Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supporting Information

Nanomorphology-dependent pseudocapacitive properties of NiO electrodes engineered through controlled potentiodynamic electrodeposition process

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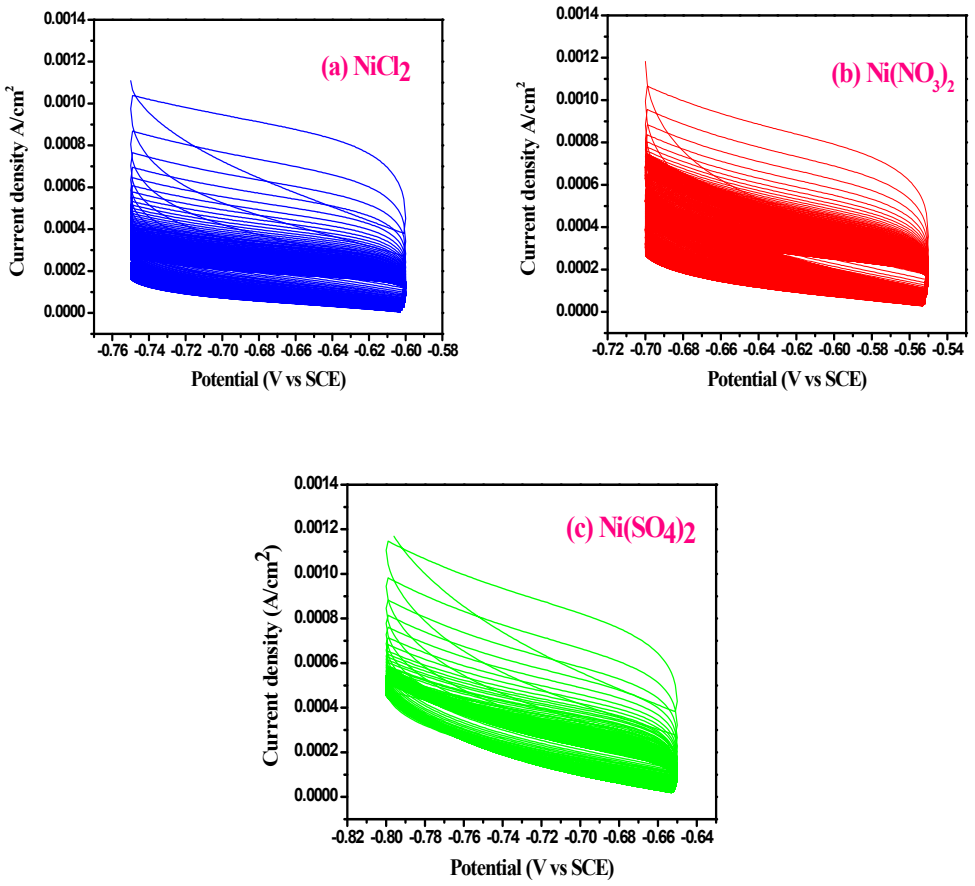

Figure S1: Cyclic voltammetry curves at 100 mV.s^{-1} for 30 minutes during the potentiodynamic electrodeposition for different precursors (a) Nickel chloride ($NiCl_2$. $6H_2O$), (b) Nickel nitrate (Ni $(NO_3)_2$) and (c) Nickel sulphate (Ni $(SO_4)_2$).

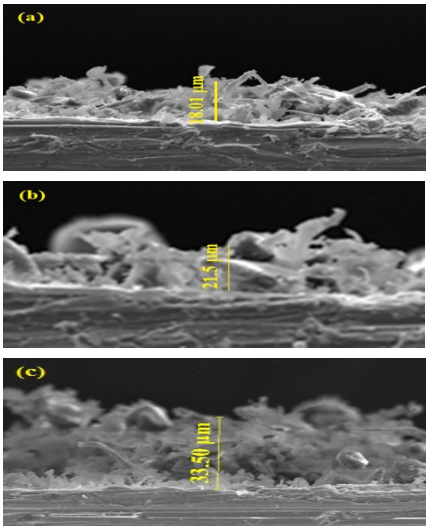

Figure S2: Cross sectional SEM images of (a) NiO-C, (b) NiO-N and (c) NiO-S samples.

