

An Investigation on the Electrochemical Performance of Mn_3O_4 -Based Aqueous Symmetric Supercapacitor Devices

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Supplementary File

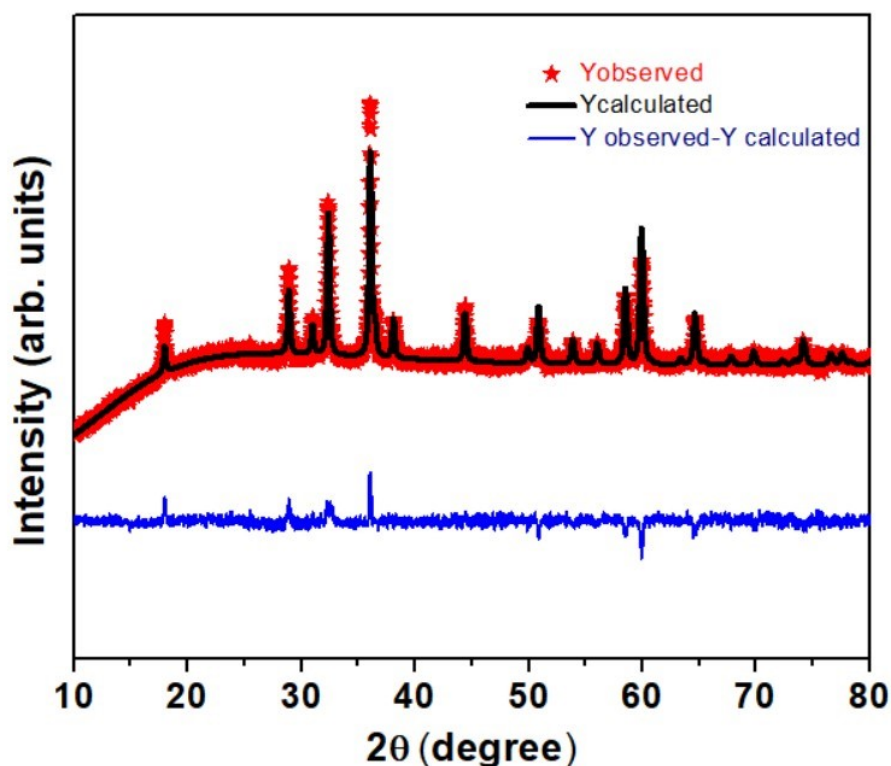


Fig. S1. Rietveld refined powder XRD pattern of Mn_3O_4 nanoparticles.

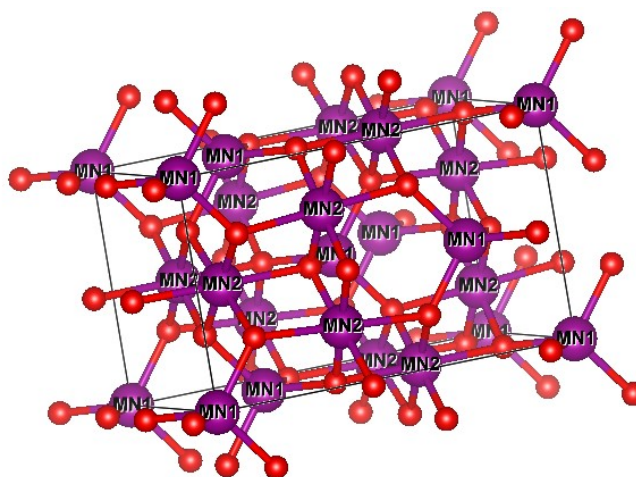


Fig. S2. Crystal structure of Mn_3O_4 nanoparticles obtained from Rietveld refinement.

Table. S1. Refinement parameters of Mn_3O_4 nanoparticles.

