

Supplementary Information:

Probing the Effect of Titanium Substitution on the Sodium Storage in Na₃Ni₂BiO₆ Honeycomb-type Structure

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Tab. S1 Structural information of all synthesized compounds.

Compound	a [Å]	b [Å]	c [Å]	β [°]	V [Å ³]	Impurity	Bragg R-factor	Rf-factor
NNB	5.403(2)	9.340(7)	5.676(6)	108.475(3)	271.726(0)	NiO 4 %	9.07	5.43
NNBT0.1	5.400(7)	9.320(3)	5.678(8)	108.492(7)	271.083(8)	NiO 4 %	8.14	4.60
NNBT0.3	5.392(5)	9.282(7)	5.676(4)	108.469(9)	269.506(4)	NiO 3 %	6.12	3.63
NNBT0.5	5.375(0)	9.198(8)	5.671(3)	108.436(9)	266.017(9)	NiO 14 % NaBiO ₂ 14 % NaNi _{0.5} Ti _{0.5} O ₂ 21 %	5.83	2.28

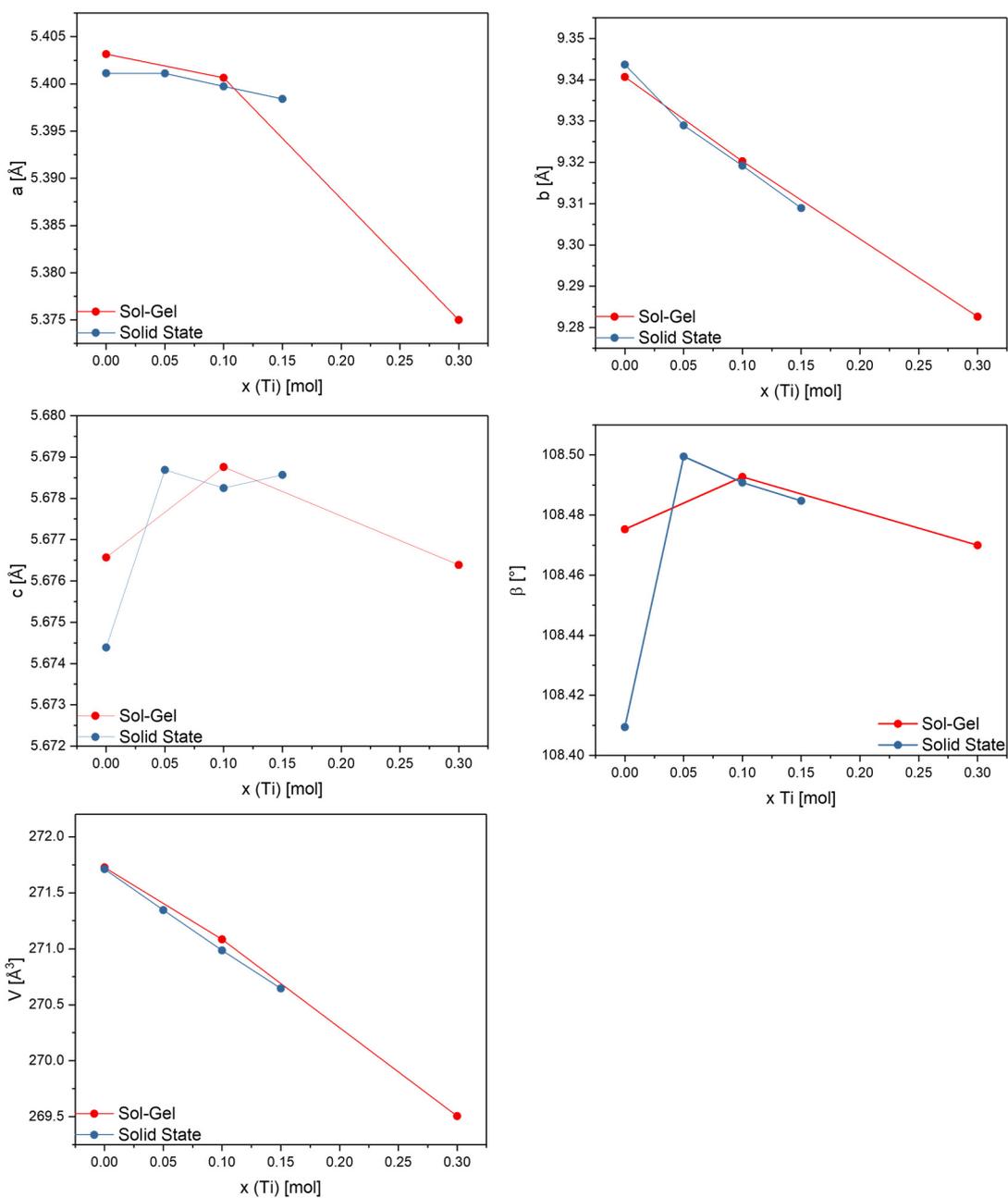


Figure S1 Linear dependence of lattice parameter a, b, c, β and their corresponding change in unit cell volume.

In addition to the sol-gel synthesis, solid-state synthesis was carried out for products with smaller Ti amount in advance to prove compliance with the Vegard's law.