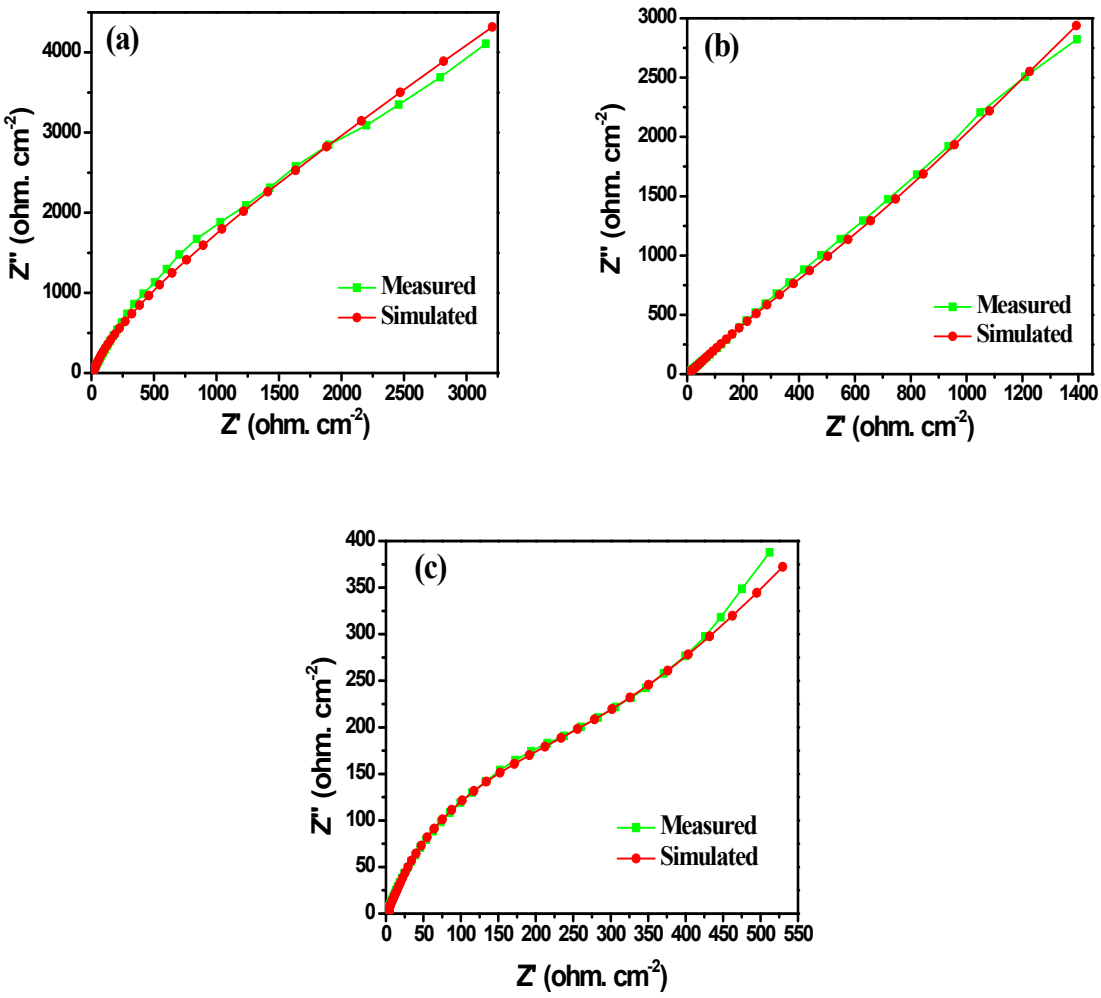

Figure S3: The measured and simulated data for matched equivalent circuit for (a) NiO-N, (b)NiO-C and (c) NiO-S electrodes, which indicates a very good agreement between measured and simulated data for matched equivalent circuit.

Table S1: Electrochemical circuitry parameters obtained from EIS study for matched equivalent circuit.

Parameters	Electrode Type		
	NiO-N	**NiO-C**	**NiO-S**
R_s (Ω/cm^2)	1.34	1.29	1.27
R_1(Ω/cm^2)	21.11	10.17	4.35
R_2(Ω/cm^2)	0.28	0.21	0.10
R_3(Ω/cm^2)	0.001	0.001	0.001
CPE-1(μF)	0.227	0.349	0.455
CPE-2(μF)	0.3427	0.533	0.841
Q	0.000158	0.000258	0.000961
W	0.000144	0.000207	0.000145