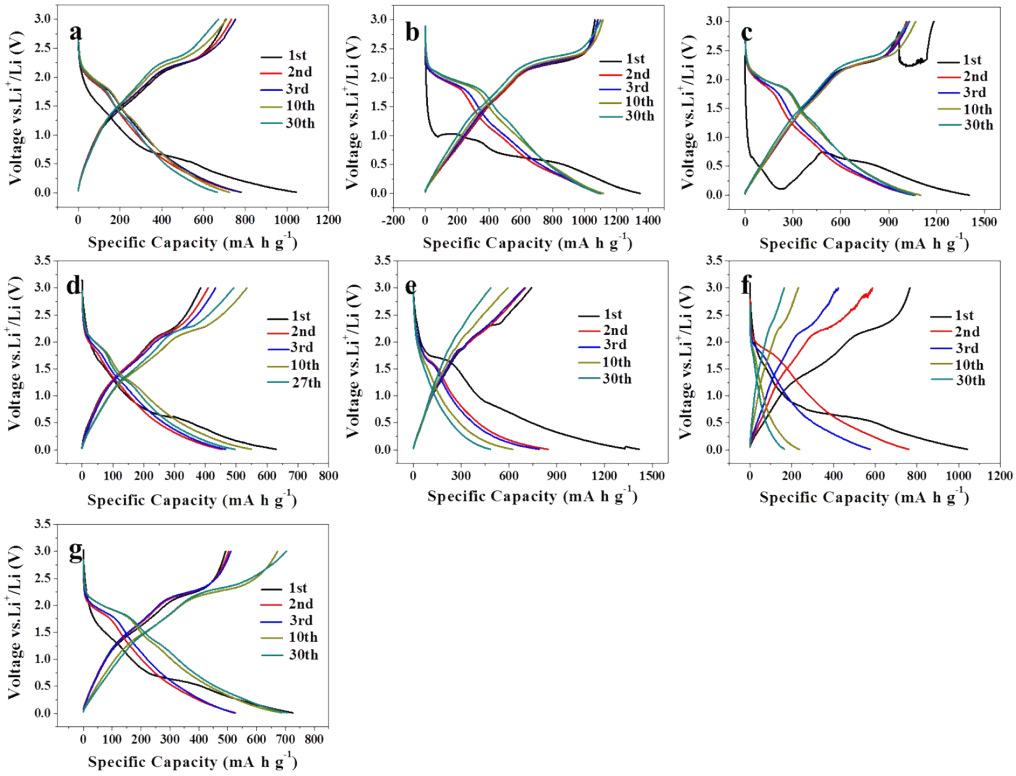

Fig. S2. GDC profiles of a: CP-400-acid/MoS_2, b: CP-600-acid/MoS_2, c: CP-700-acid/MoS_2, d: CP-1000-acid/MoS_2, e: CP-800-acid, f: MoS_2, g: CNT/MoS_2 at 0.05 A g^{-1}.

