Electronic Supplementary Information (ESI)

Ultrasmall MnO@N-rich carbon nanosheets for high-power asymmetric supercapacitors

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Table S1 Elemental quantitative analyses were determined by comprehensive techniques of EA, ICP, XPS and EDS.

	C (wt%)	N (wt%)	Mn (wt%)	O (wt%)
EA/ICP	32.73	13.25	39.79	-
XPS	33.26	18.06	36.44	12.24
EDS	34.80	14.66	39.24	11.30

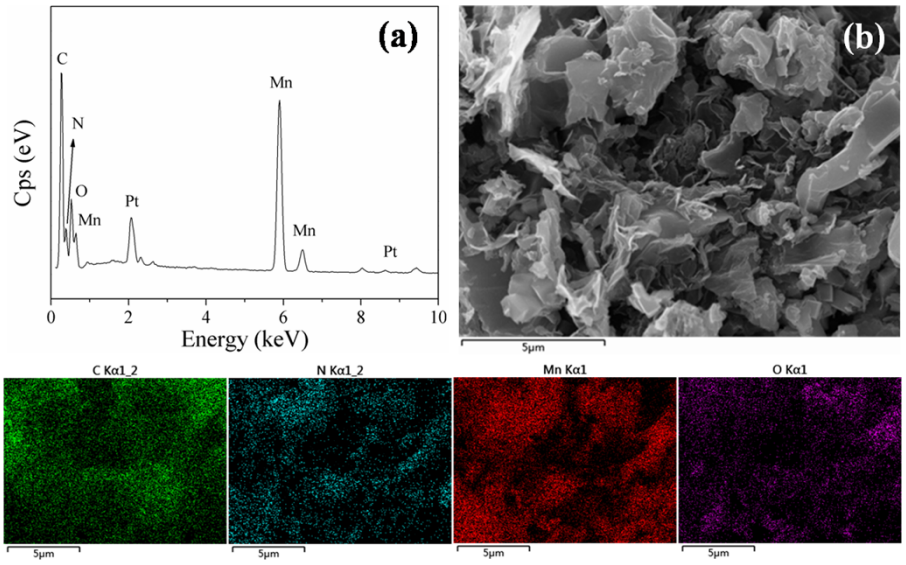

Figure S1. (a) EDS of MnO@NCs. The bottom images show element mapping from the SEM image (b).

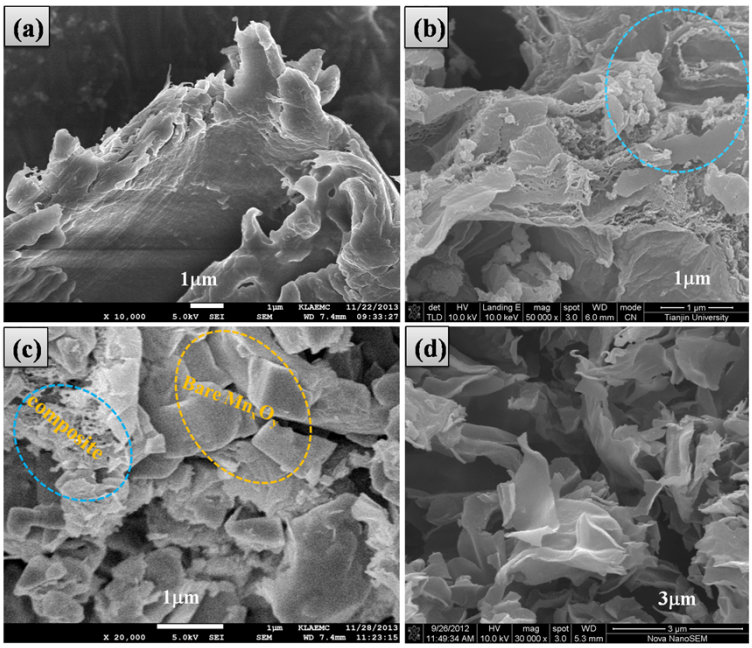

Figure S2. SEM images of the precursor (a) and products calcined at 700°C (b), 800°C (c), or 750°C (d).

