

## Electronic Supplementary Information

### Nanoscale morphology dependent pseudocapacitance of NiO: Influence of intercalating anions during synthesis

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Table S1 TGA data of uncalcined samples

Sample	Weight loss (%) due to structural water		Weight loss (%) due to crystalline water		
	Temp. (°C)	Loss (%)	Temp. (°C)	Decomp. temp. (°C)	Loss (%)
NiO-C-uc	25-205	18	205-400	290	20
NiO-N-uc	25-205	16	205-400	285	19
NiO-A-uc	25-205	11	205-400	285	20

Table S2 XRD results of various NiO samples

Sample	$d_{hkl}$	d spacing (Å)	FWHM (2θ)	Crystallite size (nm)	Average crystallite size (nm)
NiO-C	111	2.42	2.38	3.48	3.75
	200	2.09	2.35	3.60	
	220	1.48	2.20	4.18	
NiO-N	111	2.43	2.50	3.32	3.49
	200	2.10	2.56	3.30	
	220	1.49	2.38	3.86	
NiO-A	111	2.44	2.75	3.05	3.18
	200	2.11	2.90	2.91	
	220	1.49	2.56	3.59	

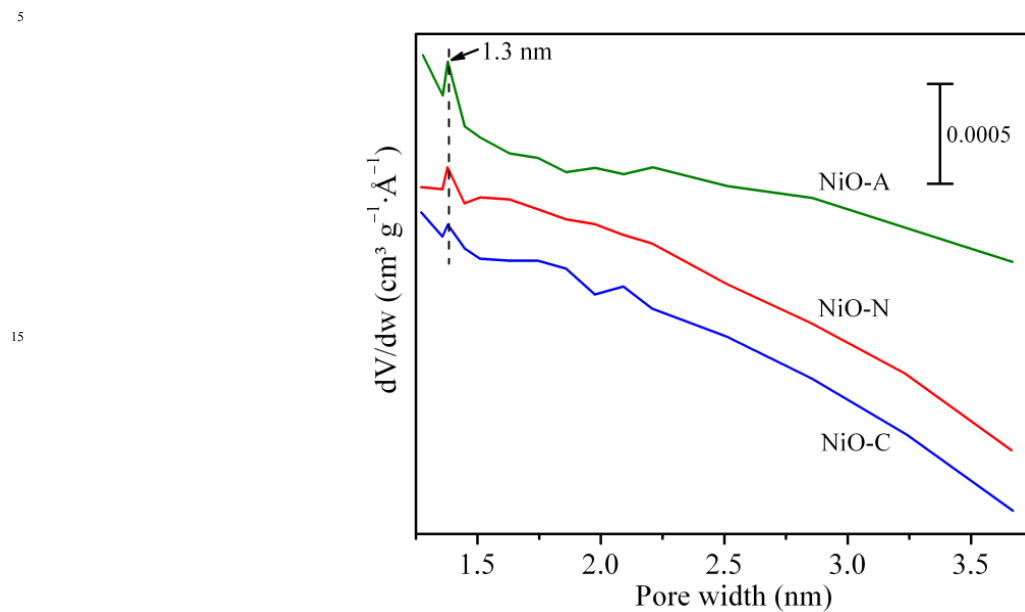


Fig. S1 Pore size distribution of calcined NiO-N, NiO-A and NiO-C samples obtained using HK method.

