

Electronic Supplementary Information

$\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$ Microspheres Constructed by Hierarchically
Arranged Nanoparticles as Lithium Battery Cathode with Enhanced
Electrochemical Performance

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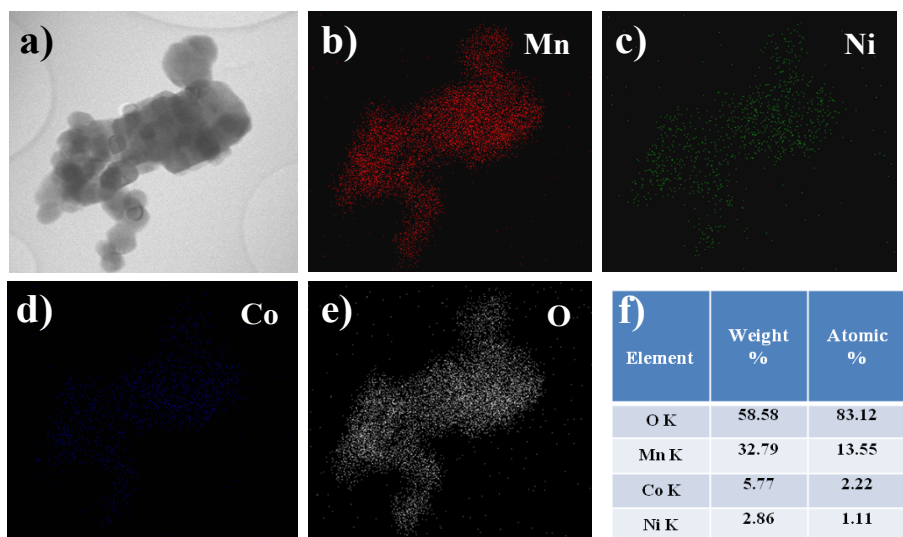


Fig. S1. STEM elemental mapping of pristine $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$

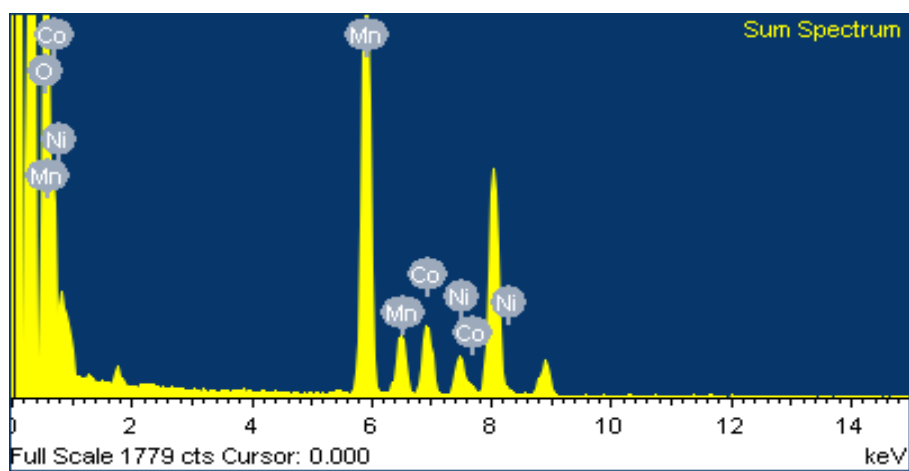


Fig. S2. EDX spectrum of $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$

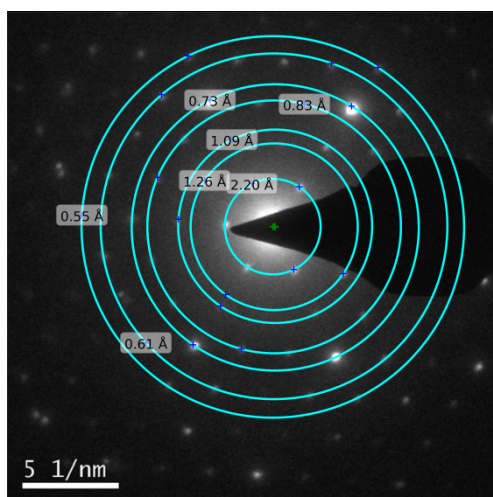


Fig. S3. Selected Area Electron Diffraction (SAED) pattern of as-synthesized $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$ material.