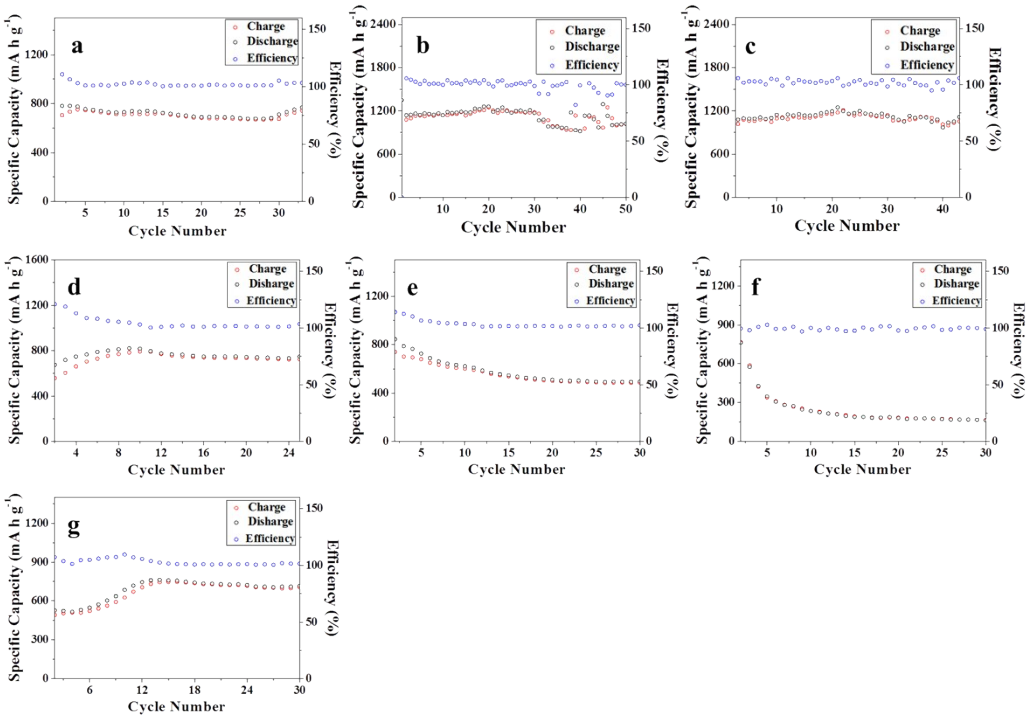

Fig. S3. Cycling performance of a: CP-400-acid/MoS_2, b: CP-600-acid/MoS_2, c: CP-700-acid/MoS_2, d: CP-1000-acid/MoS_2, e: CP-800-acid, f: MoS_2, g: CNT/MoS_2 at 0.05 A g^{-1}.

Samples	CP-400-acid/ MoS_2	CP-600-acid/ MoS_2	CP-700-acid/ MoS_2	CP-1000-acid/ MoS_2	CP-800-acid	MoS_2	CNT/ MoS_2
Capacities at 0.05 A g^{-1} (mA h g^{-1})	768.7	975	1115	748.3	541.8	143.4	716

Table S2. Comparable capacities of CP-400-acid/MoS_2, CP-600-acid/MoS_2, CP-700-acid/MoS_2, CP-1000-acid/MoS_2, CP-800-acid, MoS_2, CNT/MoS_2 at 0.05 A g^{-1}.

