

Supporting Information

**In-Situ Synthesis of Heterostructured Carbon-Coated
Co/MnO Nanowire Arrays for High-Performance Anodes in
Asymmetric Supercapacitors**

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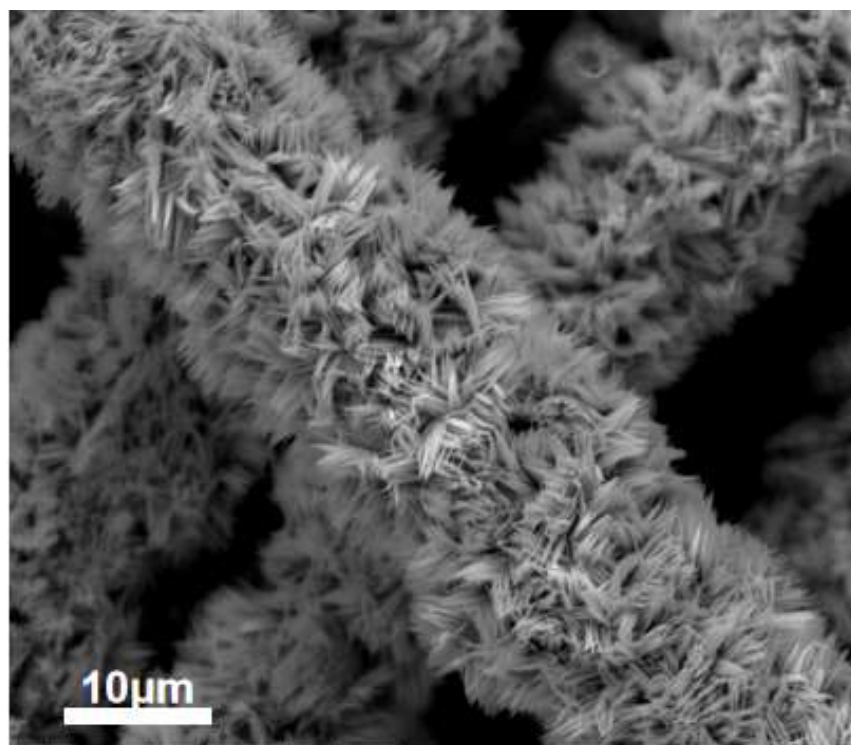


Figure S1. SEM image of MnCo₂O_{4.5}-Ar(600).

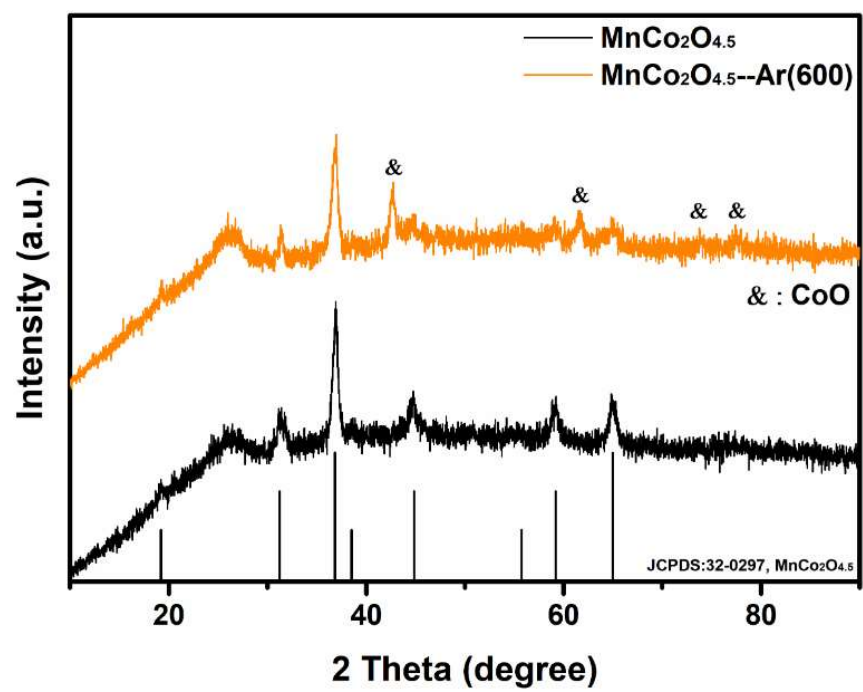


Figure S2. XRD patterns of the pristine $\text{MnCo}_2\text{O}_{4.5}$ and $\text{MnCo}_2\text{O}_{4.5}\text{-Ar(600)}$.

