

Electronic Supplementary Information

Microwave Assisted Synthesis of Mesoporous NiCo₂O₄ Nanosheets as Electrode Material for Advanced Flexible Supercapacitors

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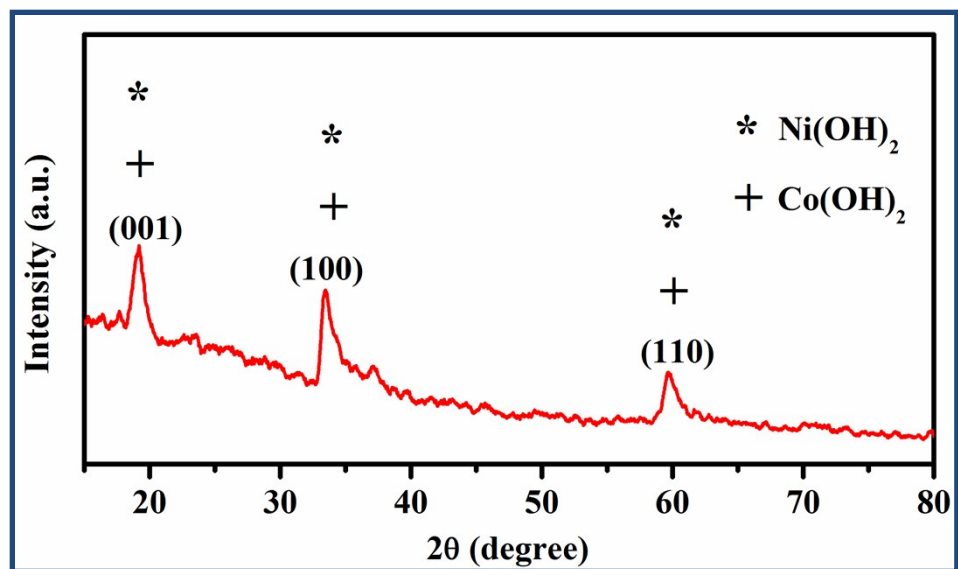


