

Figure S1. The cross-sectional SEM image and its SEM-EDS mapping of pristine NMC811-LPSClBr

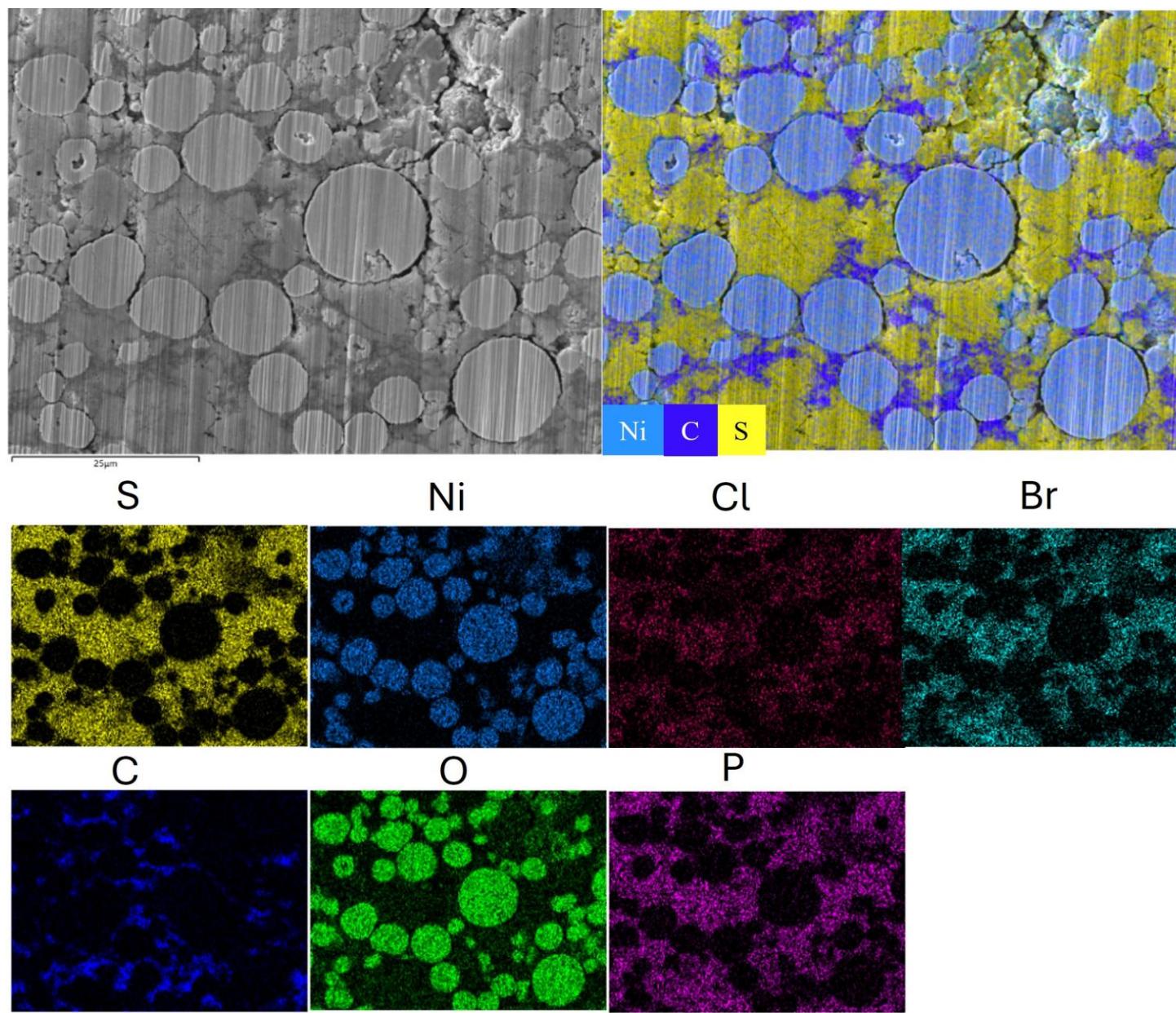


Figure S2. The cross-sectional SEM image and its SEM-EDS mapping results of NMC811-LPSClBr after 50 cycles