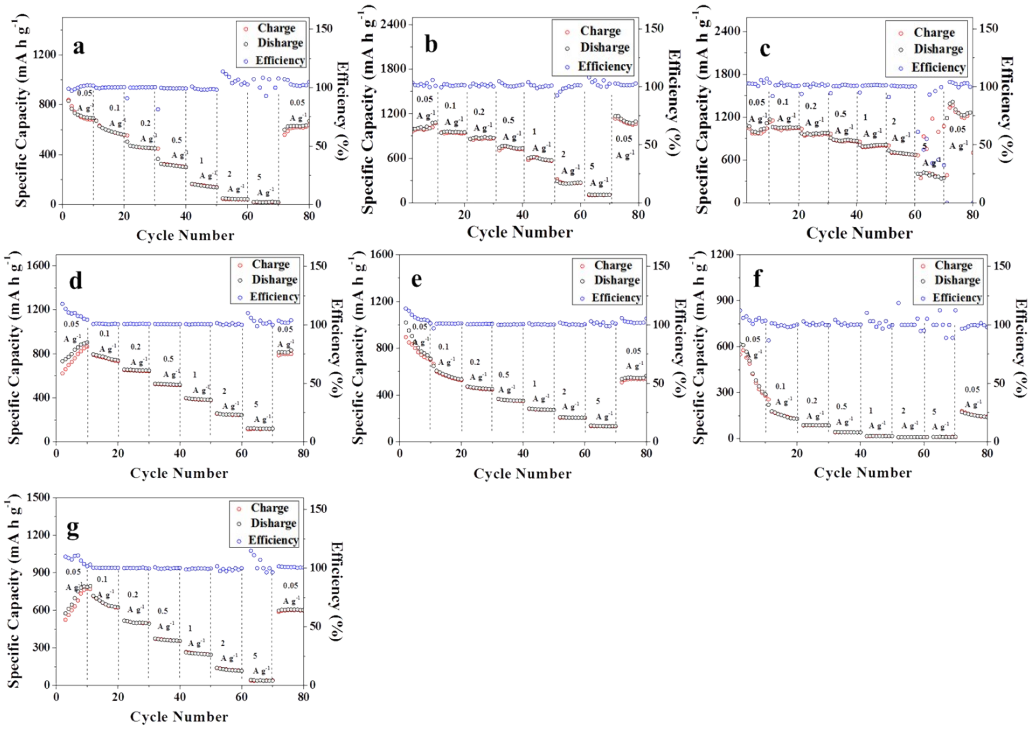

Fig. S4. Cycling performance of a: CP-400-acid/MoS_2, b: CP-600-acid/MoS_2, c: CP-700-acid/MoS_2, d: CP-1000-acid/MoS_2, e: CP-800-acid, f: MoS_2, g: CNT/MoS_2 at different current densities.

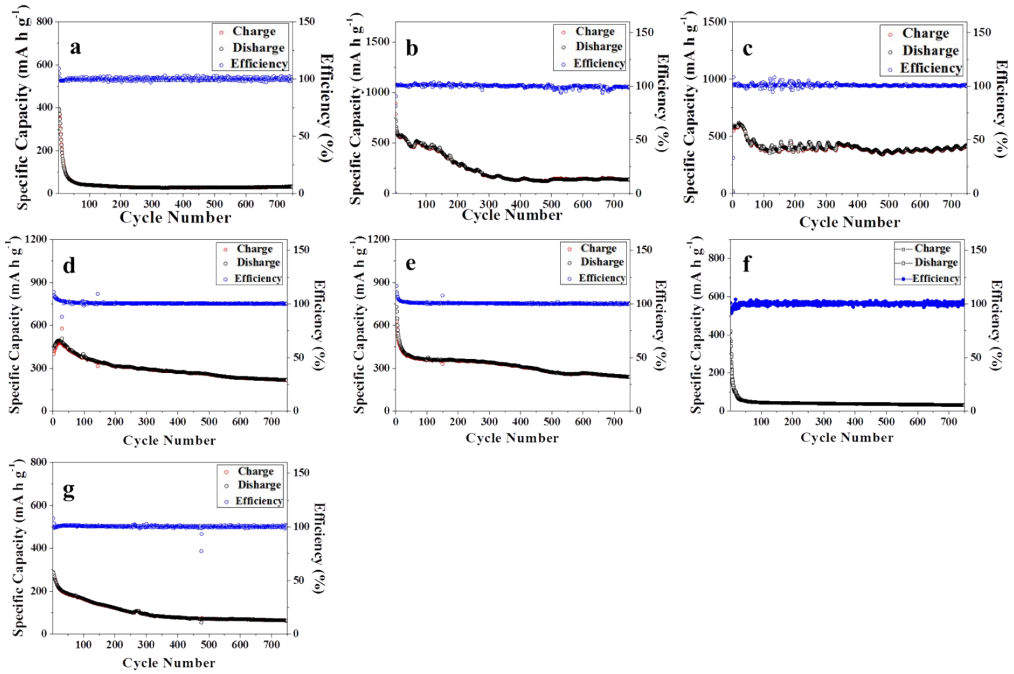

Fig. S5. Long-life cycling performance of a: CP-400-acid/MoS_2, b: CP-600-acid/MoS_2, c: CP-700-acid/MoS_2, d: CP-1000-acid/MoS_2, e: CP-800-acid, f: MoS_2, g: CNT/MoS_2 at 1 A g^{-1}.

Samples	CP-400-acid/ MoS_2	CP-600-acid/ MoS_2	CP-700-acid/ MoS_2	CP-1000-acid/ MoS_2	CP-800-acid	MoS_2	CNT/ MoS_2
Capacities at 0.05 A g^{-1} (mA h g^{-1})	32.1	139	414	217.8	239.3	31.7	63.3

Table S3. Comparable capacities of CP-400-acid/MoS_2, CP-600-acid/MoS_2, CP-700-acid/MoS_2, CP-1000-acid/MoS_2, CP-800-acid, MoS_2, CNT/MoS_2 at 1 A g^{-1}.