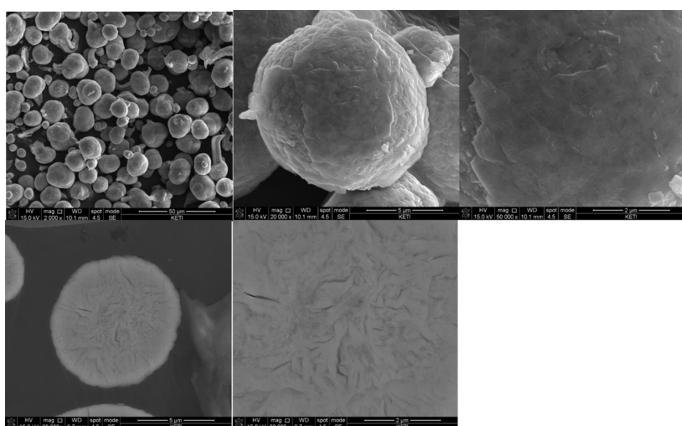
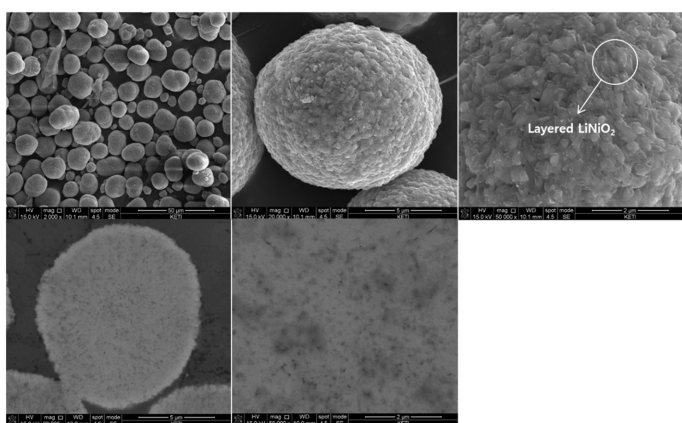


**Fig. S3.** SEM and CP-SEM images of NCM samples calcinated at 400°C for 0 h.



**Fig. S4.** SEM and CP-SEM images of NCM samples calcinated at 500°C for 0 h.



**Fig. S5.** SEM and CP-SEM images of NCM samples calcinated at 700°C for 15 h.

**Table S1.** Raman analysis results of  $\text{LiNi}_{0.88}\text{Co}_{0.06}\text{Mn}_{0.06}\text{O}_2$  cathode materials at 480°C for 2 h and then at 700°C for 5, 10, and 15 h

	LiOH	$\text{Li}_2\text{CO}_3$	Total
480°C 2 h_700°C 5 h	6943	4837	11780
480°C 2 h_700°C 10 h	6351	3738	10089
480°C 2 h_700°C 15 h	5988	2913	8901