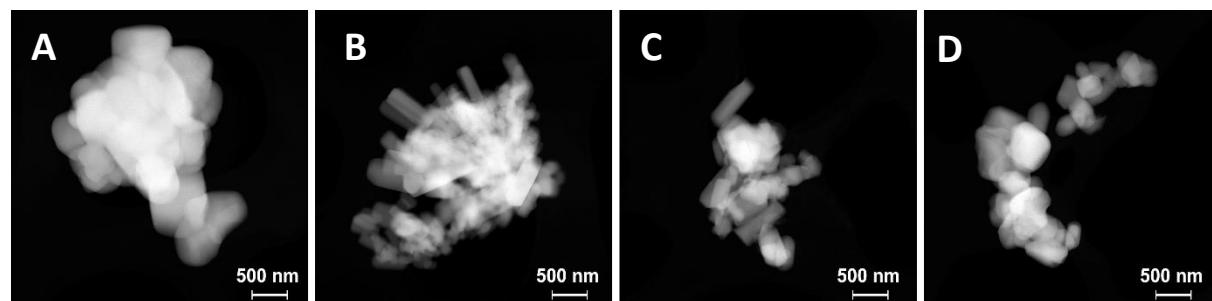
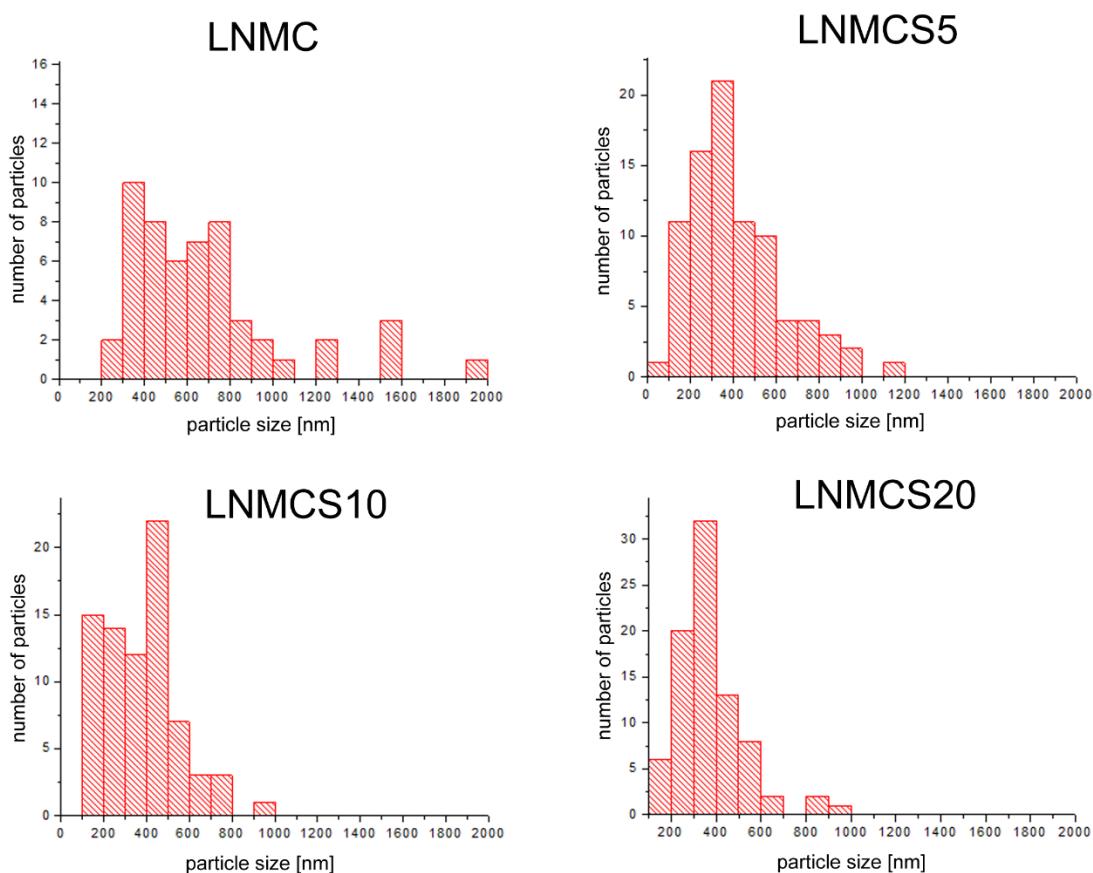


