Comparing Temporal and Spatial Atomic Layer Deposition for Enhanced Performance of Li Ion Battery Electrodes

A. Yersak¹, A. Dameron¹, X. Li², Y. Yang², K. Hurst³, R. Tenent³, and S. George^{1,4}

¹Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO 80309, USA
²Department of Chemistry and Geochemistry, Colorado School of Mines, Golden CO, USA
³National Renewable Energy Laboratory, Golden, Colorado, 80401, USA
⁴Department of Mechanical Engineering, University of Colorado, Boulder, CO 80309, USA
Alexander.Yersak@colorado.edu

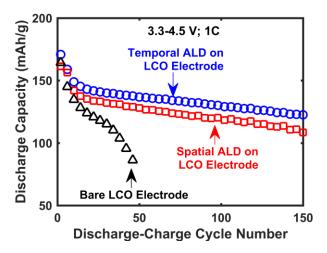


Figure S1: Discharge-charge cycle performance at 1C rate for LiCoO₂ electrodes without ALD coating (i.e. bare), coated with 4 ALD cycles using temporal ALD, and coated with 4 ALD cycles using spatial ALD.

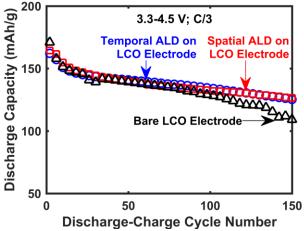


Figure S2: Discharge-charge cycle performance at C/3 rate for LiCoO₂ electrodes without ALD coating (i.e. bare), coated with 4 ALD cycles using temporal ALD, and coated with 4 ALD cycles using spatial ALD.