Supporting Information for

P2-type $Na_{2/3}Ni_{1/3}Mn_{2/3-x}Ti_xO_2$ as a new positive electrode for higher enegy Na-ion batteries

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Figure S1. (a)Charge/discharge curves and (b)discharge capacity retention of Na//Na $_{2/3}$ Ni $_{1/3}$ Ti $_{2/3}$ O₂ cells with different cut-off voltage.



Figure S2. (a)Charge/discharge curves and (b)discharge capacity retention of Na//Na_{2/3}Ni_{1/3}Mn_{2/3}O₂ cells with different cut-off voltage.

Table S1. Comparison of the electrochemical properties and the ratio of lattice volume changes of samples.

	Energy Density ^a	Capacity retention ^b	d-space(fully charged) ^c	Cell volume change ^d
	/Wh kg⁻¹	/%	/Å	/%
Na _{2/3} Ni _{1/3} Mn _{2/3} O ₂	556	66.7	4.43	-23.2
Na _{2/3} Ni _{1/3} Mn _{1/2} Ti _{1/6} O ₂	470	93.9	5.03	-12.7
Na _{2/3} Ni _{1/3} Mn _{1/3} Ti _{1/3} O ₂	437	86.7	5.10	-12.1

^a Calculated from Figure 2.^b Capacity retention after 10 cycle.

^{*c*} Inter-layer distance after fully charging (to 4.5 V) was calculated from ex-situ XRD results. ^{*d*} Cell volume change is estimated by difference of lattice volume of fully-charged and pristine.