

Table S1: Listed results of the refined parameters extracted from the Rietveld refinement of the anode samples.

Phase	Refined Parameter	Fresh SoC 0%	Fresh SoC 100%	Cycled SoC 0%	Cycled SoC 100%
NaTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub>	a(Å)	8.4881(3)	8.4807(3)	8.4774(3)	8.4791(3)
	c(Å)	21.8131(5)	21.7870(5)	21.7691(4)	21.7771(4)
	Phase_Fraction	0.197(5)	0.110(2)	0.144(2)	0.113(2)
	Weight_Fraction	0.864(2)	0.765(3)	0.868(2)	0.735(2)
	Uiso (all atoms)	0.0107(3)	0.0088(3)	0.0088(3)	0.0092(2)
	Ti2_z	0.14554(6)	0.14562(6)	0.14544(6)	0.14542(6)
	P1_x	0.2864(2)	0.2864(2)	0.2867(2)	0.2869(2)
	O1_x	0.0259(4)	0.0269(4)	0.0265(4)	0.0240(4)
	O1_y	0.1945(3)	0.1950(3)	0.1948(3)	0.1935(3)
	O1_z	0.1909(2)	0.1903(2)	0.1908(2)	0.1909(2)
	O2_x	0.1910(3)	0.1913(3)	0.1913(3)	0.1900(3)
	O2_y	0.1611(3)	0.1615(3)	0.1613(3)	0.1606(3)
	O2_z	0.0891(2)	0.0884(2)	0.0887(2)	0.0884(2)
Graphite	a(Å)	2.462(6)	2.459(2)	2.458(2)	2.458(2)
	c(Å)	6.701(2)	6.7095(6)	6.7061(6)	6.7081(6)
	Phase_Fraction	0.746(6)	0.693(4)	0.813(3)	0.716(4)
	Weight_Fraction	0.065(2)	0.095(2)	0.097(2)	0.092(2)
Na <sub>3</sub> Li(SO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O) <sub>6</sub>	a(Å)	8.456(2)	-	-	-
	c(Å)	30.280(5)	-	-	-
	Phase_Fraction	0.0109(5)	-	-	-
	Weight_Fraction	0.044(2)	-	-	-
Li <sub>3</sub> PO <sub>4</sub>	a(Å)	-	6.1494(8)	-	6.148(2)
	b(Å)	-	5.2427(7)	-	5.2422(8)
	c(Å)	-	4.8825(5)	-	4.8851(7)
	Phase_Fraction	-	0.165(4)	-	0.110(4)
	Weight_Fraction	-	0.110(3)	-	0.068(2)
	Uiso (all atoms)	-	0.011(3)	-	0.014(3)
	P1_y	-	0.161(3)	-	0.168(4)
	P1_z	-	0.115(2)	-	0.063(4)
	O1_x	-	0.221(2)	-	0.207(4)
	O1_y	-	0.316(3)	-	0.300(4)
	O1_z	-	0.062(4)	-	0.120(5)
	O2_y	-	0.868(4)	-	0.894(7)
	O2_z	-	0.052(5)	-	0.128(9)
	O3_y	-	0.183(6)	-	0.185(7)
	O3_z	-	0.718(3)	-	0.658(5)
	Li1_x	-	0.168(6)	-	0.29(1)
	Li1_y	-	0.370(9)	-	0.35(2)
	Li1_z	-	0.60(2)	-	0.73(2)
	Li2_y	-	0.83(2)	-	0.81(2)
	Li2_z	-	0.63(2)	-	0.68(2)
TiO <sub>2</sub> (Anatase)	a(Å)	3.7874(5)	3.7824(5)	3.7812(4)	3.7824(4)
	c(Å)	9.535(3)	9.519(3)	9.514(3)	9.516(2)
	Phase_Fraction	0.046(2)	0.0324(8)	0.043(1)	0.0364(8)
	Weight_Fraction	0.027(1)	0.030(1)	0.035(1)	0.031(1)
Na <sub>2</sub> SO <sub>4</sub>	a(Å)	-	-	-	9.8186(8)
	b(Å)	-	-	-	12.2987(9)
	c(Å)	-	-	-	5.8579(5)
	Phase_Fraction	-	-	-	0.0244(5)
	Weight_Fraction	-	-	-	0.074(1)
Rwp		5.79	4.64	5.54	5.27