Fig. S1. XRD pattern of as-synthesized precursor

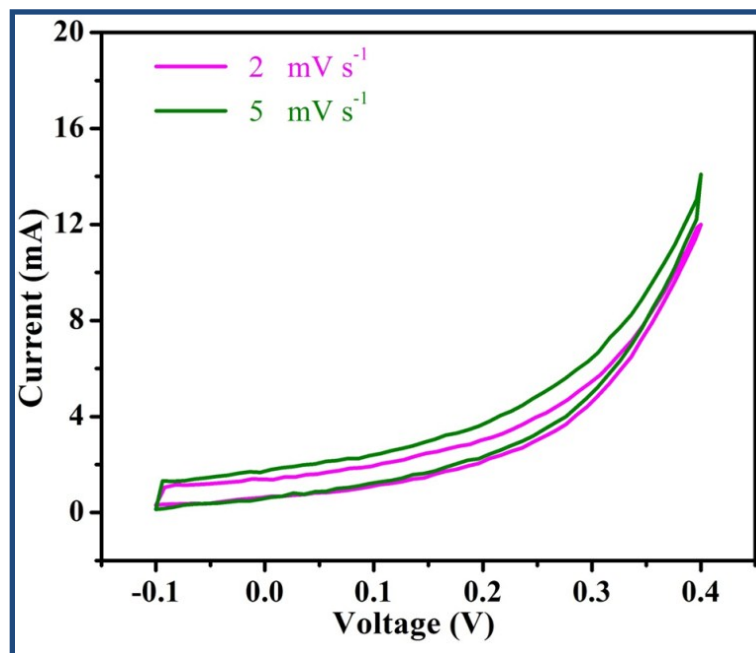


Fig.S2. CV curves of carbon cloth at various scan rates

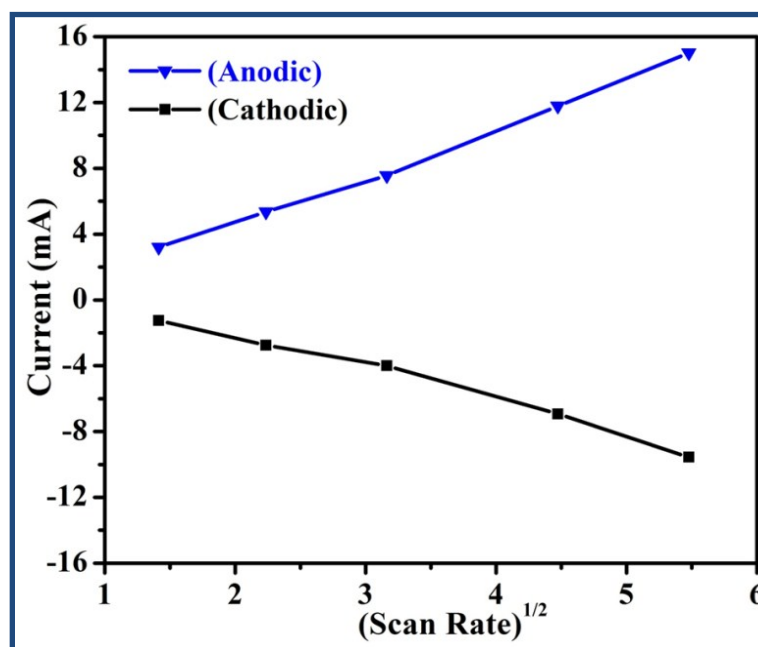


Fig. S3. Oxidation current as a function of square root of scan rate

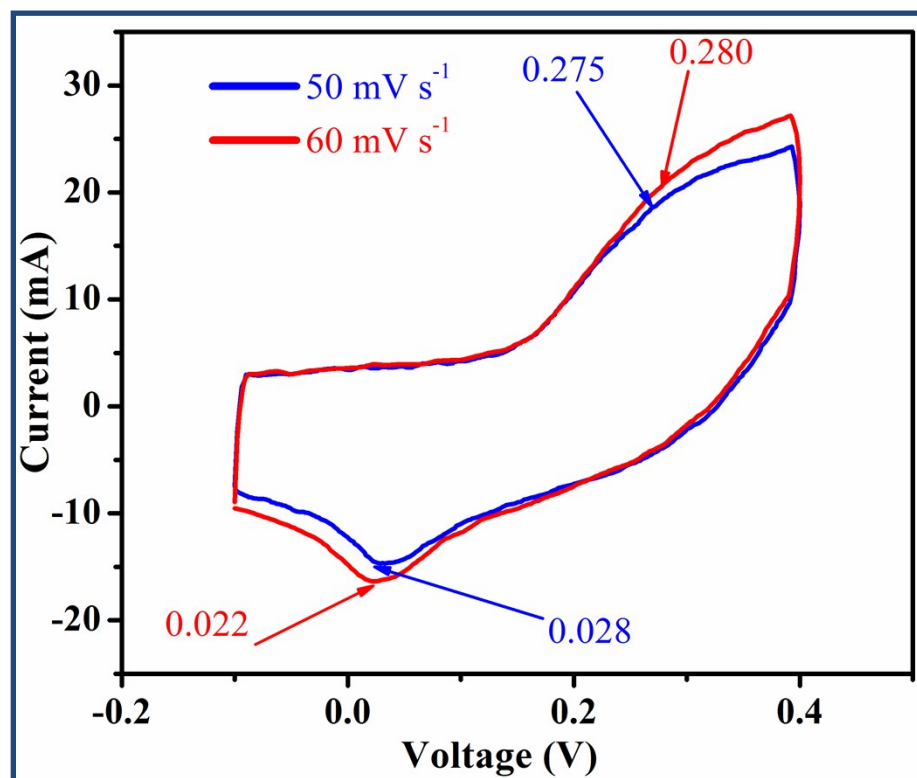