R-factor Type	Abbreviation	Value
Profile R-factor	R_p	1.91 %
Expected R-factor	R_{exp}	2.42 %
Weighted Profile R-factor	R_{wp}	2.61 %
χ^2	χ^2	1.16
Goodness Of Fit	GOF	1.08

Table S2. Atomic positions and bond angles observed from the Rietveld refinement.

x	y	z	Occ.	B	Site	Sym.	MN1	MN2	O3
MN1	0.00000	0.00000	1.000	0.000	4a	-4m2	0.0000	3.4334	2.0400
MN2	0.00000	0.25000	1.000	0.000	8d	.2/m.	3.4334	0.0000	1.9309
O3	0.00000	0.22220	1.000	0.000	16h	.m.	2.0400	1.9309	0.0000

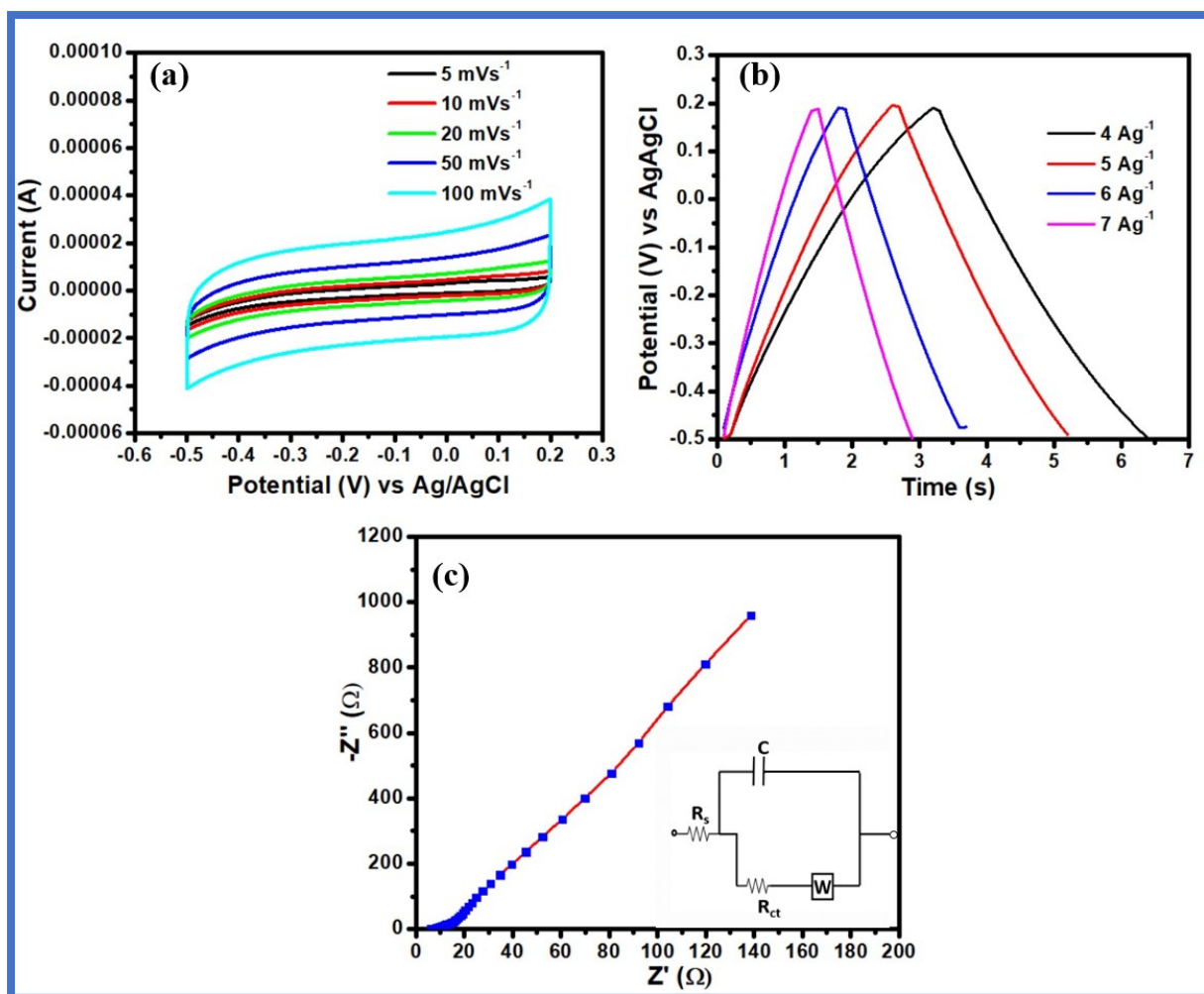


Fig. S3. a). CV, b). GCD and c). Nyquist plot of bare Ni foam in 0.5 M Na₂SO₄ electrolyte solution.