

## Supplementary

# Influence of the Composition and Testing Modes on the Electrochemical Performance of Li-Rich Cathode Materials

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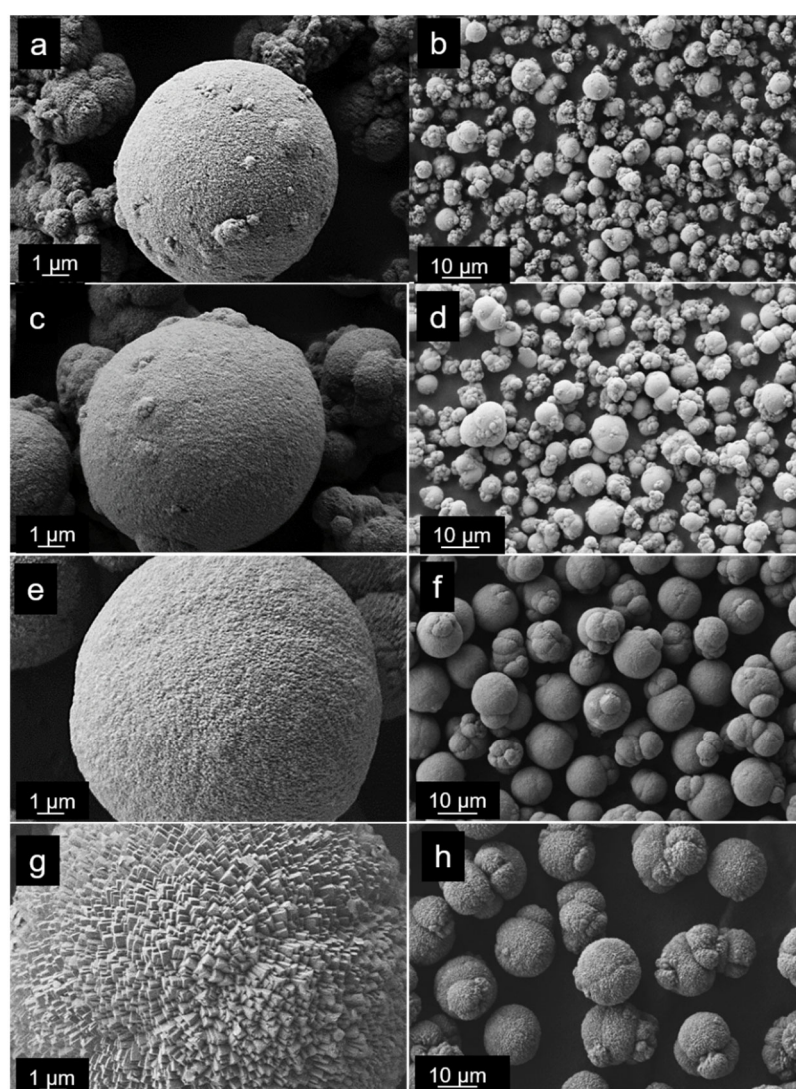


Figure S1. SEM images of the carbonate precursors for cathode materials with different magnifications: (a, b) LMR20, (c, d) LMR35, (e, f) LMR50, and (g, h) LMR65.

