

# Modeling Silicon-Dominant Anodes: Parametrization, Discussion and Validation of a Newman-Type Model

- p2D model for silicon-dominant anode ( $\approx 70\text{wt\% Si}$ )  
 → Error between simulation and measurement is 21 mV RMSE and 1.3% capacity deviation at 1C current
- literature reveals that Si parameters span over several orders of magnitude  
 → recommendations for further characterization are drawn
- Si electrode at 0% full cell SOC still holds a significant amount of lithium  
 → OCV reconstruction process differs from conventional graphite-based systems

