Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Flexible free-standing Ni-Mn oxides antennas decorated CNTs/nanofibers membrane for high- volumetric capacitance supercapacitors

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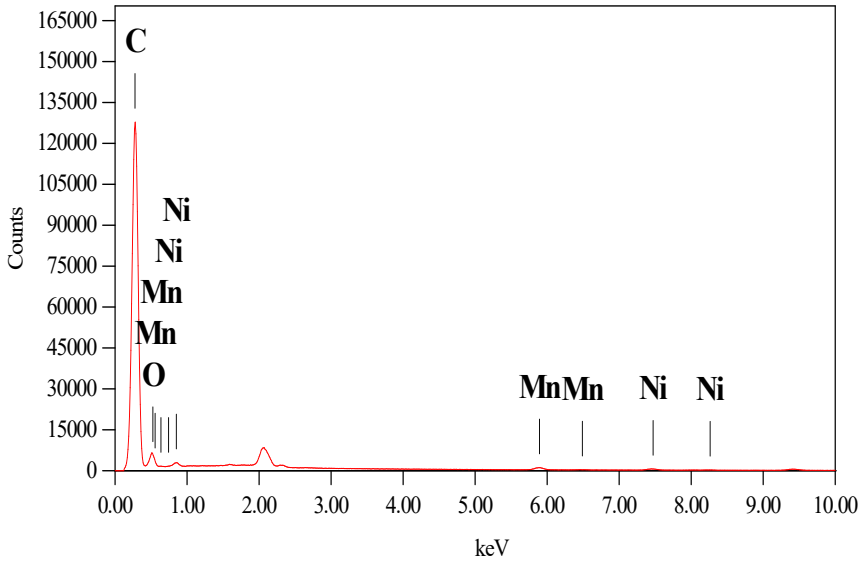

Element	*(KeV)*	*Mass %*	*Sigma*	*Atom %*
C K	0.277	73.51	0.18	88.41
O K	0.525	9.13	0.17	8.24
Mn K	5.894	6.15	0.12	1.62
*Ni K**	7.471	5.26	0.15	1.29
*Pt K**	2.048	5.95	0.12	0.44
Total		100		100

Figure S1: SEM/EDX analysis of Ni- Mn oxides /CNT@CNF

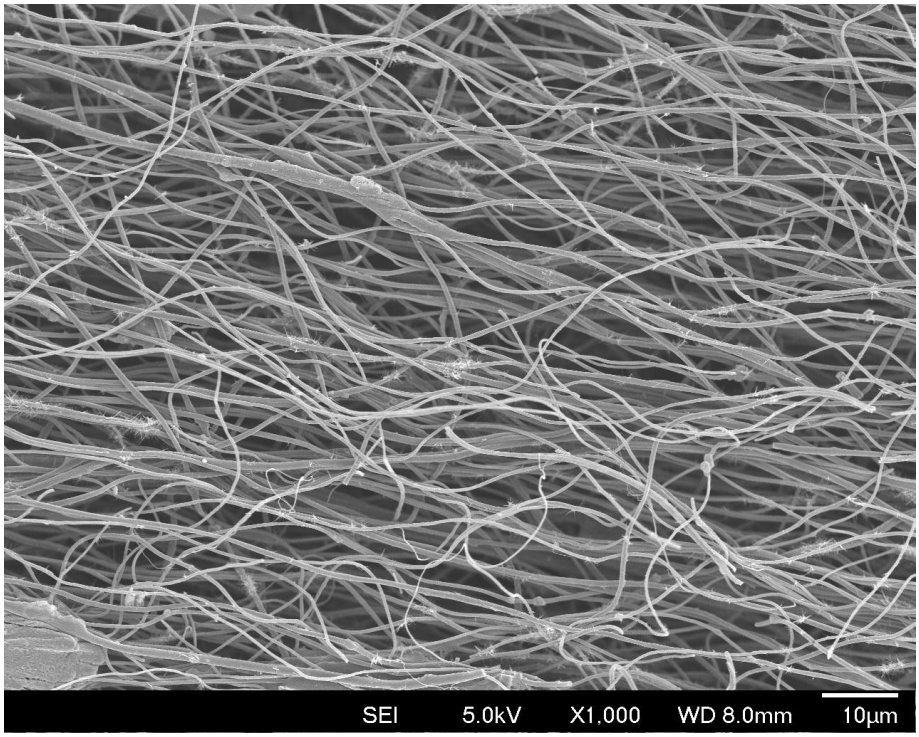

Figure S2: SEM images of the as prepared free-standing Ni-Mn oxides /CNT@CNF electrode.

