

Supplementary Materials

Influence of Mechanical Fatigue at Different States of Charge on Pouch-Type Li-Ion Batteries

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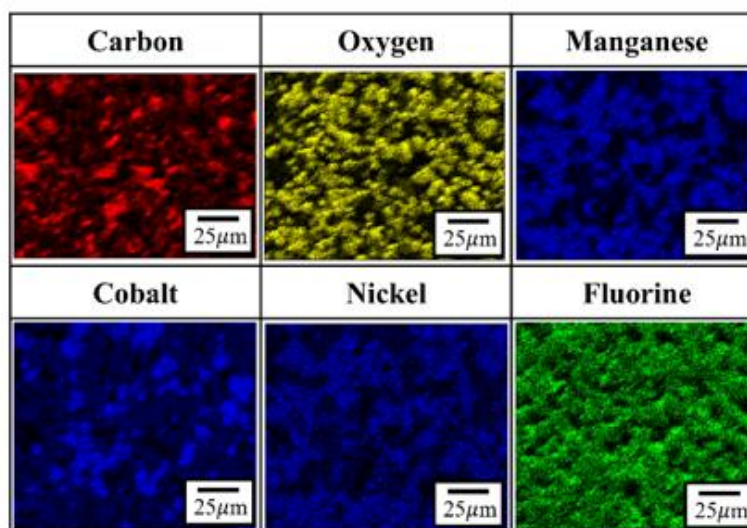
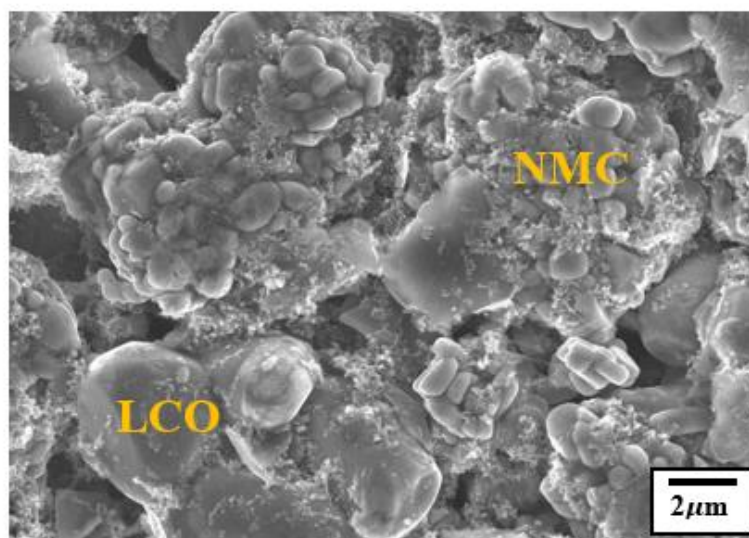
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Element	C	O	Ni	Co	Mn	F
Weight (%)	21.9	20.9	10.3	25.8	10.3	10.8

Figure S1. FE-SEM and EDS elemental mapping results for the LCO/NCM cathode. The below table shows the result of EDS mapping analysis.

Table S1. Inductively coupled plasma (ICP) analysis result for the LCO/NCM cathode.

Element	Li	Ni	Co	Mn
Weight (%)	8.00	13.0	67.3	11.7

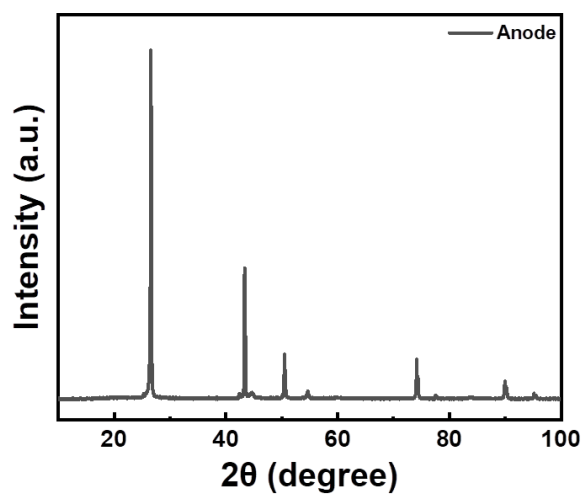


Figure S2. X-ray diffraction pattern (XRD) of the graphite anode.