Fig. S4. CV curves of hybrid electrode at higher scan rate 50 & 60 mV s⁻¹

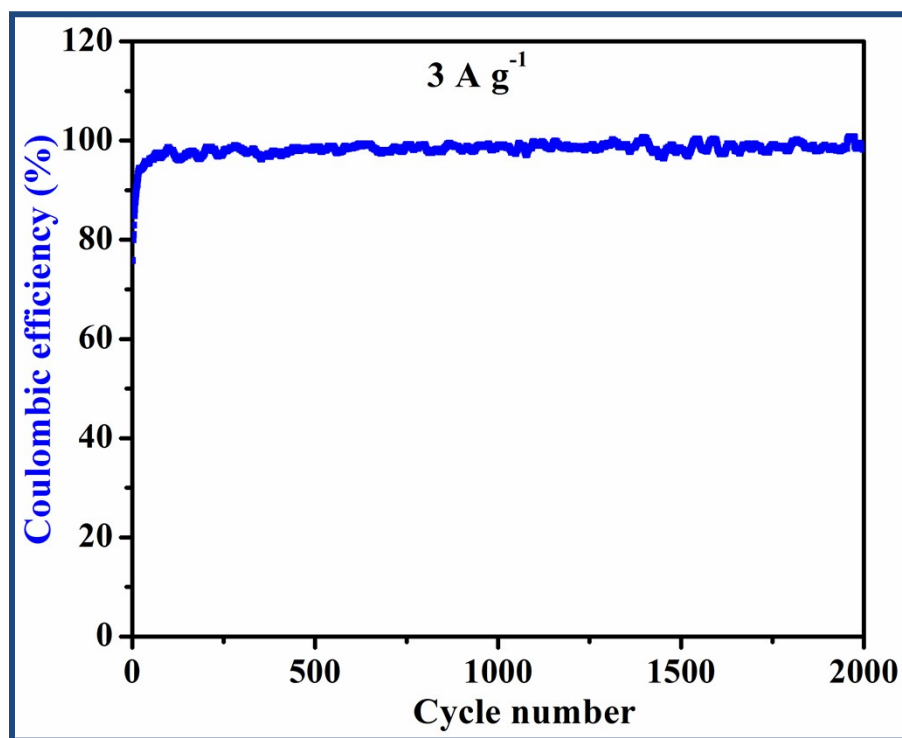


Fig. S5. Coulombic efficiency of hybrid electrode at 3 A g^{-1}

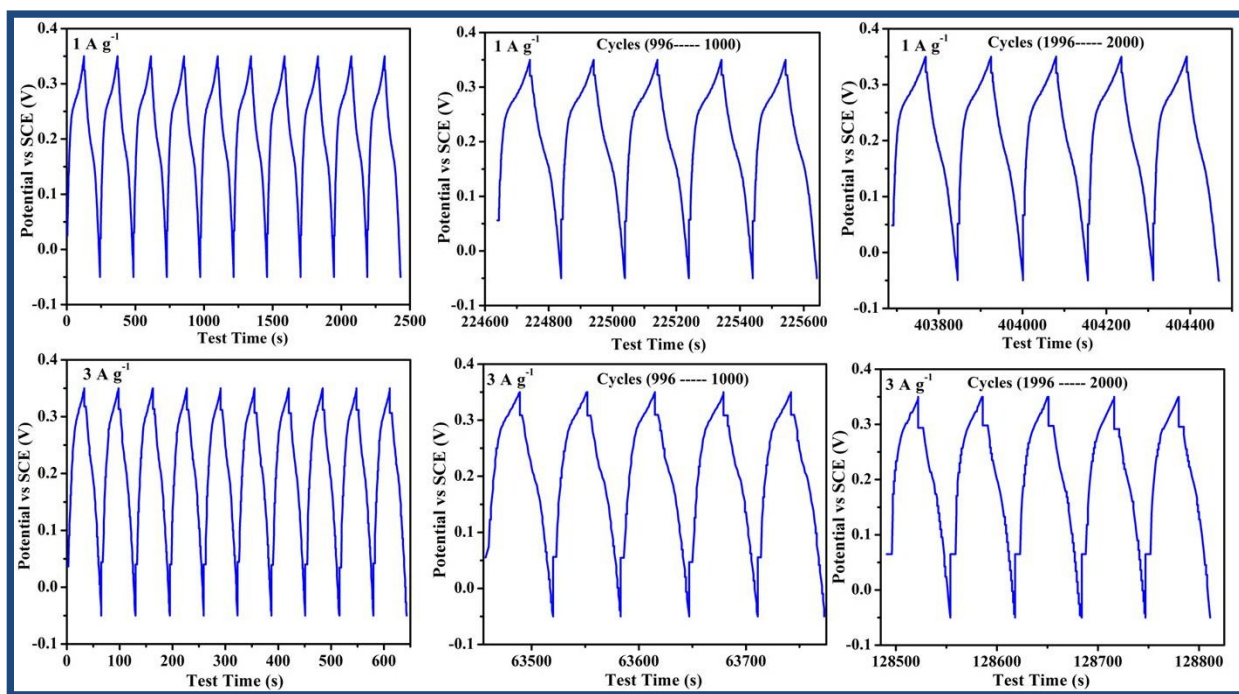


Fig. S6. Galvanostatic charge discharge curves at 1 & 3 A g^{-1} for different cycles