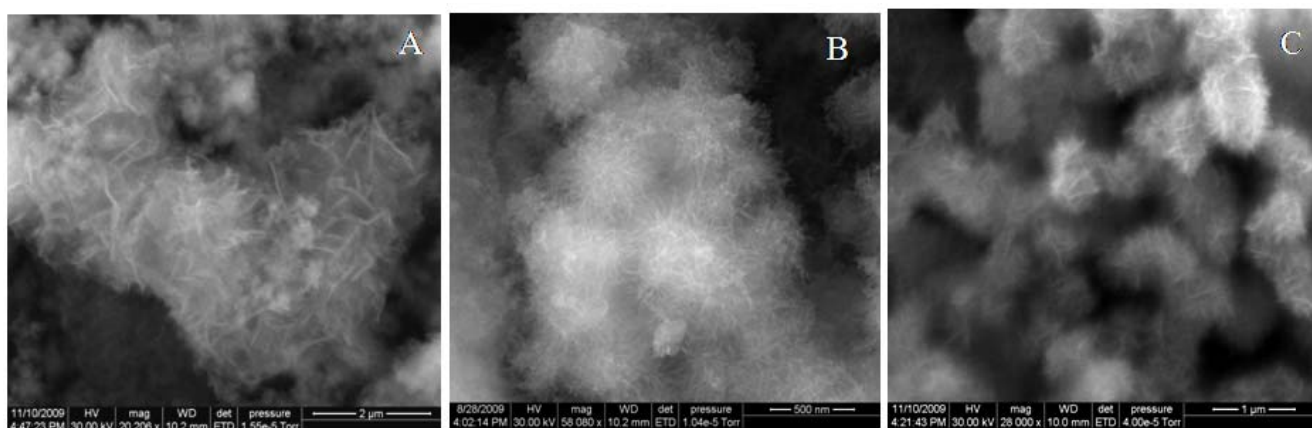
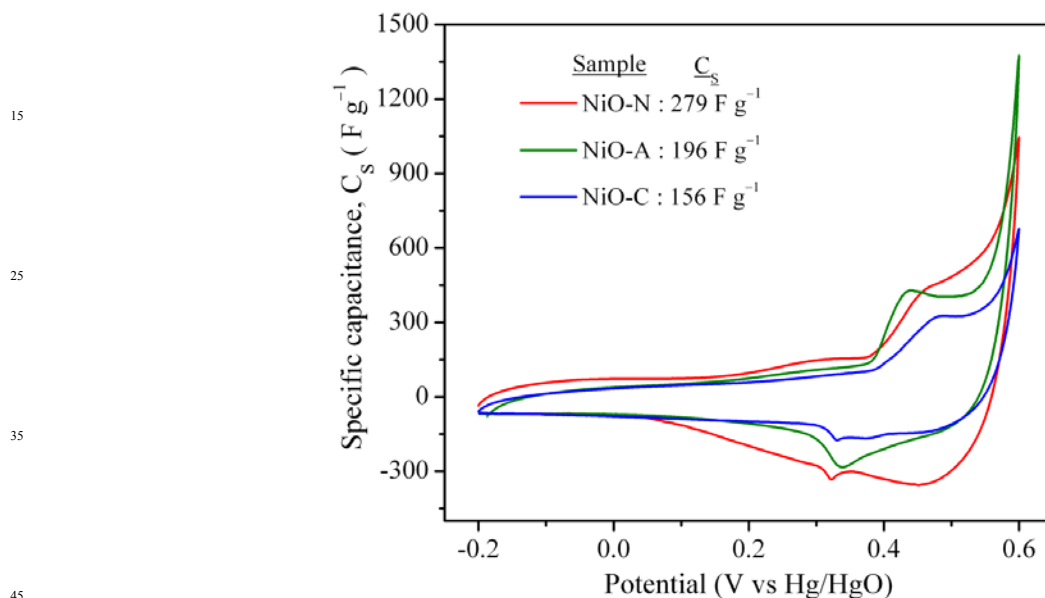


Fig. S2 FESEM images of (A) NiO-A-uc, (B) NiO-N-uc and (C) NiO-C-uc samples (uncalcined Ni hydroxides).

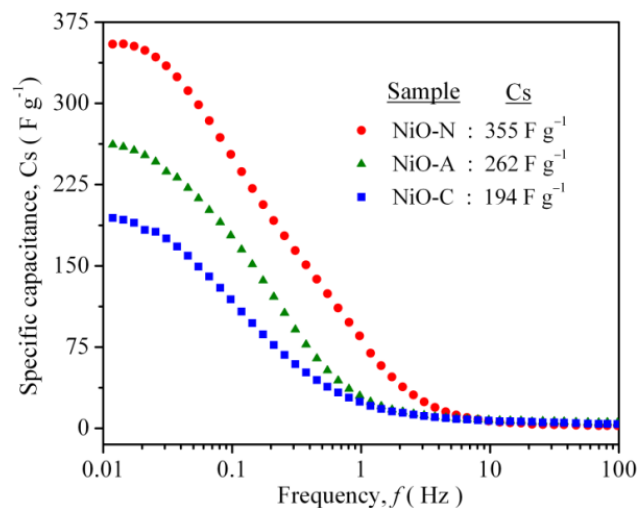
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Fig. S3 Specific capacitance values of calcined NiO-N, NiO-A and NiO-C samples calculated from the cyclic voltammetry measurements at a scan rate of  $5\ mV\ s^{-1}$ .

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Fig. S4 The specific capacitance values of NiO-N, NiO-A and NiO-C electrodes calculated from the respective impedance spectra as a function of the frequency.

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