Supporting information

Fabrication of cobalt gallium oxide with zinc iron oxide on nickel foam for high performance asymmetric supercapacitor

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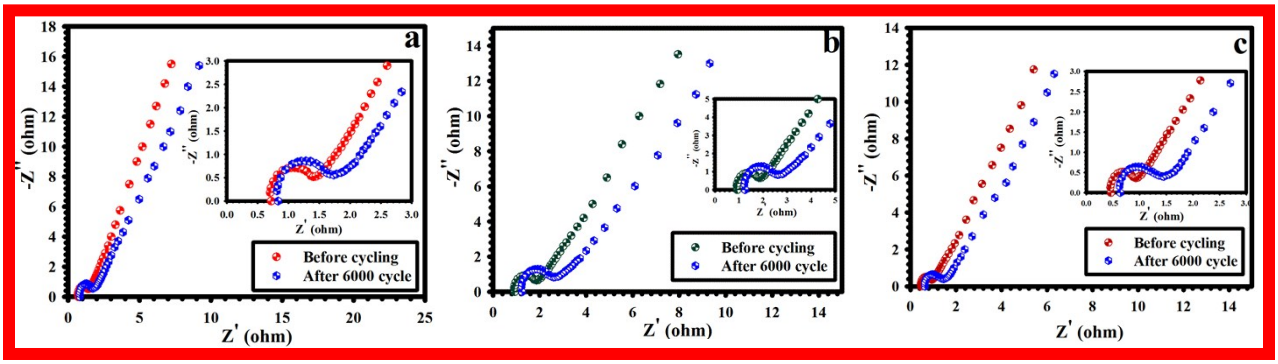

Fig. S1. (a) Nyquist plot of the $CoGa_2O_4$ (CGO)/nickel foam electrode in 2 M KOH solution before and after 6000 cycling. (b) Nyquist plot of the $ZnFe_2O_4$ (ZFO)/nickel foam electrode in 2 M KOH solution before and after 6000 cycling. (c) Nyquist plot of the our device before and after 6000 cycling

Table S1. Comparison of the electrochemical performance of $CoGa_2O_4$ (CGO)//$ZnFe_2O_4$ (ZFO) in three and two electrode systems with other previously reported electrodes.

Composition	Capacitance 3 and 2 electrodes ($F g^{-1}$)	Cycles, retention 2 and 3 electrode	ED ($W h kg^{-1}$) 2 Electrode	Synthesis method	Reference
$NiCo_2O_4$/GO	709.7 (3 E) 96.2 (2 E)	3000, 84.7 % (3 E) 5000, 94.3 (2 E)	34.4	Hydrothermal	1
rHGO/$NiCo_2O_4$@CF	1178 (3 E) 192.5 (2 E)	5000, 87.4 % (3 E) 5000, 82.7% (2 E)	74.88	Hydrothermal	2
$NiCo_2O_4$	1229 (3 E) 68.7 (2 E)	3000, 86.3% (3 E) 2000, 87.8% (2 E)	21.5	Hydrothermal	3
$CuCo_2O_4$	1330 (3 E)	5000, 93.6% (3 E)	29.55	Electrodeposition	4
Nickel-cobalt sulfide	1036 440 (3 E) 119.1 (2 E)	2000, 87% (3 E) 10000, 87.6% (2 E)	42.3	Hydrothermal	5
PCs/$NiCo_2S_4$	605.2 (3 E) 190 (2 E)	5000, 91.3% (3 E) 5000, 92.7% (2 E)	23.3	Hydrothermal	6
$CoGa_2O_4$ (Positive electrode) $ZnFe_2O_4$ (Negative electrode)	1379.16 (3 E $CoGa_2O_4$) 300.5 (3 E $ZnFe_2O_4$) 232.2 (2 E) 352.30 (2 E)	6000, 96.6 (3 E $CoGa_2O_4$) 6000, 91.1(3E $ZnFe_2O_4$) 6000, 96.4 (2 E)	82.56	Electrodeposition	This work

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