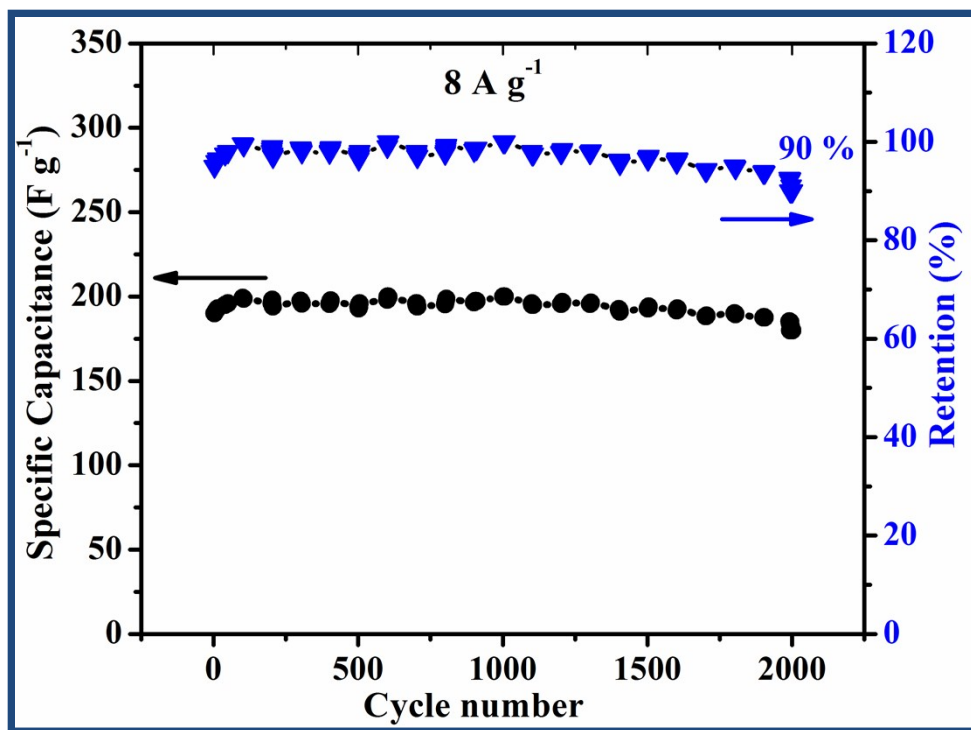


Fig. S7. Cycle performance at a current density of 8 A g^{-1} .

