

Electronic Supplementary material (ESI) for RSC Advances  
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## **Electronic Supplementary Information (ESI)**

### **Rhombohedral NASICON-Structured $\text{Li}_2\text{NaV}_2(\text{PO}_4)_3$ with Single Voltage Plateau for Superior Lithium Storage**

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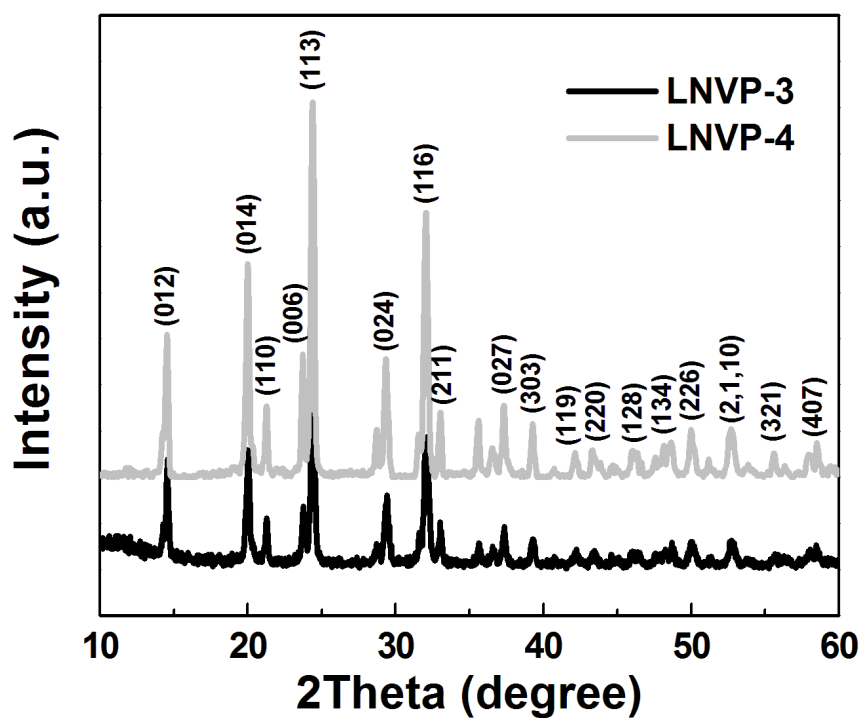
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**Table S1.** Lattice parameters of the LNVP-1, LNVP-3 and LNVP-4.

Compounds	Structure Type	Lattice parameters			
		a (Å)	b (Å)	c (Å)	V (Å <sup>3</sup> )
Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> <sup>[29]</sup>	Rhombohedral	8.7288	8.7288	21.804	1438.73
Li <sub>2</sub> NaV <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> <sup>[26]</sup>	Rhombohedral	8.325	8.325	22.491	1350
<b>LNVP-1</b>	Rhombohedral	8.326	8.326	22.577	1355.75
<b>LNVP-3</b>	Rhombohedral	8.333	8.333	22.516	1354.04
<b>LNVP-4</b>	Rhombohedral	8.337	8.337	22.584	1359.5



