Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Synthesis and Electrochemical Performance of Maricite-$NaMPO_4$ (M=Ni, Co, Mn) Electrodes for Hybrid Supercapacitor

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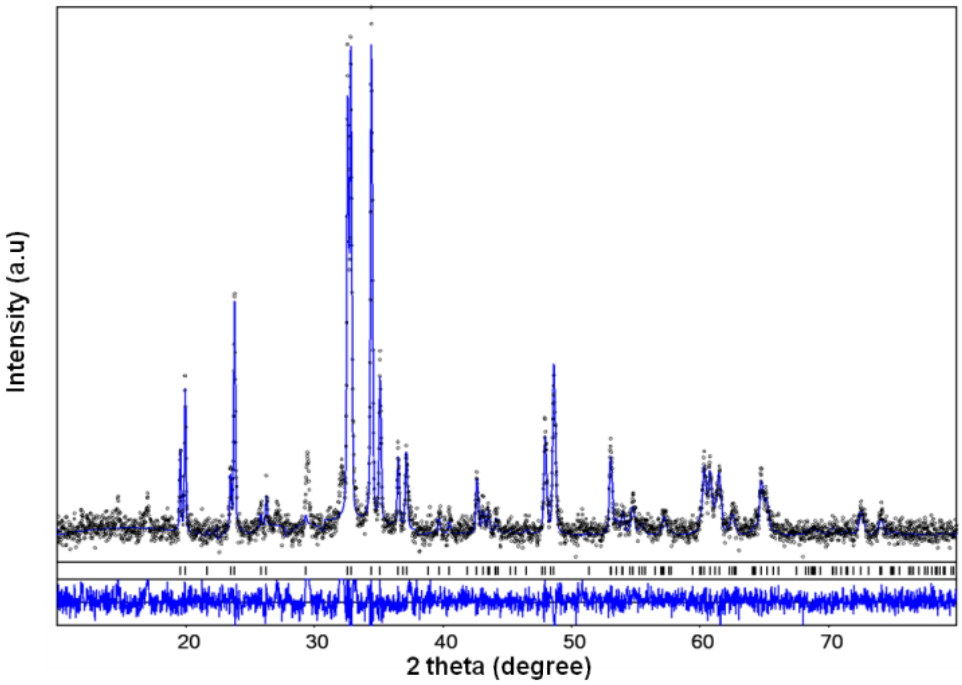

Fig. S1. Graphical results of the Rietveld refinement of $NaMnPO_4$ sample showing presence of orthorhombic maricite-type phase (blue line) as a predominant one.

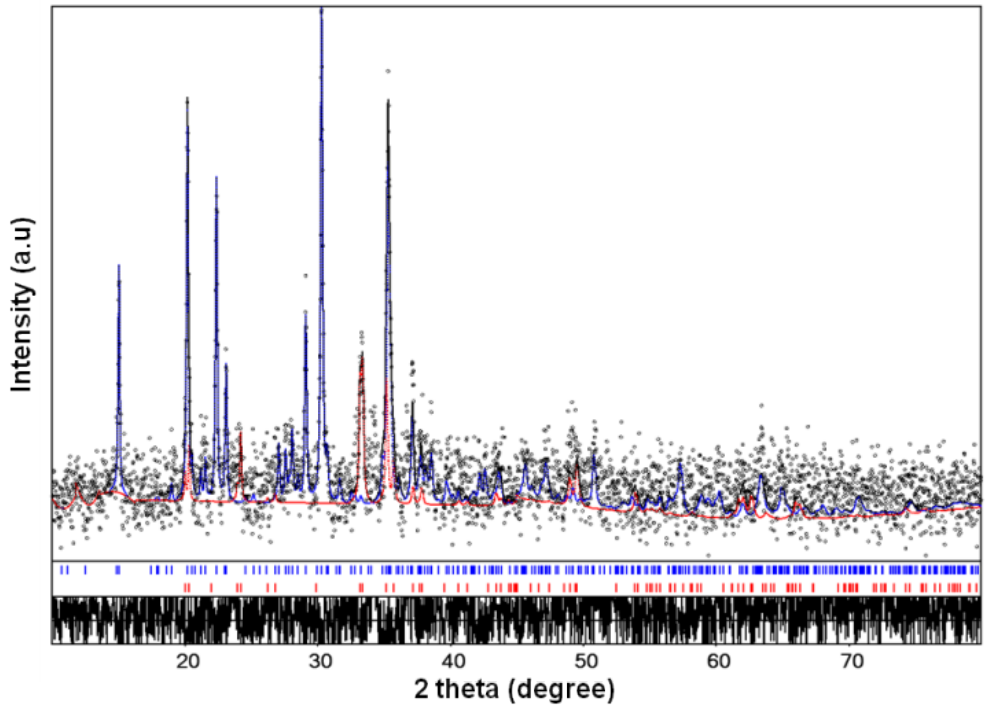

Fig. S2. Graphical results of the Rietveld refinement of $NaCoPO_4$ sample showing presence of 77 wt. % of hexagonal (blue) and 23 wt. % of orthorhombic (red) polymorphs of $NaCoPO_4$.