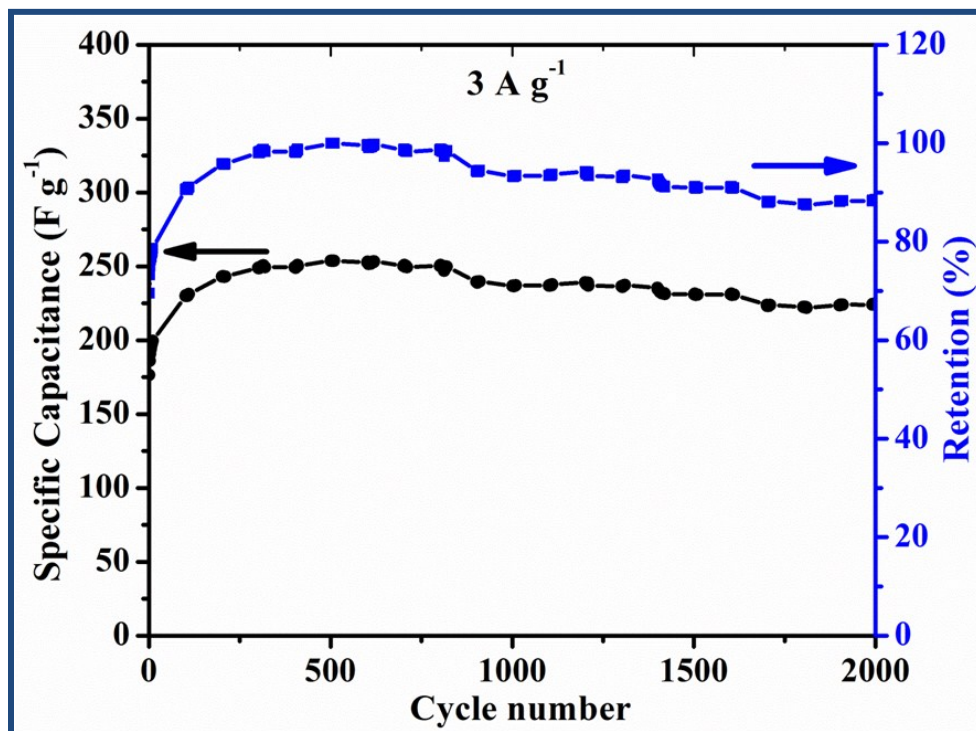


Fig. S8. Cycle performance in bend state at a current density of 3 A g^{-1} .

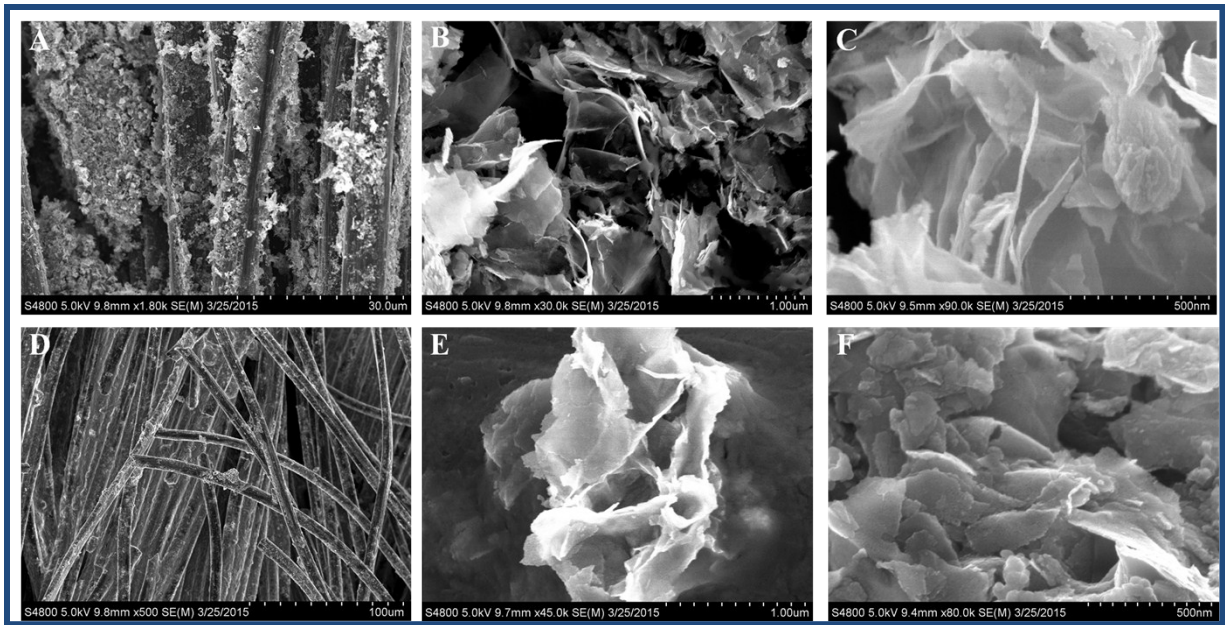


Fig. S9. SEM images of electrode; (A, B, C) before and (D, E, F) after cyclic test.

Table 1. Simulated impedance values of fresh electrode from the Randles equivalent circuit as shown in inset of Fig. 7(A)

Index	Fixed	Symbol	Start	End	Error
1	0	R_s	0.5876	0.5877	6.143
2	0	R_{ct}	1.957	1.972	5.645
3	0	CPE_1	0.0000242	0.0000242	10.64
4	0	CPE_2	0.10006	0.01006	20.99
5	0	W	0.01171	0.01171	14.05
6	0	R_f	317.7	317.7	33.43

Table 2. Simulated impedance values of used electrode after 2000 cycle test from the equivalent circuit as shown in inset of Fig. 7(B)

Index	Fixed	Symbol	Start	End	Error
1	0	R_s	0.9045	0.9044	3.828
2	0	R_{ct}	2.061	2.061	2.529
3	0	CPE_1	0.000000789	0.000000789	6.235
4	0	CPE_2	0.00288	0.00288	6.725
5	0	W	0.007806	0.007808	13.07
6	0	R_f	8.699	872.7	168.3