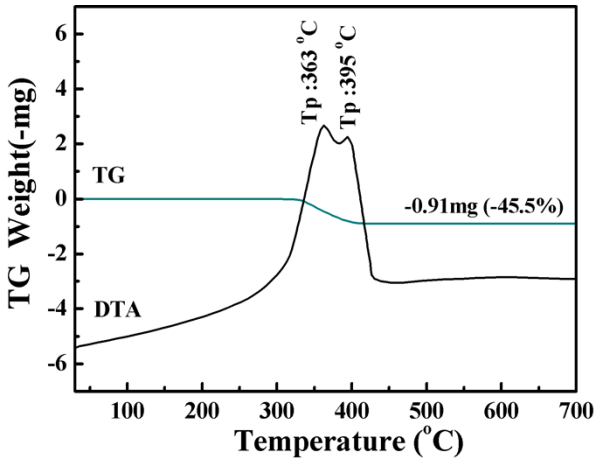

Figure S3. TG-DTA curves of MnO@NCs sintered in air.

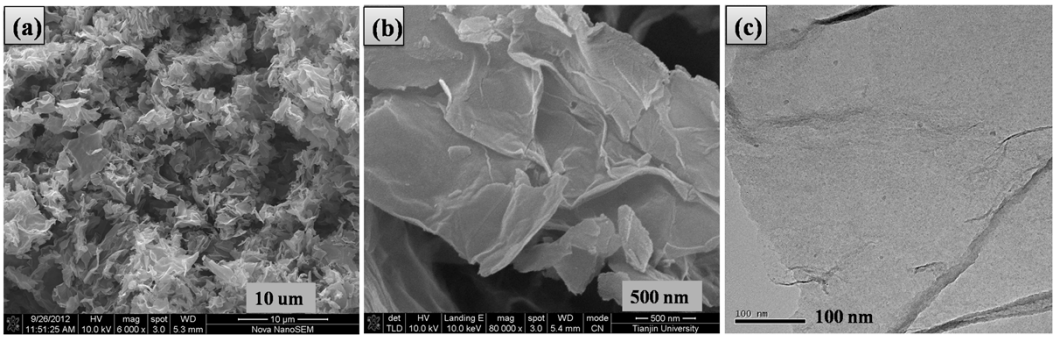

Figure S4. Specifically exterior textures for the SEM images (a,b) and TEM image (c) of MnO@NCs.

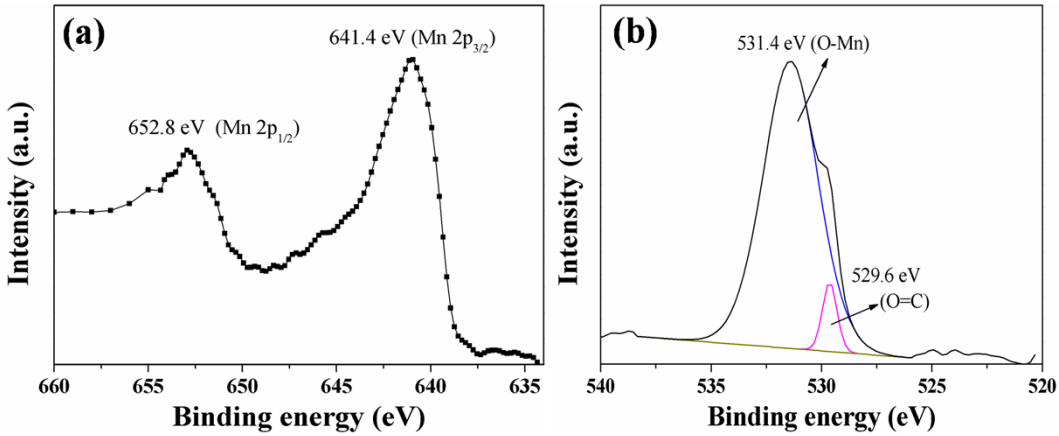

Figure S5. High-resolution XPS of Mn2p (a) and O1s peaks (b).