Table 1. hkl values of $R\bar{3}m$ and $C2/m$ space groups and the corresponding d spacing values.

$R\bar{3}m$	$C2/m$	d spacing (XRD) (Å)	d spacing (TEM) (Å)
003	001	2.2	2.2
---	020	1.26	1.26
---	110	0.84	0.84
101	111	0.645	0.61
006	002	1.089	1.07
012	13-1	0.55	0.556
104	131	0.84	0.83
015	13-2	0.828	0.812
107	132	0.56	0.55
018	13-3	0.73	0.73
110	331	0.66	0.61

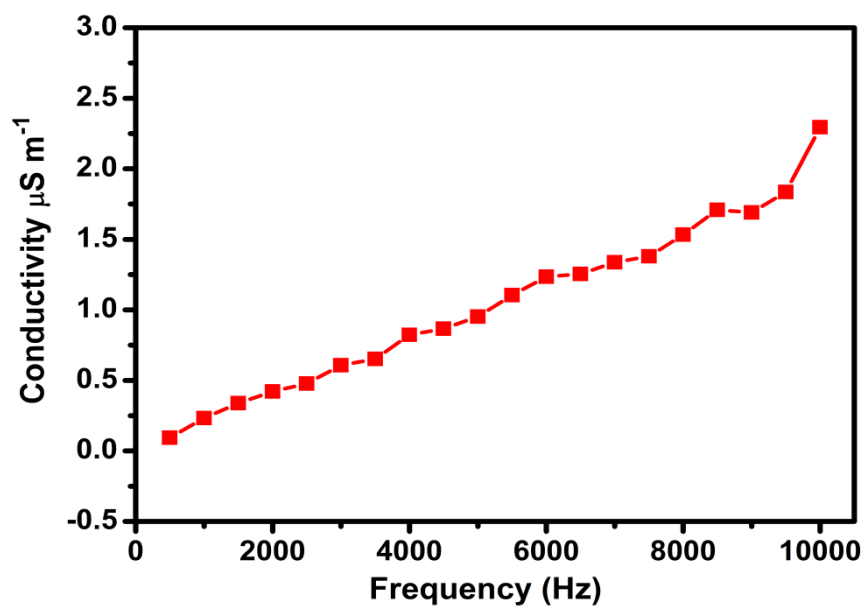


Fig. S4. Room temperature conductivity plot of $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$

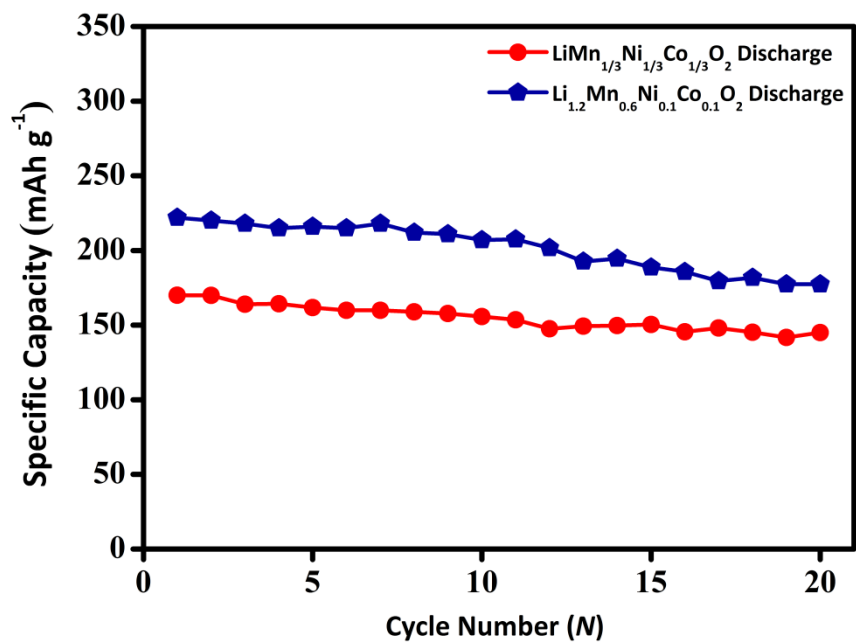


Fig. S5. Comparison of discharge capacity values of $\text{LiMn}_{1/3}\text{Ni}_{1/3}\text{Co}_{1/3}\text{O}_2$ and $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ni}_{0.1}\text{Co}_{0.1}\text{O}_2$ cathodes