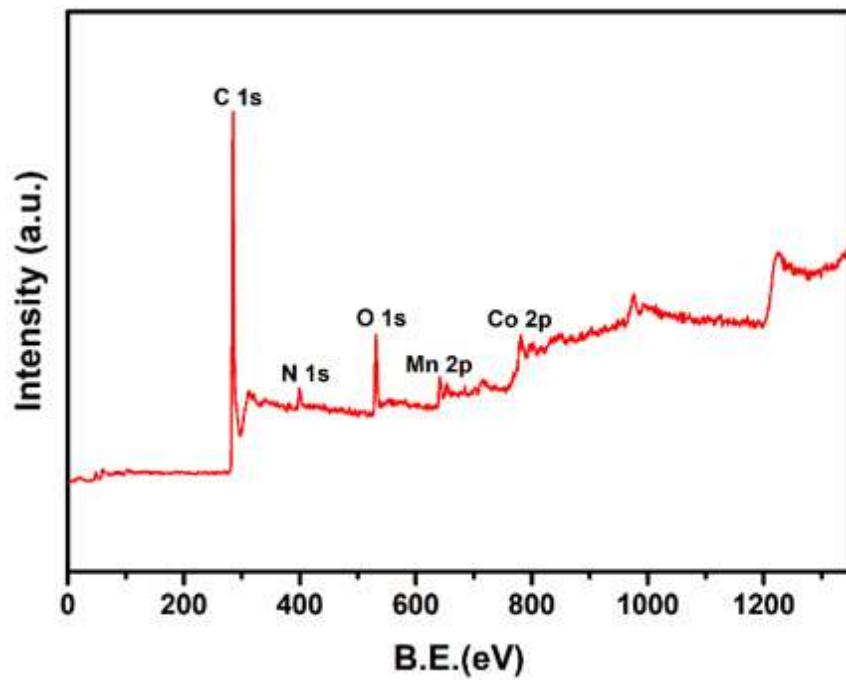


Figure S3. Survey scanning XPS spectra of the S-600.