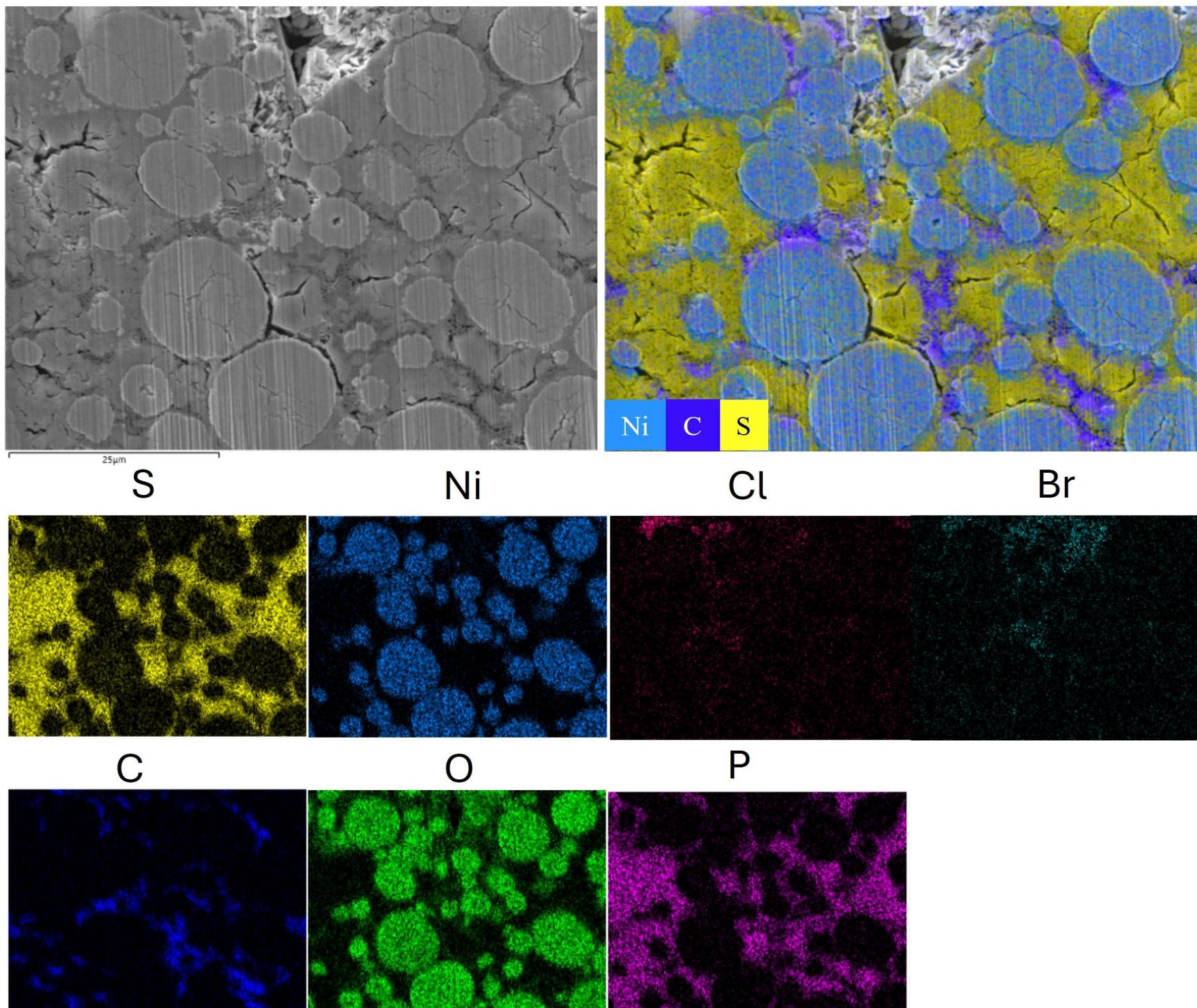


Figure S3. The cross-sectional SEM image and its SEM-EDS mapping results of NMC811-LPSClBr after 200 cycles