**Fig. S1.** XRD patterns of the LNVP-3 and LNVP-4 nanoparticles.

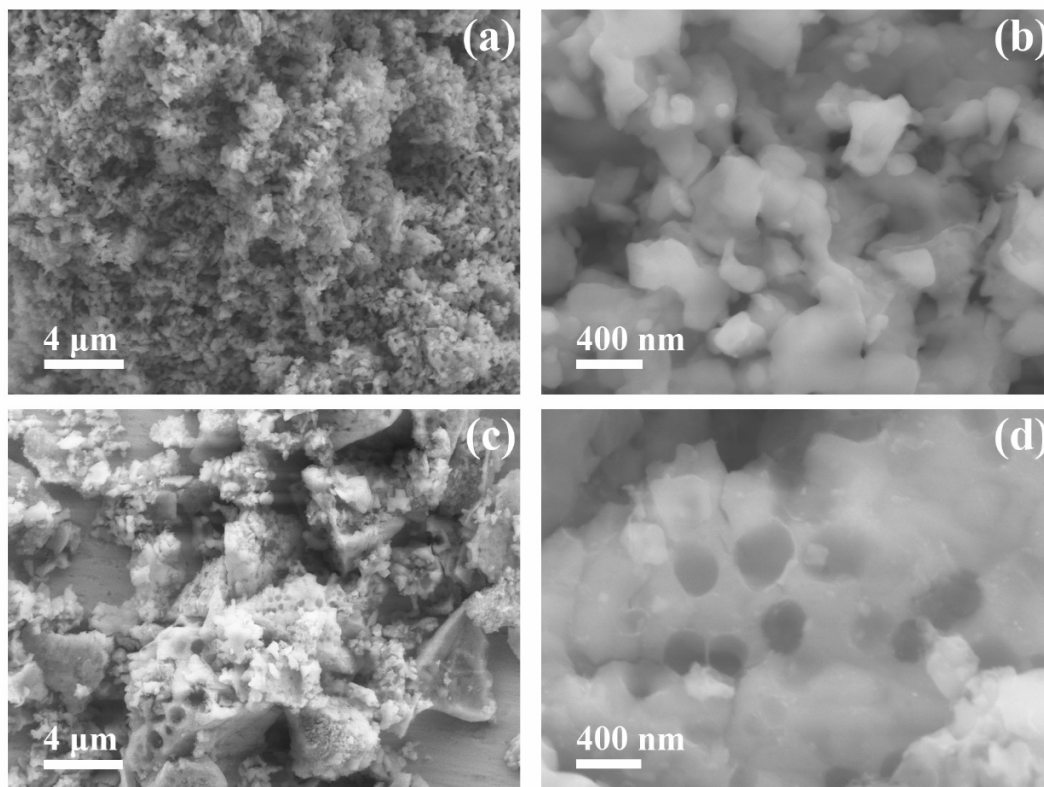


Fig. S2 Morphological analysis of LNVP-3 (a,b) and LNVP-4 (c,d).

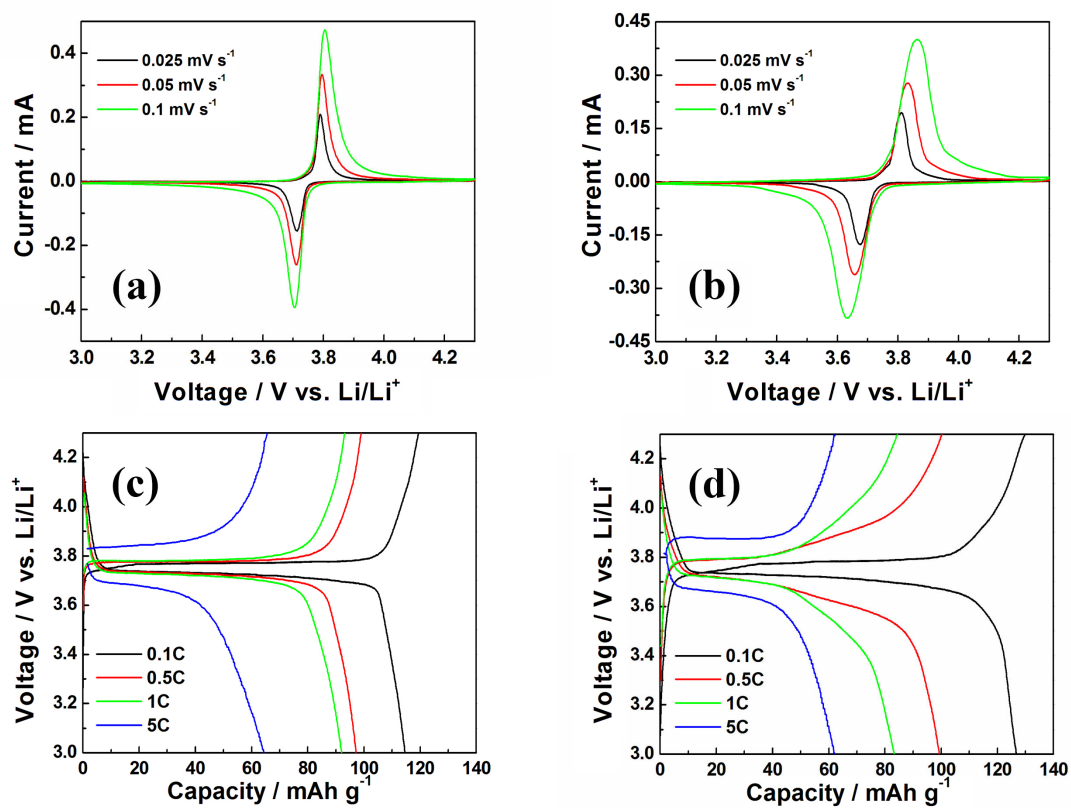


Fig. S3 Electrochemical properties of LNVP-3 and LNVP-4: CV and galvanostatic charge/discharge curves of LNVP-3 (a,c) and LNVP-4 (b,d).