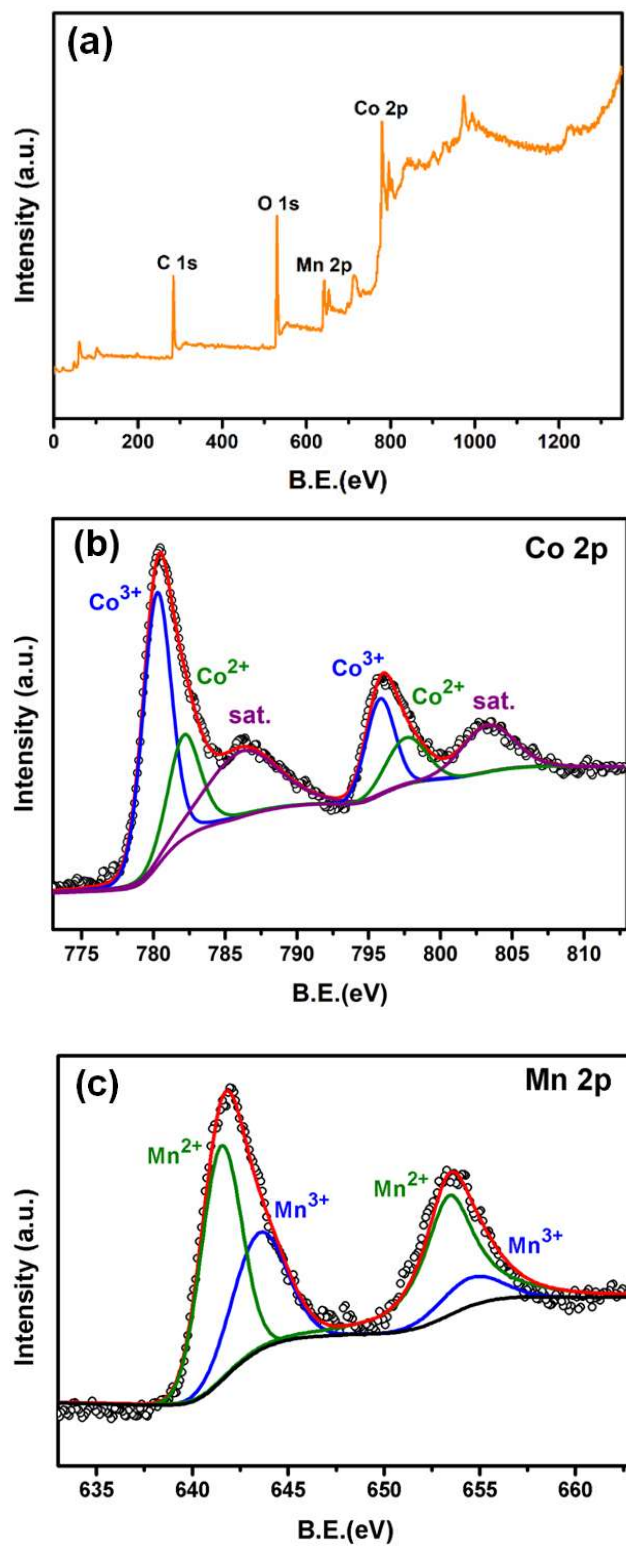


Figure S4. (a) Survey scanning XPS spectra of the $\text{MnCo}_2\text{O}_{4.5}\text{-Ar(600)}$, (b) and (c)

Corresponding high resolution Co 2p and Mn 2p.