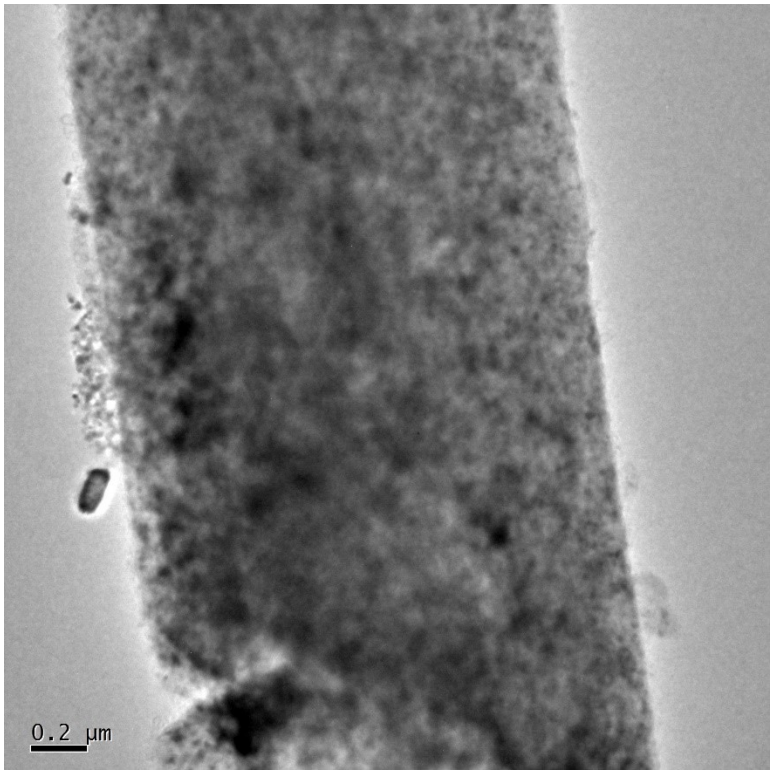

Figure S3: TEM image of the nanofibers showing the tubular structure is composed of interconnected nanoparticles.

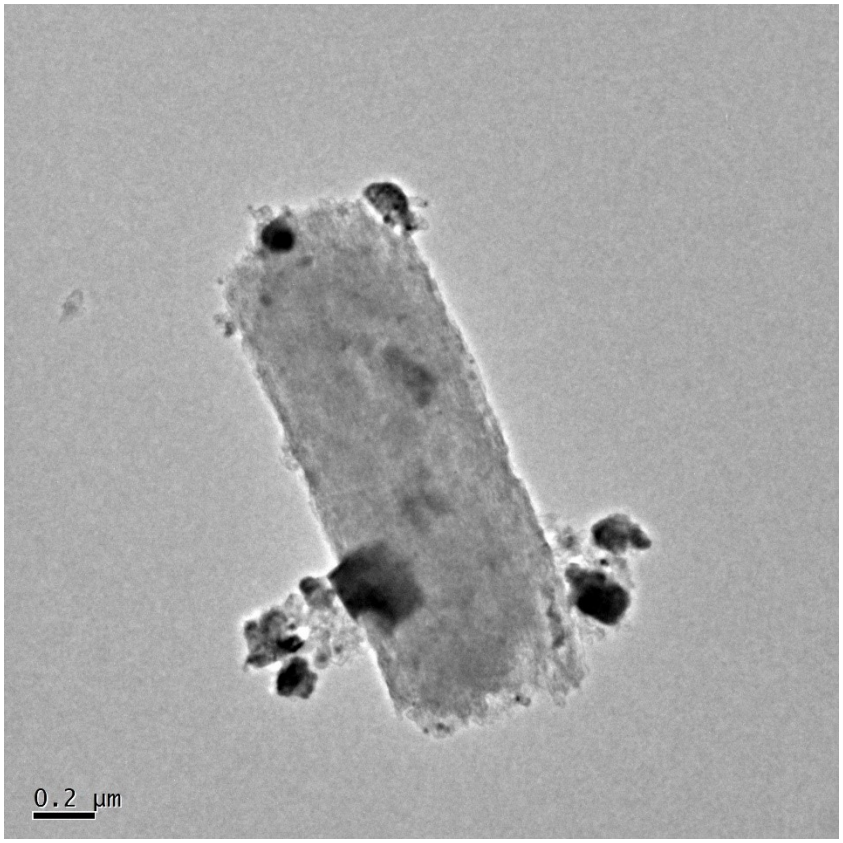

Figure S4: TEM image of a part of the nanofiber showing the growth of Ni-Mn oxides antennas out of the fibres surface.

