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Electronic supplementary information

Improving Kinetics and Surface Stability of Sodium Manganese Oxide Cathode Materials for Sodium Rechargeable Batteries with Al2O3/MWCNT Hybrid Networks

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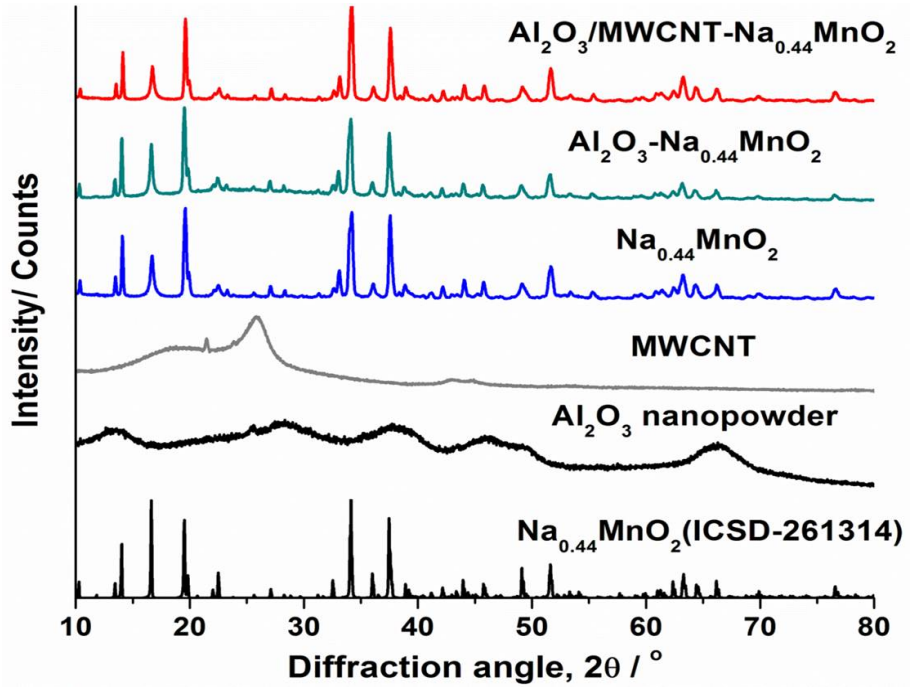

Fig. S1 X-ray diffraction (XRD) patterns acquired from pristine and surface-modified $Na_{0.44}MnO_2$.

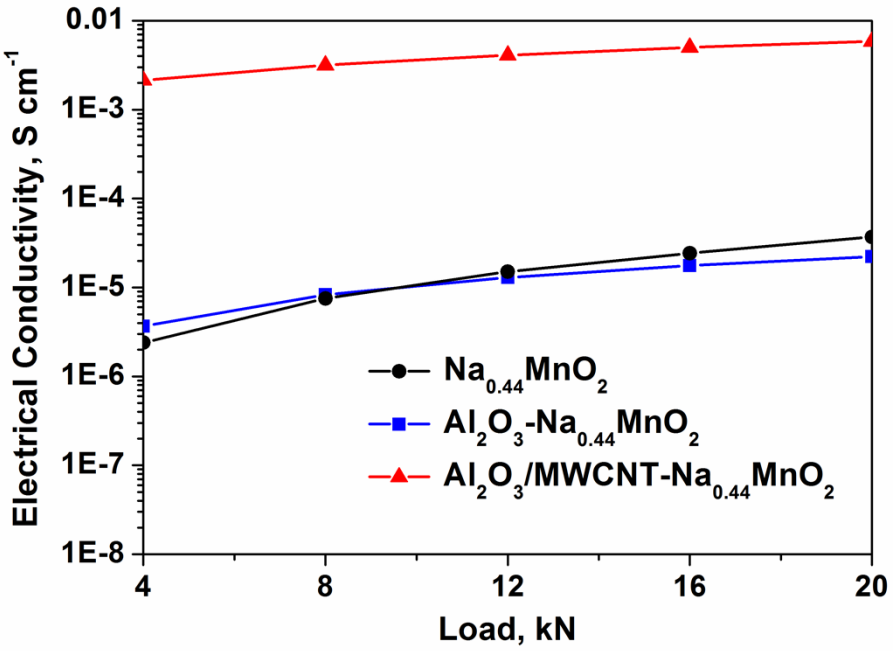

Fig. S2 Electrical conductivities of pristine and surface-modified $Na_{0.44}MnO_2$ measured by a four-point probe powder resistivity measurement system.

Compounds	ICT-AES [%wt]			Na/Mn [%at/at]	Al/Mn [%at/at]	Carbon cont. [%wt]
	Na	Mn	Al			
$Na_{0.44}MnO_2$	10.7	56.2	-	0.455	-	0.23
Al_2O_3-$Na_{0.44}MnO_2$	11.0	56.5	0.19	0.465	0.007	0.23
Al_2O_3/MWCNT-$Na_{0.44}MnO_2$	10.7	55.8	0.21	0.458	0.008	1.04

Table S1 Results of the inductively coupled plasma atomic emission spectroscopy (ICP-AES) and elemental analyses (EA) of pristine and surface-modified $Na_{0.44}MnO_2$.