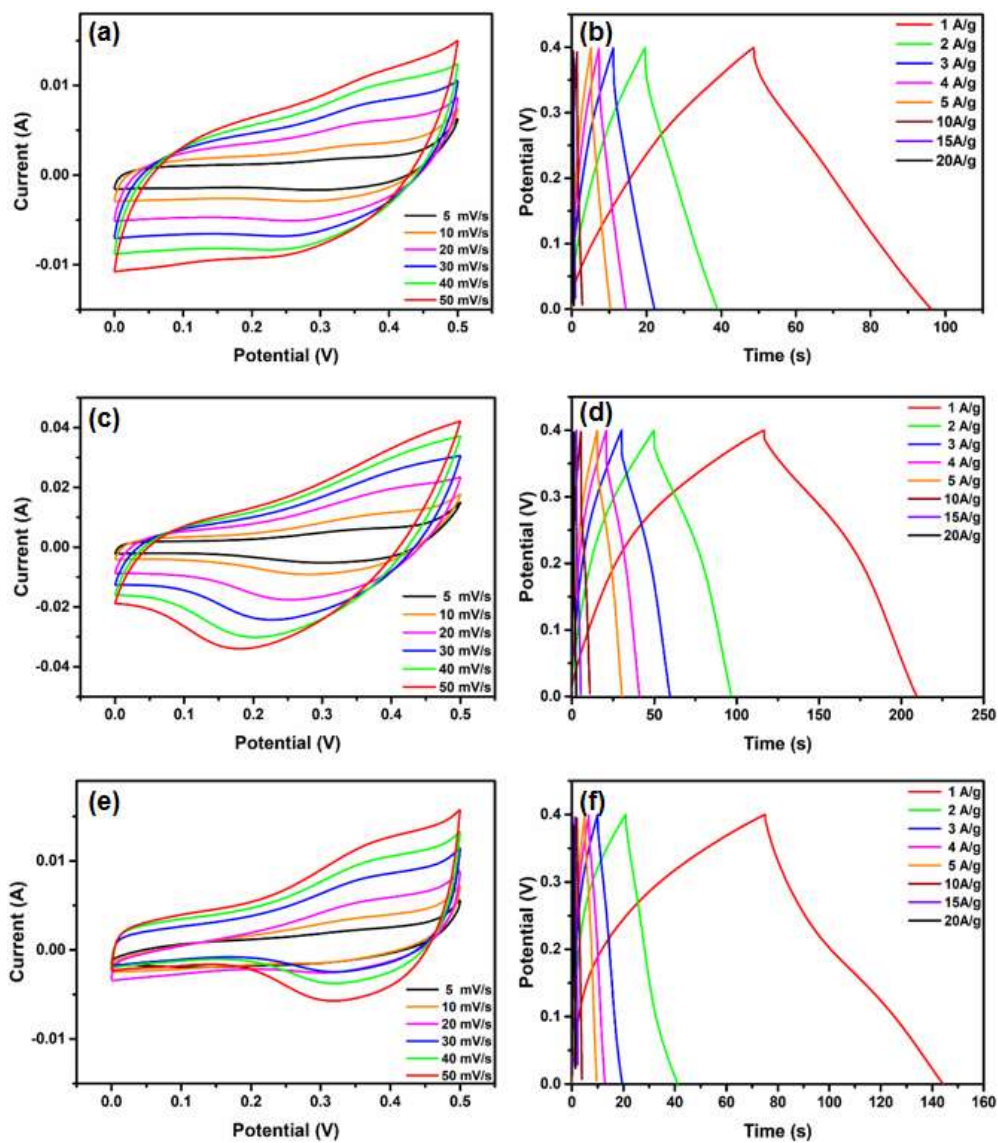


Figure S5. CV and GCD curves of (a-b) pristine MnCo₂O_{4.5} NWs, (c-d) S-500 and (e-f)

S-700.

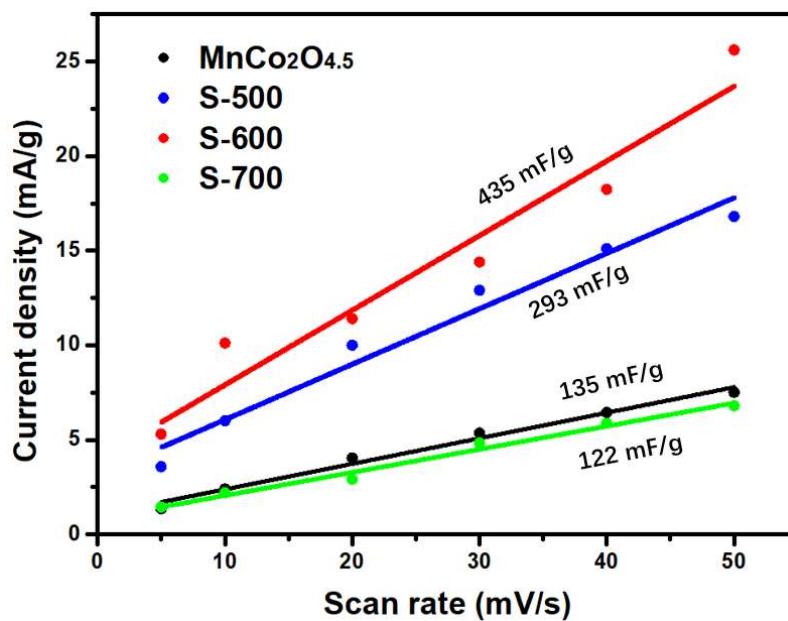


Figure S6. Current densities obtained from CV curves as a function of scanning rates, the corresponding slope being the C_{dl} values.