## Supporting Information



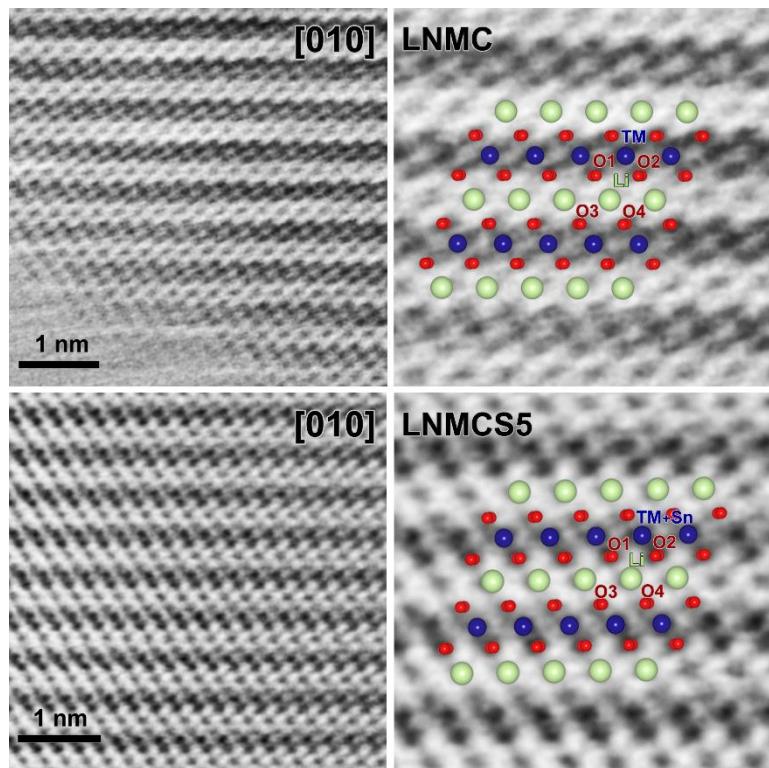
**Fig. S1.** HAADF-STEM images of  $\text{Li}_{1.2}\text{Ni}_{0.13}\text{Co}_{0.13}\text{Mn}_{0.54-x}\text{Sn}_x\text{O}_2$  a) LNMC ( $x=0$ ), b) LNMCS5 ( $x=0.027$ ), c) LNMCS10 ( $x=0.054$ ) and d) LNMCS20 ( $x=0.108$ ).



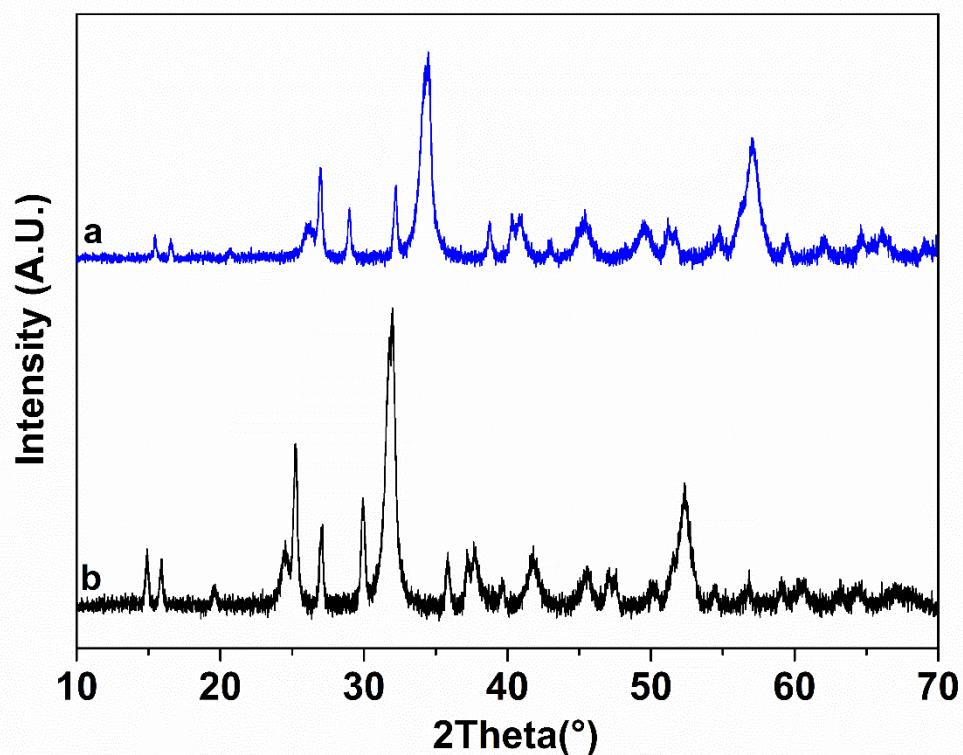
**Fig. S2.** Particle size distribution plots for LNMC, LNMCS5, LNMCS10 and LNMCS20