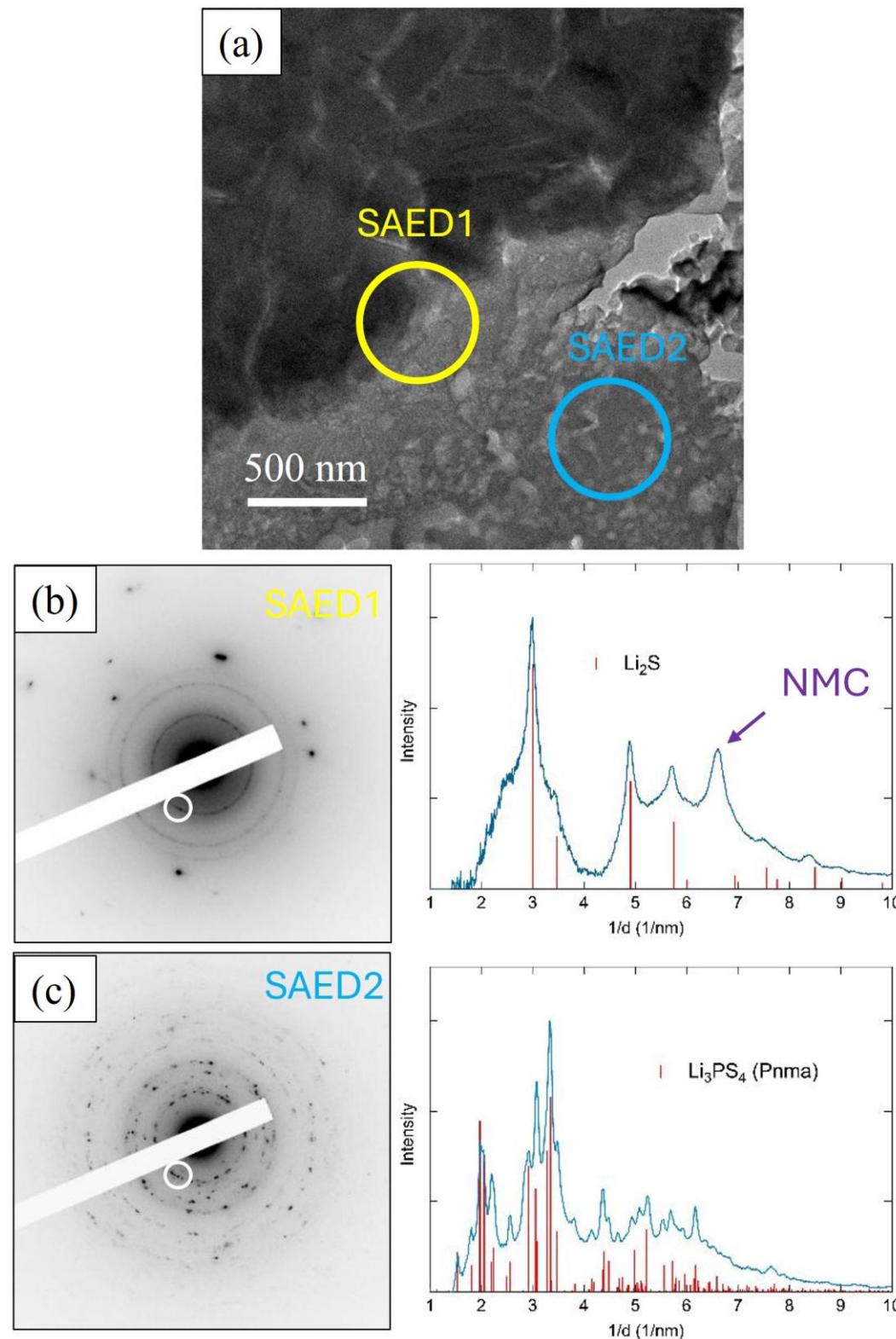


Figure S4. (a) the TEM image of NMC811-LPSClBr after 200 cycles (b) the SAED pattern and its intensity profile of the interface (c) the SAED pattern and its intensity profile of SE