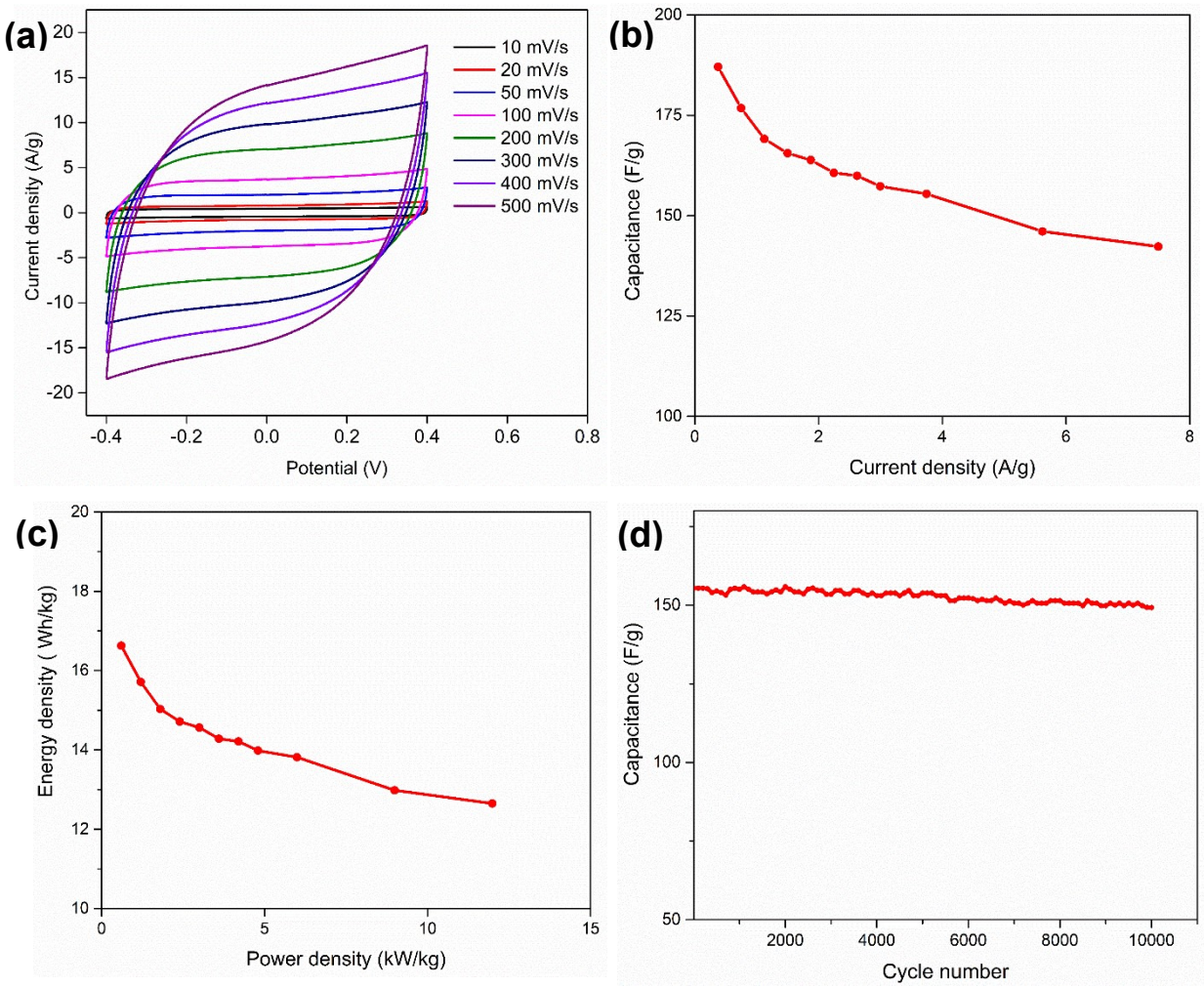

Figure S5: Gravimetric electrochemical performance Ni-Mn oxides/CNT@CNF super capacitor device (a) cyclic voltammograms at various scan rates of from 10 to 500 mV s^{-1} b) specific gravimetric capacitance at different current densities c) energy and power densities and d) cycling test at a current density of 3.74 A g^{-1}.