Reinforcing the surface conductivity and stability of primary particles

for high-performance Li-rich layered Li_{1.18}Mn_{0.52}Co_{0.15}Ni_{0.15}O₂ via an

integrated strategy

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Table S1. The total average chemical composition of the pristine sample by ICP-AES.

Sample	Li	Mn	Со	Ni
Pristine	1.182	0.517	0.150	0.151

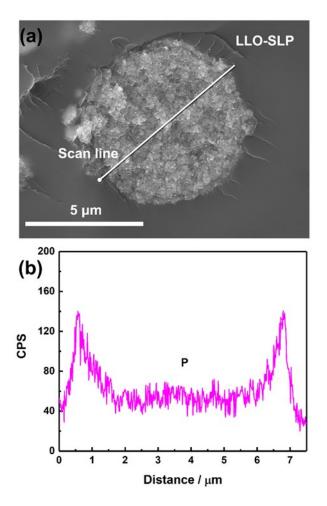


Fig. S1 (a) Cross-section image and (b) EDS line scanning of the LLO-SLP secondary particle

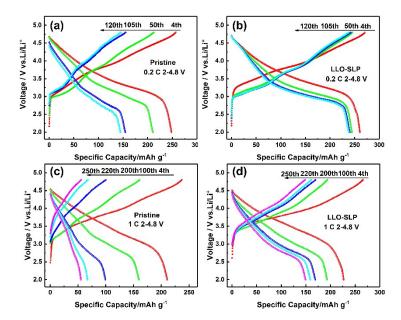


Fig. S2 Charge-discharge profiles of the pristine and LLO-SLP samples at selected cycles (a, b) at 0.2 C rate; (c, d) at 1 C rate

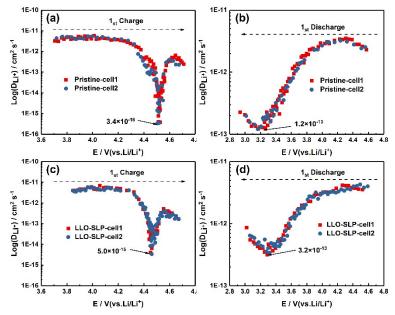


Fig. S3 (a, b) Li⁺ diffusion coefficient of the pristine sample during the charge and discharge; (c, d) Li⁺ diffusion coefficient of the LLO-SLP sample during the charge and discharge. Two cells were tested on each sample for the GITT test.