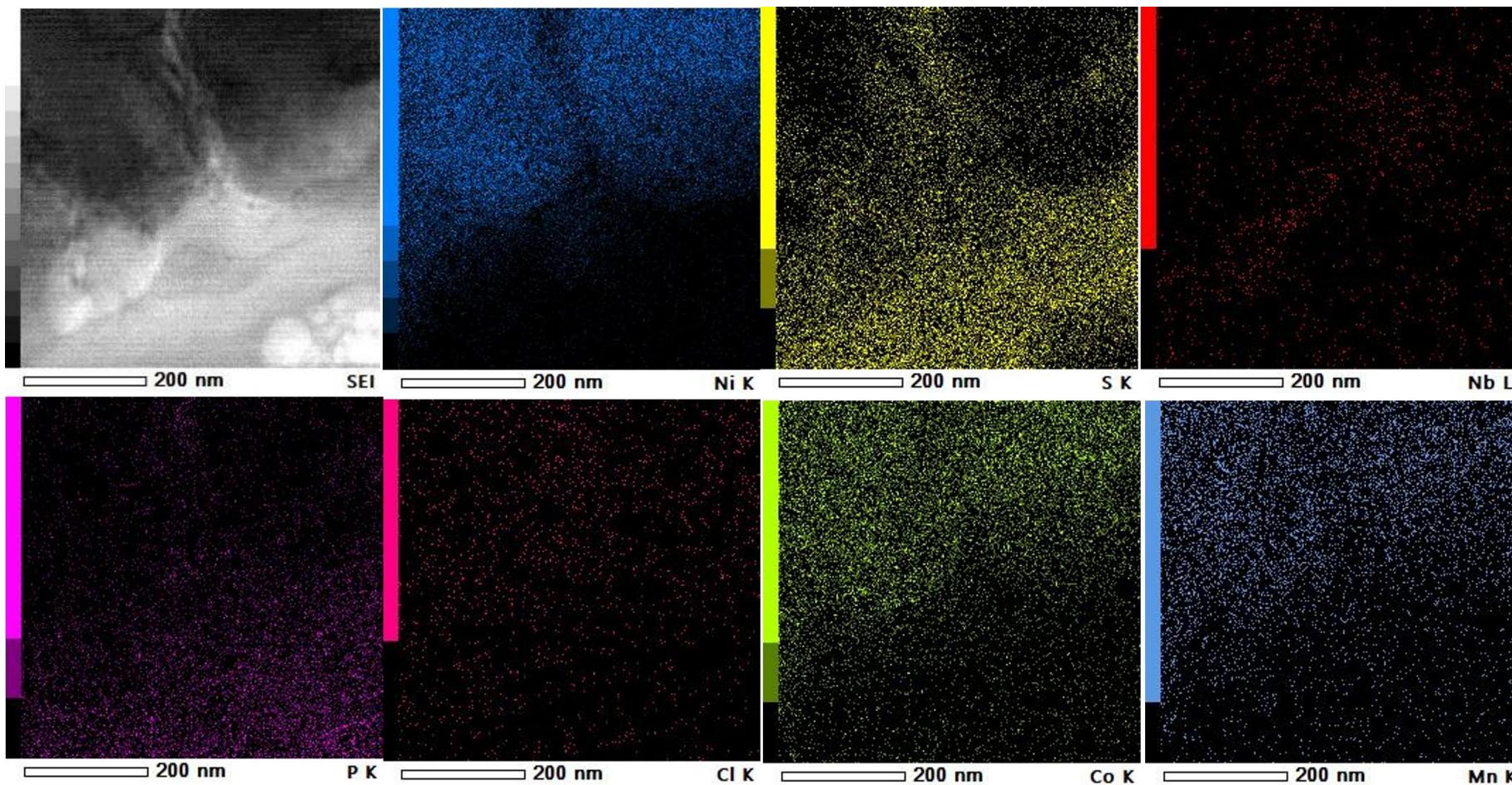


Figure S5. High magnification of STEM-EDS results at the interface between NMC811 and after 200 cycles