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Supplementary information file - Performance of nanocrystalline Ni_3N as a negative electrode for sodium-ion batteries (Li, Hasan, Hector and Owen)

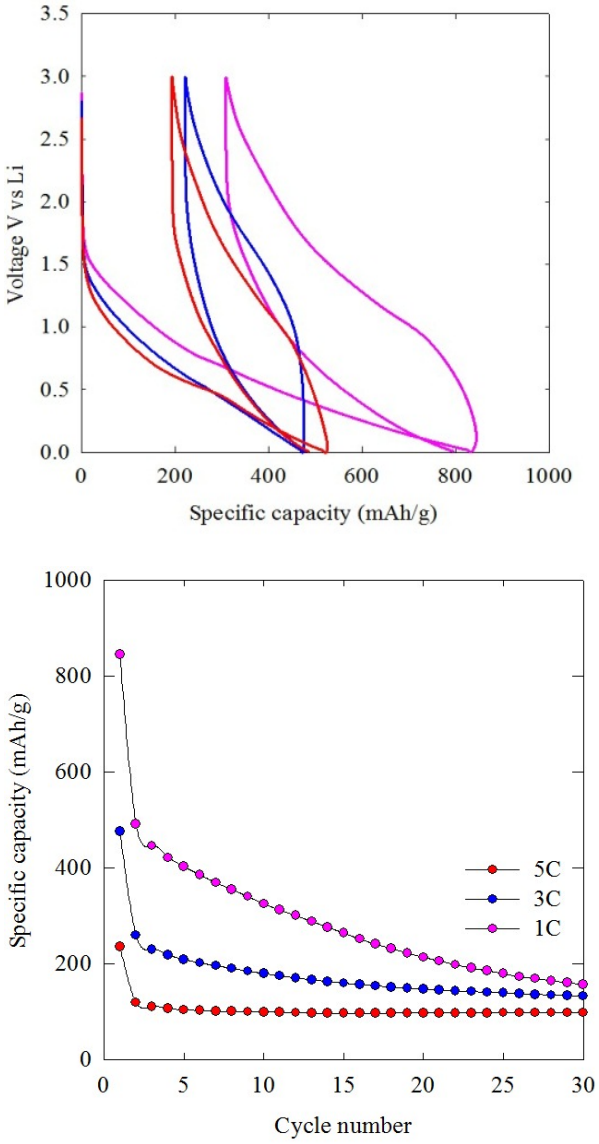

Fig. S1 Voltage versus specific capacity (top) and reduction specific capacity versus cycle number (bottom) of Ni_3N-lithium half cells cycled between 3 V and 1 mV at different current rates for 30 cycles (5C = 2115, 3C = 1269 and 1C = 423 mAg^{-1}). The counter electrode was lithium foil and the electrolyte was 1 M $LiPF_6$ in EC:DEC (1:1).

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Table S1 Refined parameters from Rietveld refinements of Ni_3N

Parameter (both patterns refined in $P6_322$ with Ni at $^1/_3$,0,0 and N at $^1/_3$,$^2/_3$,$^1/_4$)	Data from fit in Fig. 1(Ni_3N obtained by ammonolysis of $[Ni(NH_3)_6].2NO_3$)	Data from fit in Fig. 2 (Ni_3N obtained by ammonolysis of $[Ni(EDA)_3].2NO_3$)
a / Å	4.62231(14)	4.5937(4)
c / Å	4.30630(13)	4.3258(7)
R_{wp} / %	13.0	13.5
R_p / %	9.1	10.3
Ni U_{iso} × 100 / $Å^2$	0.23(7)	2.93(15)
N U_{iso} × 100 / $Å^2$	1.00(-)	7.2(15)