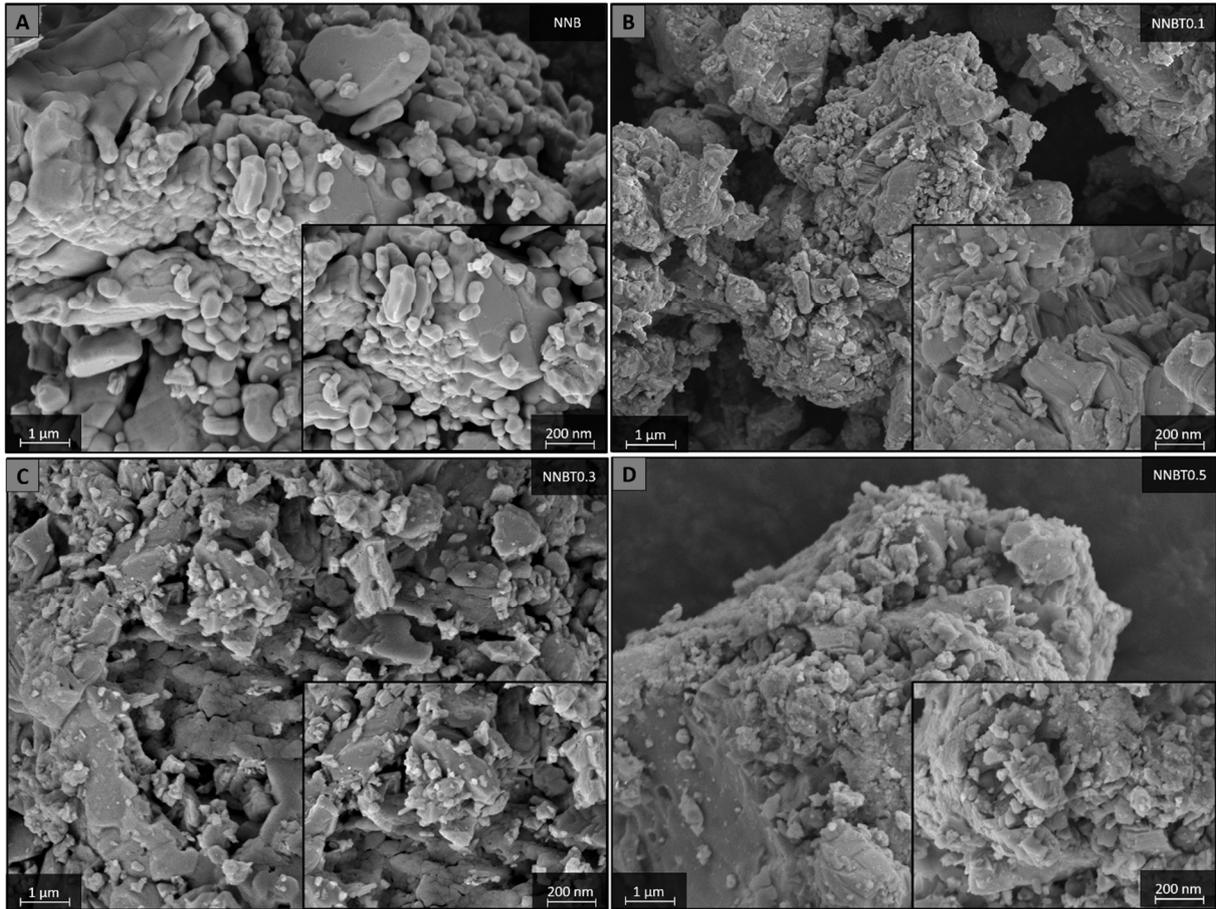


Figure S2 Scanning electron microscopy (SEM) images for the morphological characterization of pristine NNB [A], NNBT0.1 [B], NNBT0.3 [C] and NNBT0.5 [D].