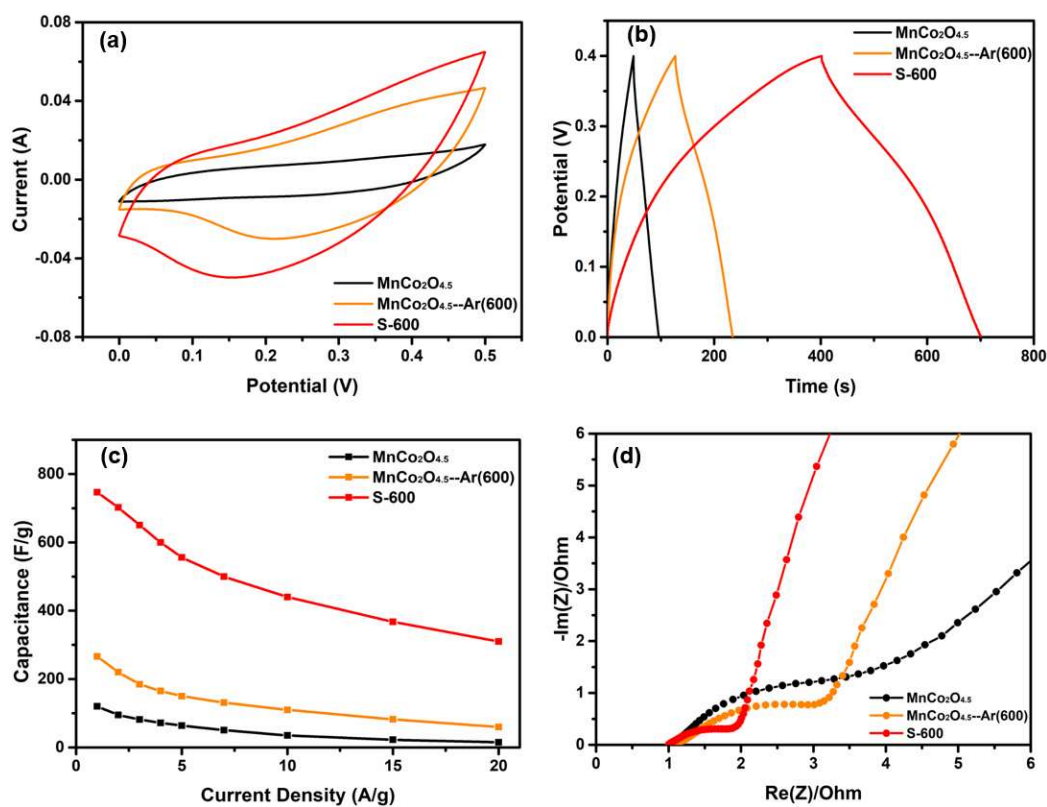


Figure S7. Electrochemical performance:(a) CV curves of $\text{MnCo}_2\text{O}_{4.5}$, $\text{MnCo}_2\text{O}_{4.5}\text{-Ar(600)}$ and S-600 at a scanning rate of 50 mV s^{-1} ; (b) GCD curves at 1 A g^{-1} ; (c) Specific capacitances;(d) Nyquist plots

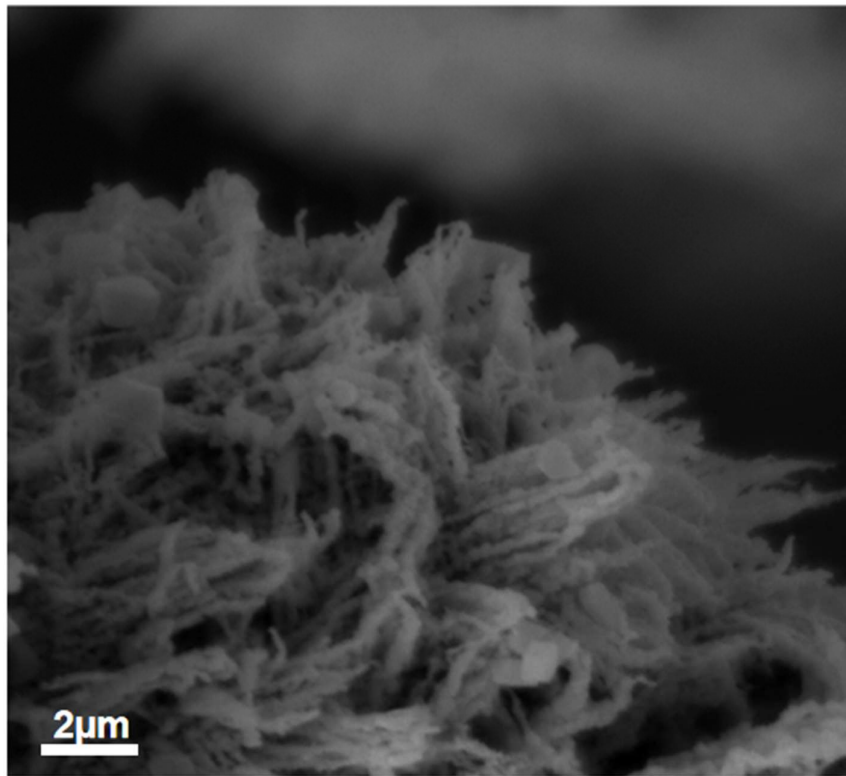


Figure S8. SEM image of S-600 NWs after 5000 cycles.

