

## Supplementary Materials

*Article*

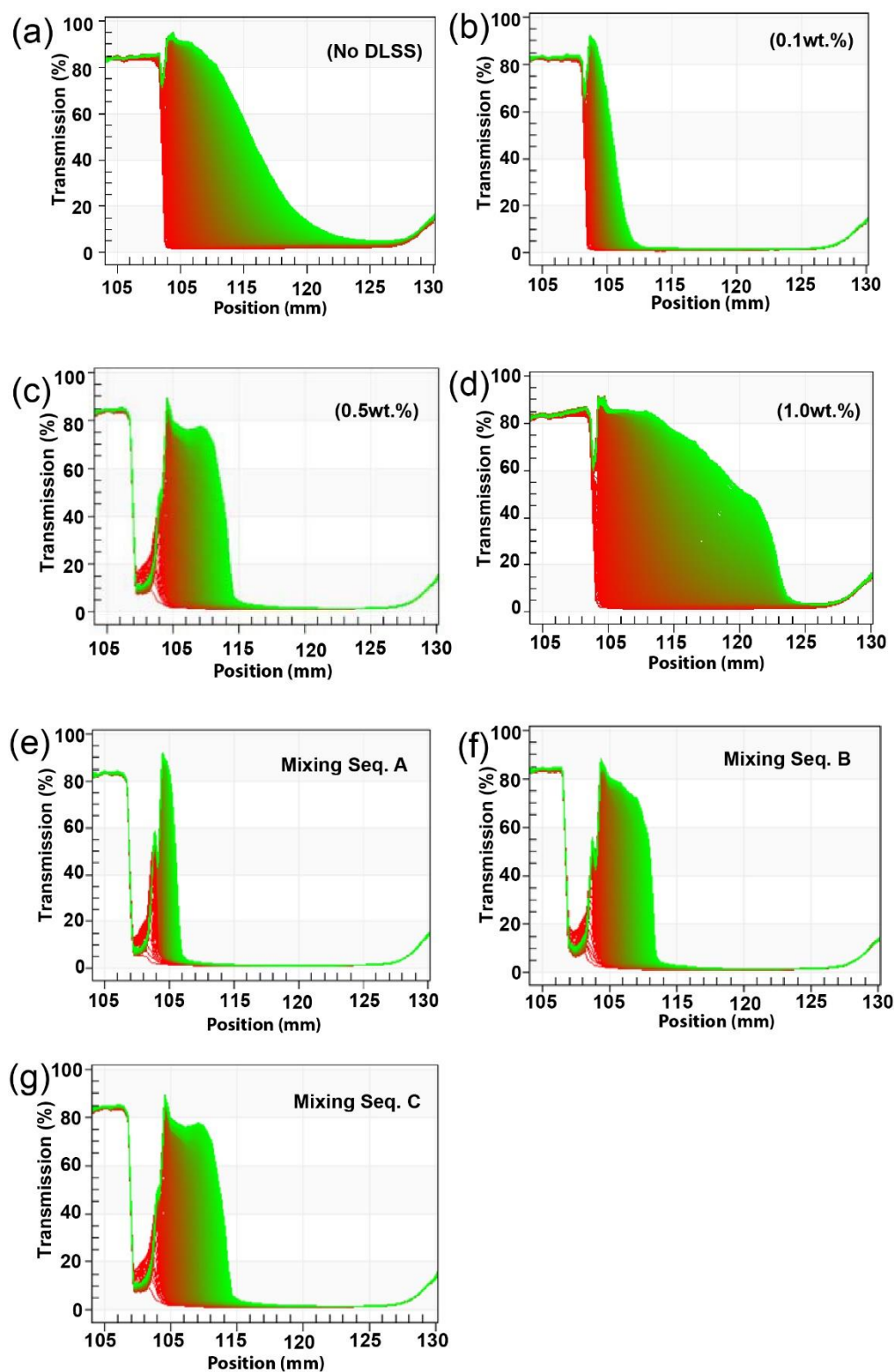
# Upgrading the Properties of Ceramic-coated Separators for Lithium Secondary Batteries by Changing the Mixing Order of the Water-based Ceramic Slurry Components

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**Figure S1.** Fingerprints for transmission profiles; a-d) Optimization of DLSS and e-f) for the slurries prepared by mixing sequences A, B, and C.

**Table S1.** Summary of results for optimization of the amount of DLSS for stabilization evaluation of Al<sub>2</sub>O<sub>3</sub> slurries corresponding to Figure 1b.

Amount of DLSS (wt.%)	Instability index	Sedimentation velocity ( $\mu\text{m s}^{-1}$ )	Standard deviation ( $\pm\mu\text{m/s}$ )
0.0	0.731	1.013	0.0058
0.1	0.227	0.310	0.0014
0.5	0.455	0.643	0.0085
1.0	0.861	1.692	0.2220

**Table S2.** Instability index and sedimentation velocity of slurries according to different mixing sequences corresponding to Figure 2c.

	Instability index	Sedimentation velocity ( $\mu\text{m/s}$ )	Standard deviation ( $\pm\mu\text{m/s}$ )	Viscosity (p)
Mixing seq. A	0.136	0.149	0.0026	0.292
Mixing seq. B	0.339	0.408	0.0048	0.261
Mixing seq. C	0.408	0.516	0.0036	0.218