



Supplementary Materials

Effects of Mg Doping at Different Positions in Li-Rich Mn-Based Cathode Material on Electrochemical Performance

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Table S1. ICP-MS analysis results.

Sample	Determined composition	Targeted composition
LR	$\text{Li}_{1.219}\text{Mn}_{0.523}\text{Ni}_{0.129}\text{Co}_{0.129}\text{O}_2$	$\text{Li}_{1.20}\text{Mn}_{0.534}\text{Ni}_{0.133}\text{Co}_{0.133}\text{O}_2$
LR-Mg	$\text{Li}_{1.197}\text{Mn}_{0.537}\text{Ni}_{0.128}\text{Co}_{0.111}\text{Mg}_{0.027}\text{O}_2$	$\text{Li}_{1.20}\text{Mn}_{0.534}\text{Ni}_{0.133}\text{Co}_{0.113}\text{Mg}_{0.020}\text{O}_2$
LR-Mg(st)	$\text{Li}_{1.19}\text{Mg}_{0.02}\text{Mn}_{0.531}\text{Ni}_{0.130}\text{Co}_{0.129}\text{O}_2$	$\text{Li}_{1.18}\text{Mg}_{0.02}\text{Mn}_{0.534}\text{Ni}_{0.133}\text{Co}_{0.133}\text{O}_2$

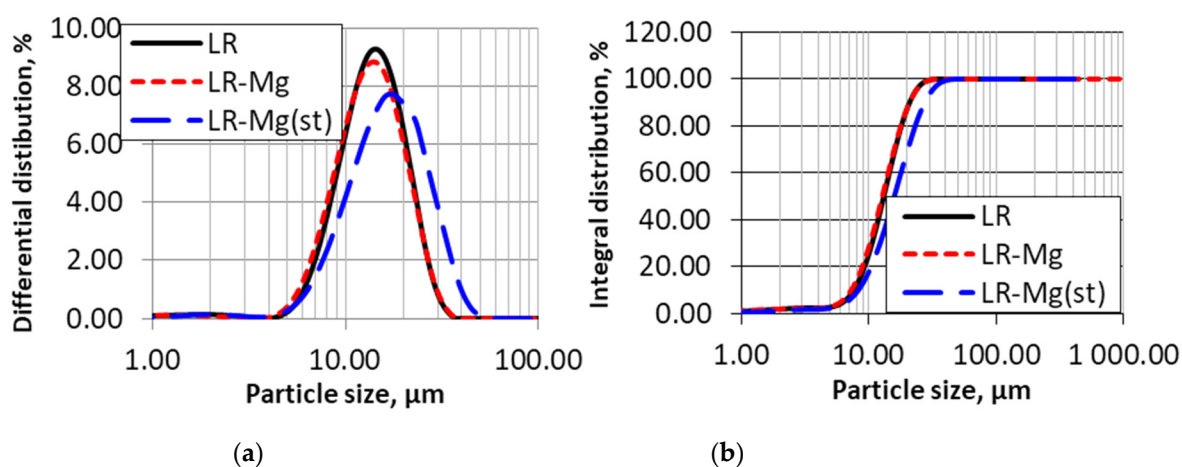


Figure S1. Particle size distributions for LR, LR-Mg, and LR-Mg(st) oxides: (a) Differential distribution; (b) Integral distribution.

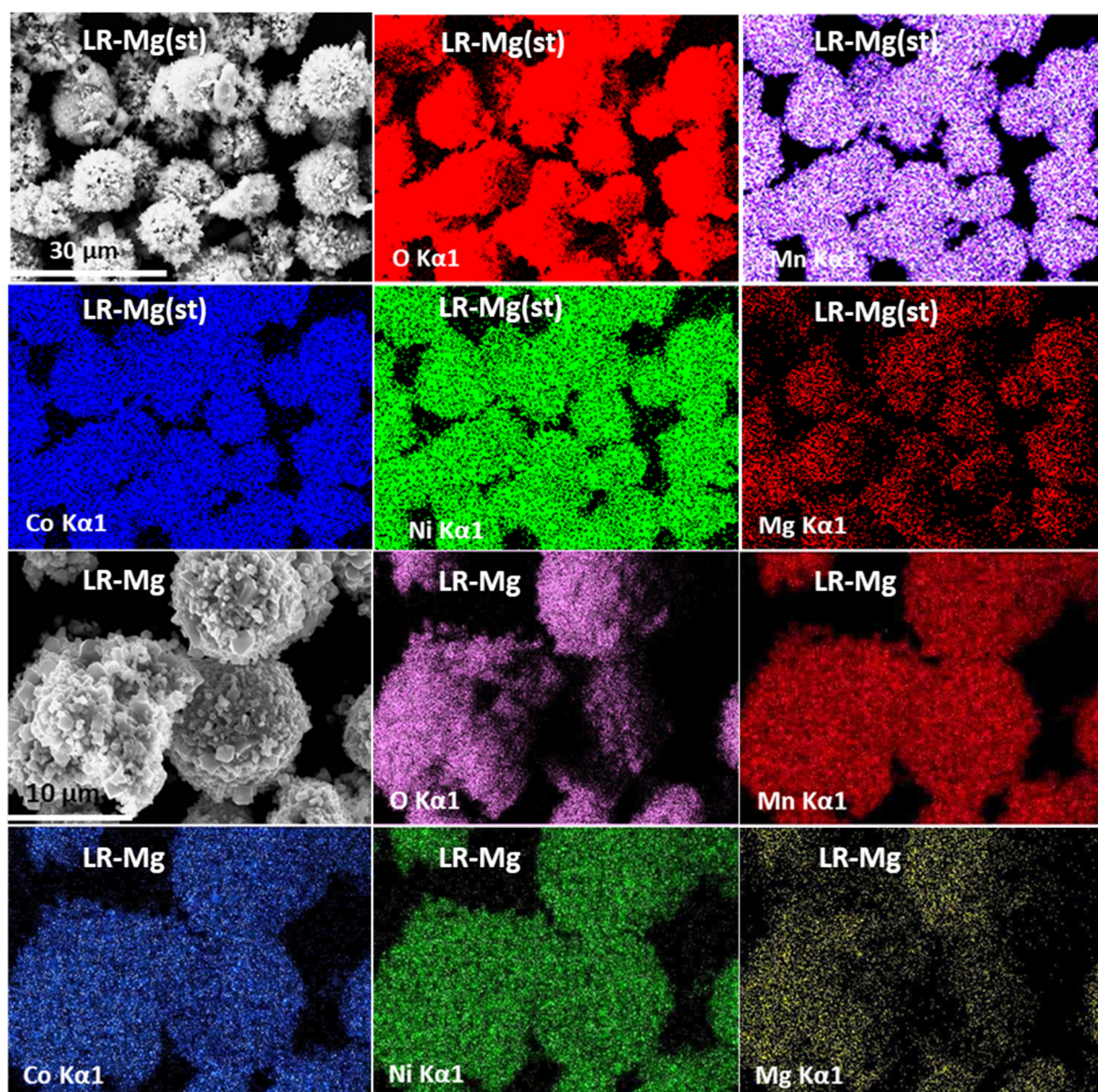


Figure S2. Element distribution EDS maps of LR-Mg and LR-Mg(st) oxides (see designations on the figures).