

Figure S1 Thermogravimetric curve



Figure S2 Electrochemical performance of NMM-005 and NMM-015 (a) \cdot (b) GCD curves at 0.1C for the 1st, 2nd, and 3rd cycles (c) \cdot (d) CV curves at 0.1 mv s⁻¹.



Figure S3 XRD patterns of NMM-000 and NMM-010 in the 25°-30° diffraction angle range.



	Stoichometric			_	Tested				
	Na	Ni	Mn	Mg	-	Na	Ni	Mn	Mg
NMM-000	0.75	0.33	0.67	0.00		0.7421	0.3356	0.6728	0.0000
NMM-005	0.75	0.28	0.67	0.05		0.7452	0.2781	0.6715	0.0495
NMM-010	0.75	0.23	0.67	0.10		0.7379	0.2310	0.6985	0.0984
NMM-015	0.75	0.18	0.67	0.15		0.7393	0.1762	0.6956	0.1498
NMM-020	0.75	0.13	0.67	0.20		0.7437	0.1358	0.6731	0.2053

Table S1 Elemental compositions for $Na_{0.75}Ni_{0.33-x}Mg_xMn_{0.67}O_2$ (x = 0, 0.05, 0.1, 0.15, 0.2) obtained from ICP-OES measurements.

Sample	NMM-000	NMM-010		
a/Å	2.9804	2.9854		
c/Å	11.1575	11.1670		
Cell volume/Å ³	80.7332	81.0745		
$ m R_{wp}$ /%	9.71	9.08		
R _p /%	8.69	7.57		
Gof	1.56	1.43		

 Table S2 Summary of refined structural parameters of NMM-000 and NMM-010