Particle size [nm]	LNMC	LNMCS5	LNMCS10	LNMCS20
Mean	682	411	380	373
Standard deviation	363	216	171	149
Minimum	256	70	100	145
Maximum	1960	1141	902	951

**Table S1.** Particle size distribution for LNMC, LNMCS5, LNMCS10 and LNMCS20

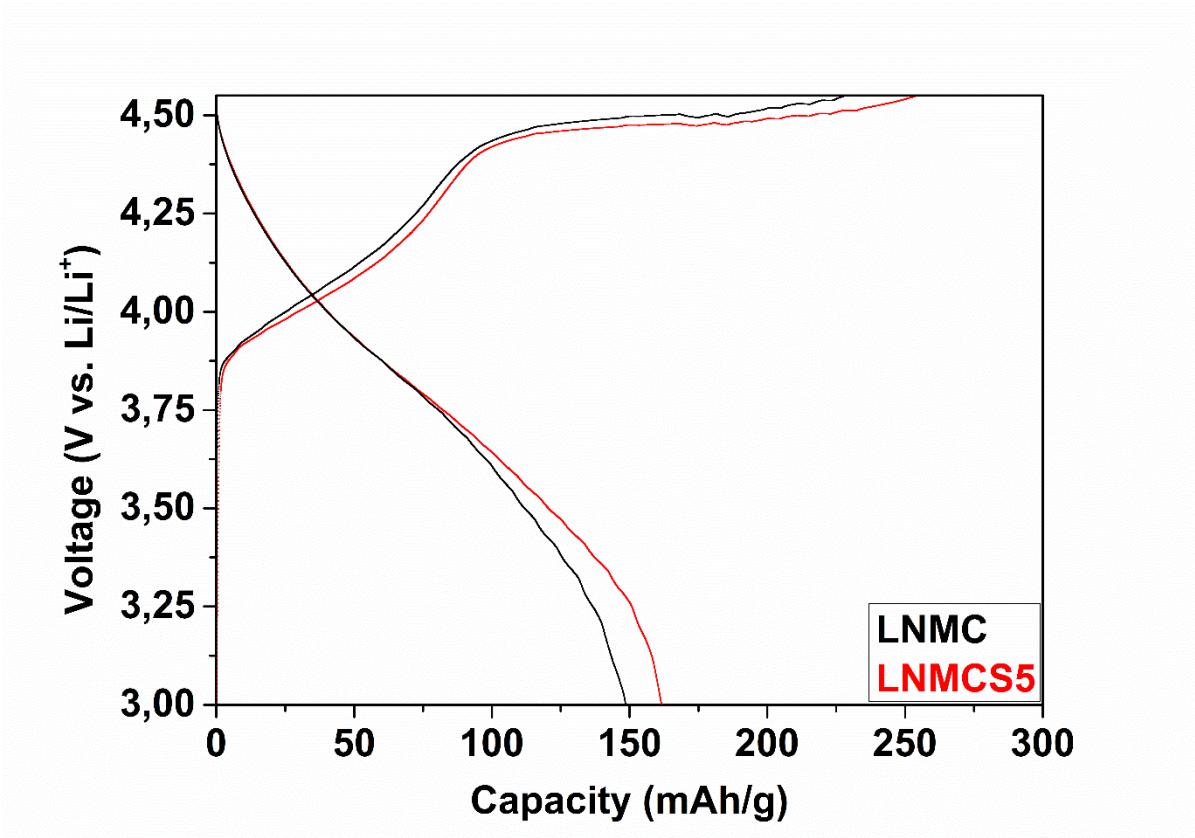


**Fig. S3.** ABF-STEM images along the [010] direction for LNMC (top) and LNMCS5 (bottom). Close-ups are shown at the right of the respective left-side images, where the blue, red and light green dots represent TM, O and Li, respectively.



**Fig. S4.** PXRD patterns of  $x=0.108$  composition precursors obtained after co precipitation making use

of the following modifications of the synthesis procedure described in the Experimental section. (a) pH 6.5 instead of 7.5 and (b) 13.5 mol% excess of  $\text{Na}_2\text{CO}_3$



**Fig. S5.** Initial charge/discharge cycle at C/20 for LNMC and LNMCS5