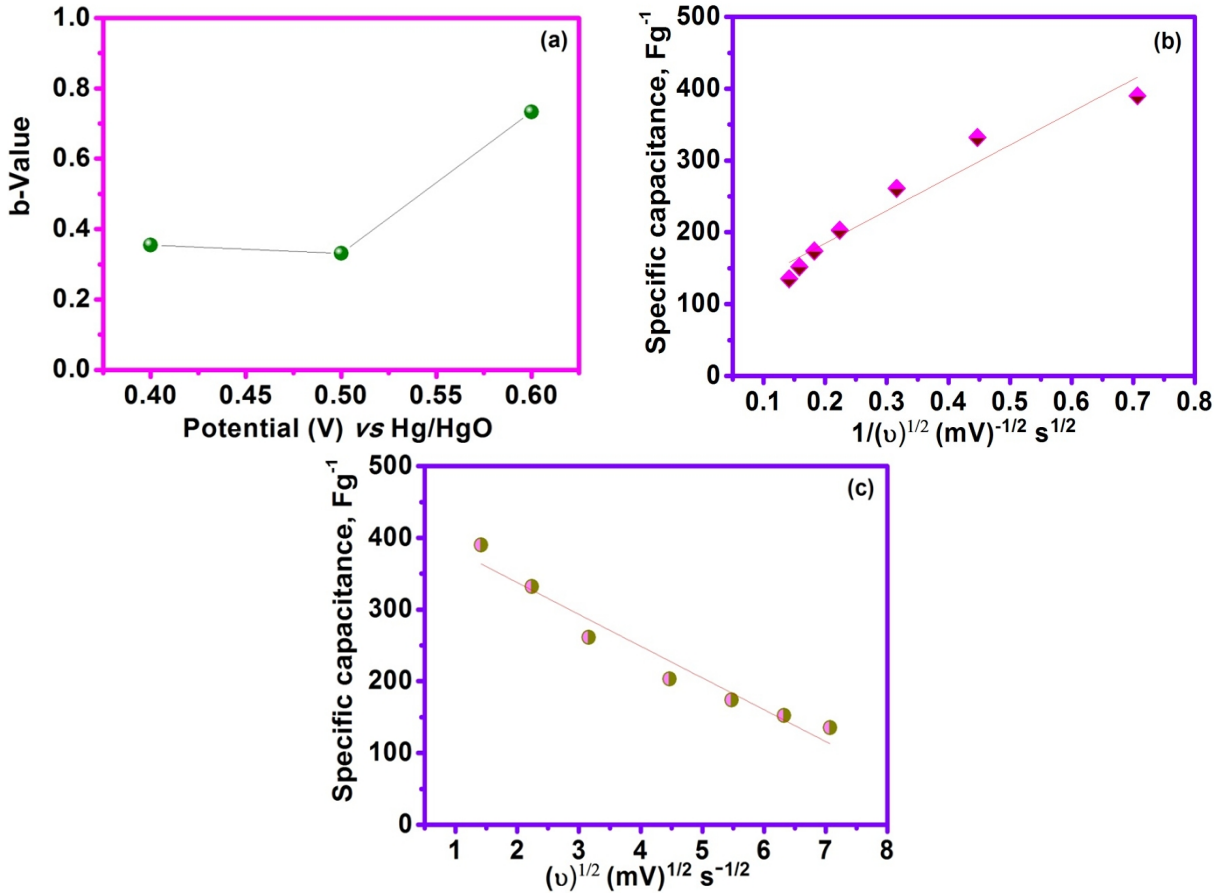

Fig. S3. (a) plot for the variation of b-value *vs* potential, and (b, c) corresponds to the Trasatti plot.

Table S1. Selected bond lengths and bond angles with estimated standard deviations in parenthesis in the $NaNiPO_4$ structure

Atoms	Distances (Å)	Atoms	Angles (degrees)
		PO_4 tetrahedra	
P – O2	2×1.516(10)	O1 – P – O2	2×108.74(8)
P – O3	1.548(15)	O1 – P – O3	110.97(8)
P – O1	1.566(15)	O2 – P – O2	112.07(7)
$(P – O)_{ave}$	*1.537*	O2 – P – O3	2×108.17(7)
		NiO_6 octahedra	
Ni – O2	2×2.021(9)	O1 – Ni – O2	2×87.99(4), 2×92.01(4)
Ni – O3	2×2.117(7)	O1 – Ni – O3	2×74.89(4), 2×105.11(4)
Ni – O1	2×2.326(10)	O2 – Ni – O3	2×85.51(4), 2×94.49(4)
$(Ni – O)_{ave}$	*2.155*	O1 – Ni – O1	180.00(5)
		O2 – Ni – O2	180.00(4)
		O3 – Ni – O3	180.00(4)
		NaO_6 polyhedra	
Na – O2	2×2.205(9)	O1 – Na – O2	2×79.14(5), 2×87.81(5)
Na – O1	2.28(2)	O2 – Na – O3	2×74.05(5), 2×105.90(5)
Na – O3	2.45(2)	O1 – Na – O3	65.52(5), 115.05(6)
Na – O1	2.53(2)	O3 – Na – O1	65.79(5), 113.64(5)
Na – O3	2.59(2)		
$(Na – O)_{ave}$	*2.38*		