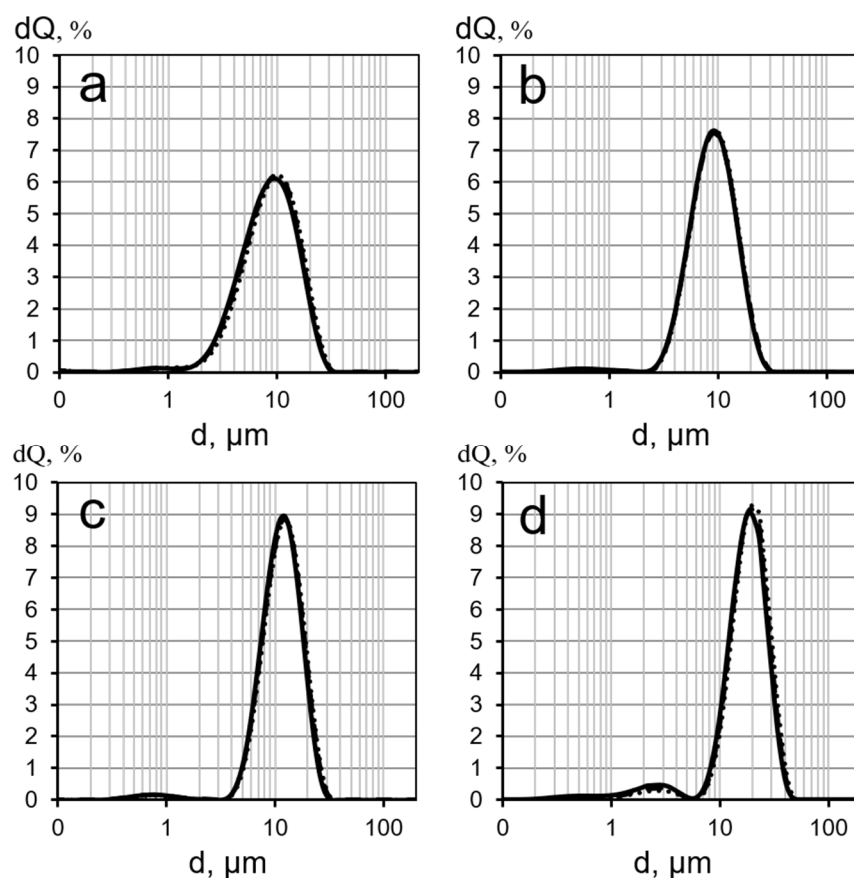


Figure S2. Differential agglomerate distributions for cathode materials with different compositions: (a) LMR20, (b) LMR35, (c) LMR50, and (d) LMR65.

Table S1. Cathode material compositions determined by ICP-OES

Samples	Determined composition
LMR20	$\text{Li}_{1.109}\text{Ni}_{0.244}\text{Mn}_{0.424}\text{Co}_{0.242}\text{O}_2$
LMR35	$\text{Li}_{1.147}\text{Ni}_{0.184}\text{Mn}_{0.483}\text{Co}_{0.185}\text{O}_2$
LMR50	$\text{Li}_{1.210}\text{Ni}_{0.133}\text{Mn}_{0.535}\text{Co}_{0.135}\text{O}_2$
LMR65	$\text{Li}_{1.249}\text{Ni}_{0.088}\text{Mn}_{0.579}\text{Co}_{0.087}\text{O}_2$

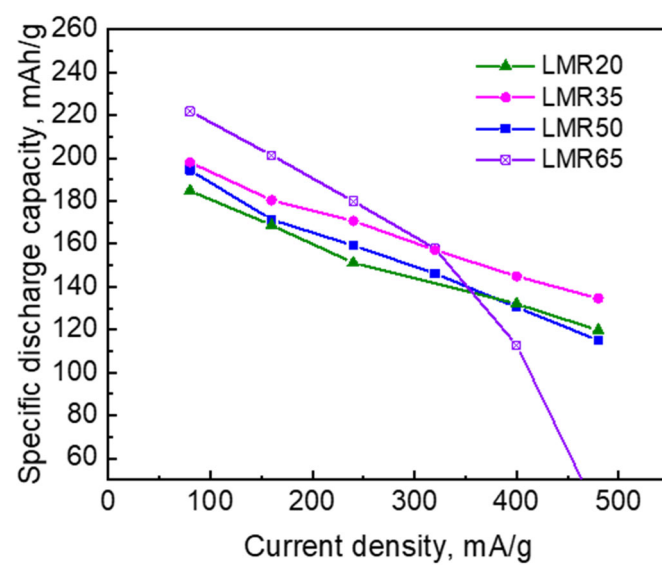


Figure S3. Rate capabilities of the cathode materials.