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Supporting Information

## Free-standing Ni<sub>3</sub>(VO<sub>4</sub>)<sub>2</sub> Nanosheet Arrays on Aminated r-GO Sheets for Supercapacitor Applications

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**Fig. S1** (a) SEM and (b-d) TEM images of NiV@r-GO nanocomposites (having 0.5/0.25 Ni/V molar ratio).



Fig. S2 (a and b) SEM images, (c) TEM image and (d) SAED pattern of aminated r-GO sheets.



**Fig. S3** SEM images of NiV@r-GO nanocomposites having Ni/V mole ratio; (a) 0.25/0.125 and (b) 1/0.5.



Fig.S4 Raman spectrum of aminated r-GO sheets.



Fig.S5 BET surface area of aminated r-GO sheets.



Fig. S6 (a) CV, (b) GCD and (c) specific capacity of aminated r-GO sheets and NiV@r-GO nanocomposites.



**Fig. S7** Electrochemical performace in term of specific capacitance (F/g) for both r-GO and NiV@r-GO nanocomposites.



**Fig. S8** GCD curve of NiV@r-GO nanocomposites having Ni/V mole ratio; (a) 0.25/0.125 and (b) 1/0.5.