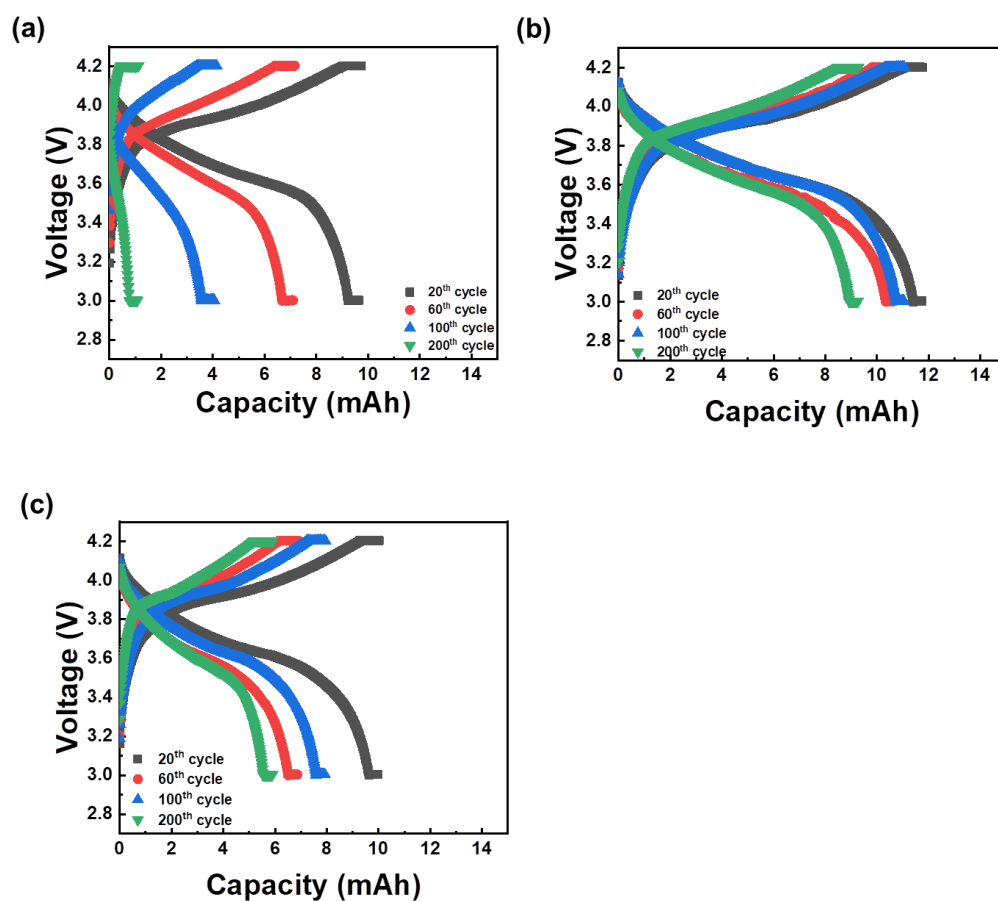


Figure S3. Charge and discharge voltage profiles of the cells after the mechanical fatigue test: (a) SoC 60% cell, (b) SoC 70% cell, and (c) SoC 100% cell.

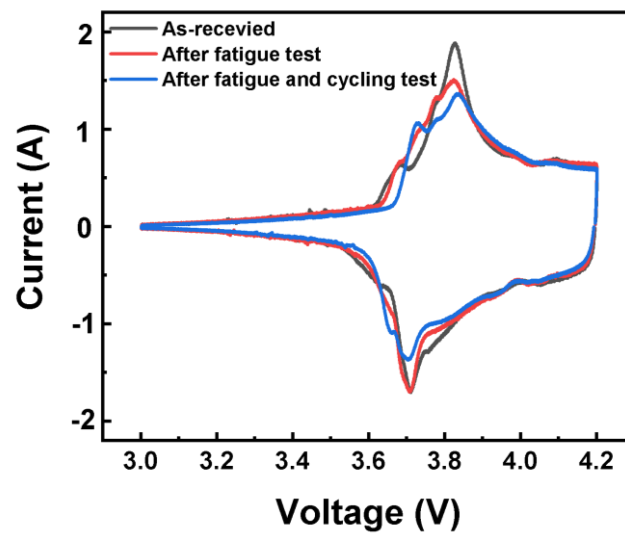


Figure S4. Cyclic voltammograms of the cell (initial SoC of 70%) under different test conditions (as-received, after the fatigue test, and after the fatigue and cycling test).

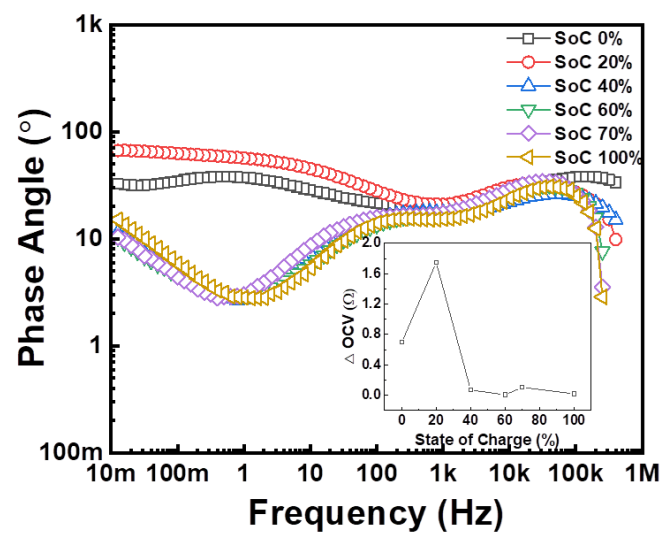


Figure S5. Bode plots of the cells with different initial SoCs immediately after the mechanical fatigue test.