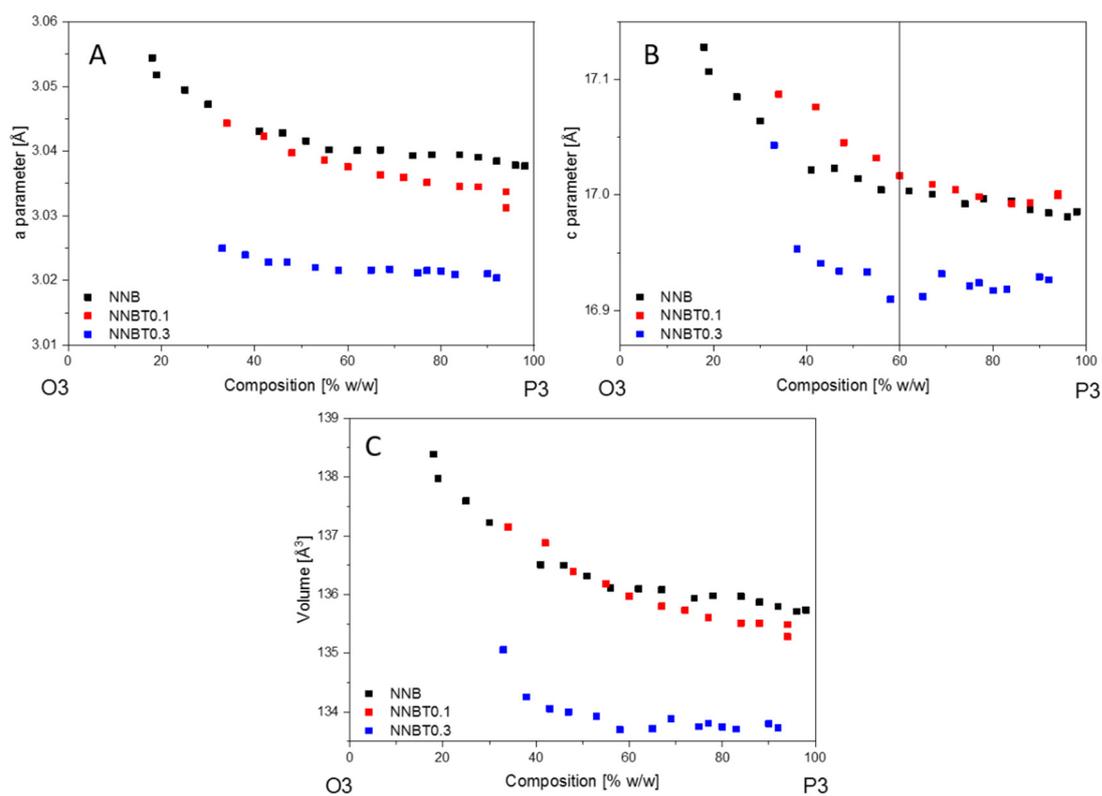


Figure S 3 Changes of lattice parameters a , c (A, B) and unit cell volume (C) of the P3 phase for the compositions NNB, NNBT0.1 and NNBT0.3 in the two-phase region O3-P3.