

Supporting Information

Multi-Scale Heterogeneity of Electrode Reaction for 18650-Type Lithium-ion Batteries During Initial Charging Process

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Supplement information

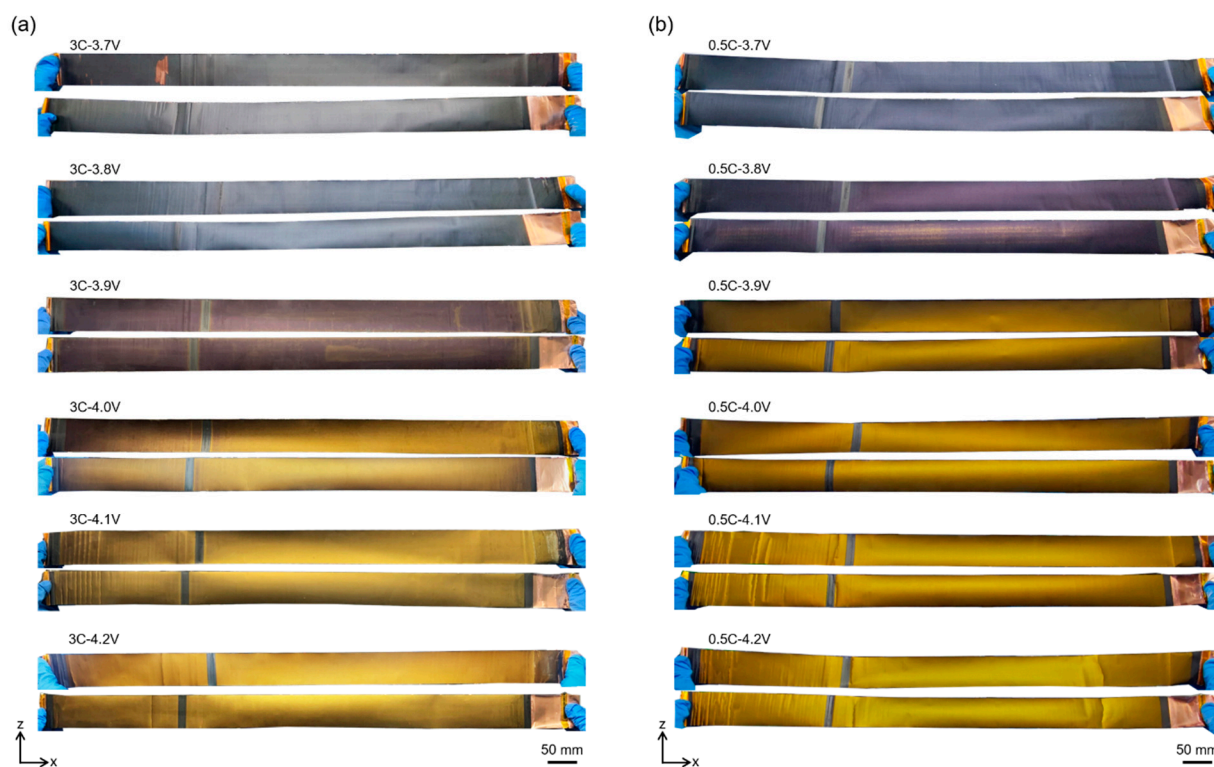


Figure S1. Quasi-operando optical images of the lithiated graphite anodes during fast-charging and slow-charging processes of 2 Ah 18650-type cells. (a) Overall expanded images of the lithiated graphite anodes between 3.7-4.2 V at four typical areas under fast-charging condition (3 C rate). (b) Overall expanded images of the lithiated graphite anodes between 3.7-4.2 V under slow-charging condition (0.5 C rate).

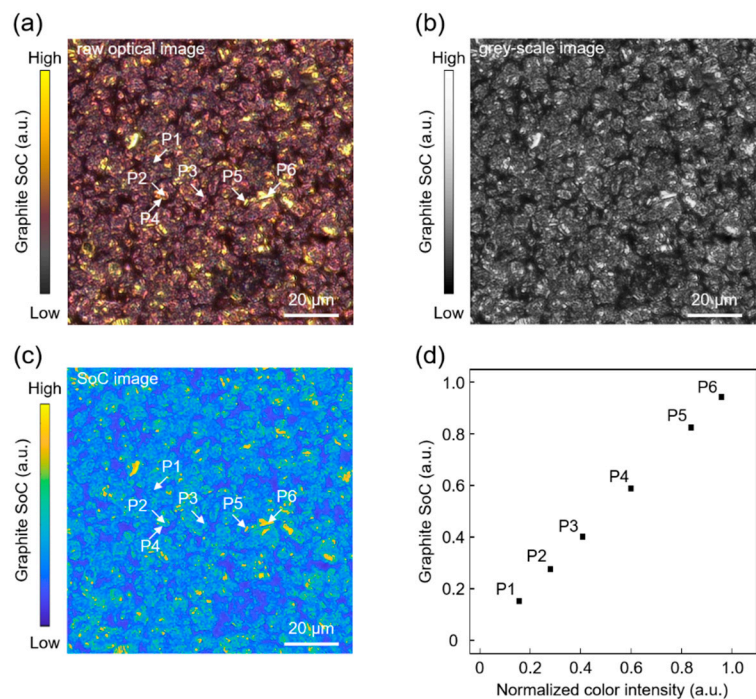


Figure S2. Calculation method of graphite SoC using Matlab. **(a)** Raw UDOF RGB image of graphite anode. **(b)** gray-scale image of panel a with a range of 0 to 255. **(c)** Normalized RGB image of panel b with a range of 0 to 1.0. **(d)** Samples of normalized and non-normalized RGB graphite SoC as labeled in panel a and panel b.