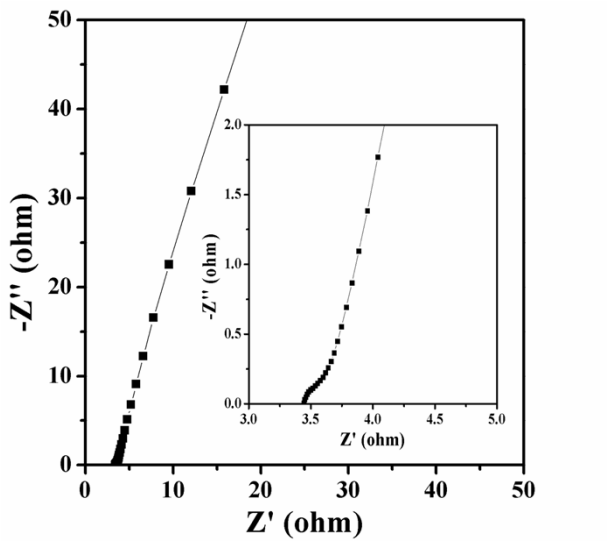

Figure S6. Nyquist plot of the MnO@NCs electrode, and inset shows enlarged profile at high frequency.

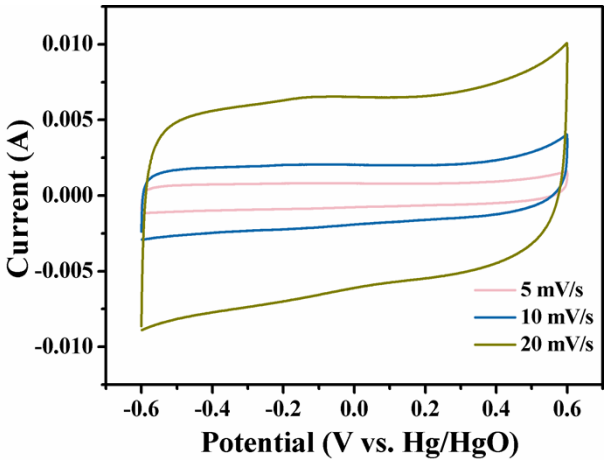

Figure S7. CV curves of N-rich carbon samples tested in a three-electrode system at different scan rates.

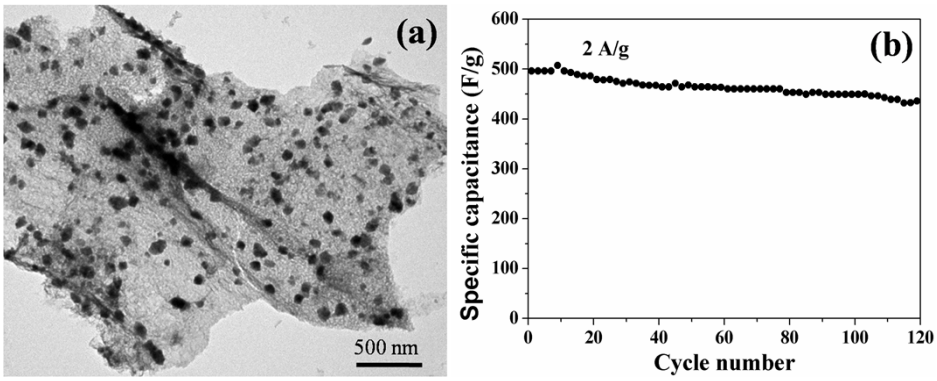

Figure S8. TEM image (a) and cyclic performance of MnO@NCs-100nm (b).

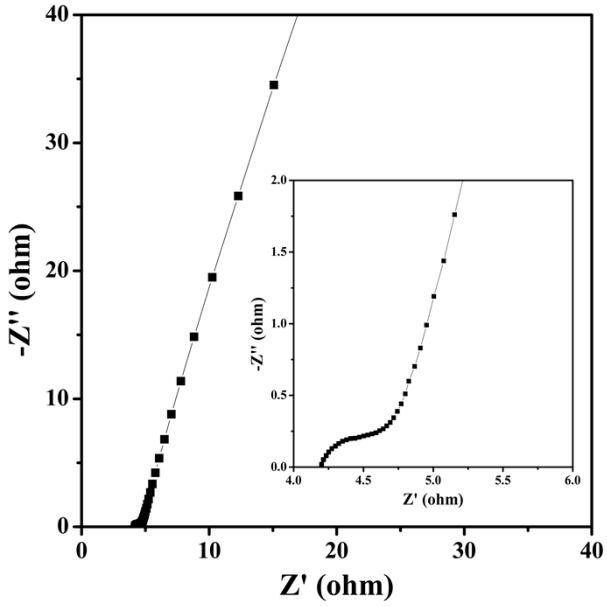

Figure S9. Nyquist plot of the asymmetric supercapacitor, and inset shows enlarged profile at high frequency