Supporting Information

Understanding the origins of higher capacities at faster rates in lithium-excess $Li_xNi_{2-4x/3}Sb_{x/3}O_2$

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Table 1: Elemental analysis of LNSO-5, LNSO-10, and LNSO-15 as determined by ICP-AES. Elemental analysis for LNSO-0 is not available.

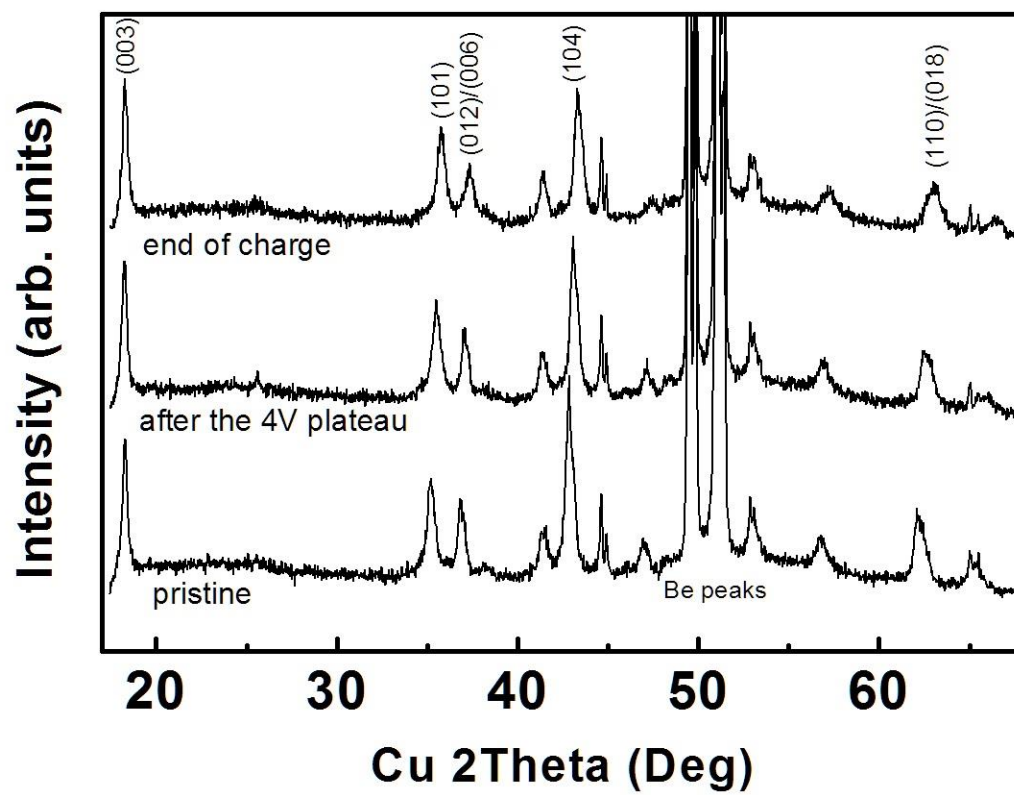| Sample	Li (at%)	Ni (at%)	Sb (at%)
LNSO-5	0.86	0.55	0.32
LNSO-10	0.93	0.49	0.34
LNSO-15	1.15	0.43	0.35

Figure S1: *In situ* XRD patterns of LNSO-15 at the start of charge (pristine), after the 4V plateau, and at the end of charge
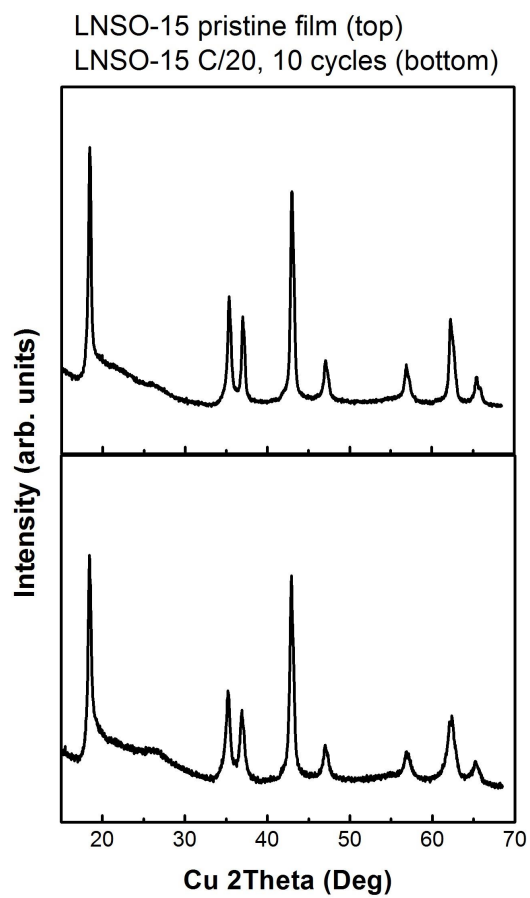
Figure S2: *Ex situ* XRD patterns of LNSO-15 pristine (top) versus after ten cycles at C/20 (bottom)