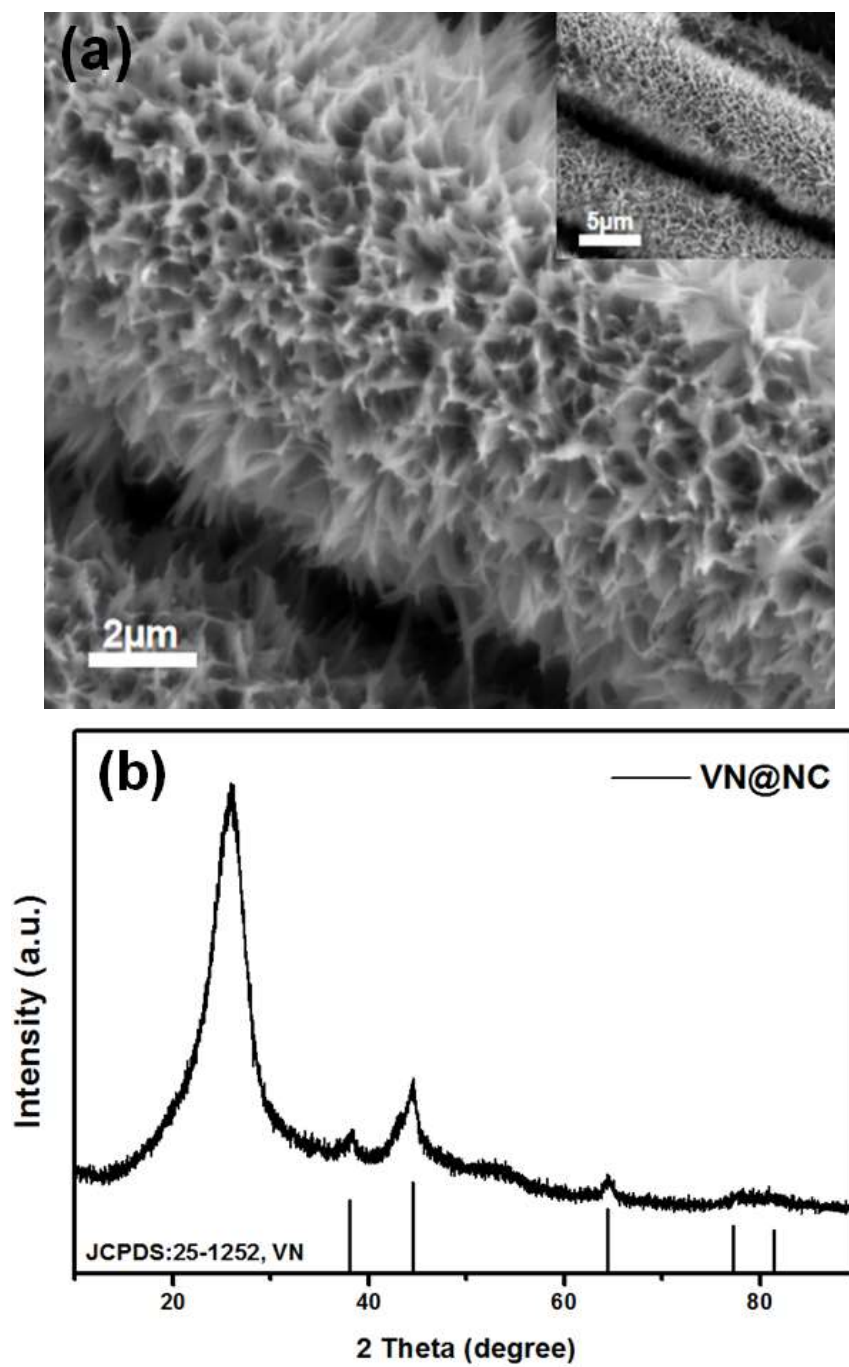


Figure S9. (a) SEM image of VN@NC; (b) Corresponding XRD pattern.

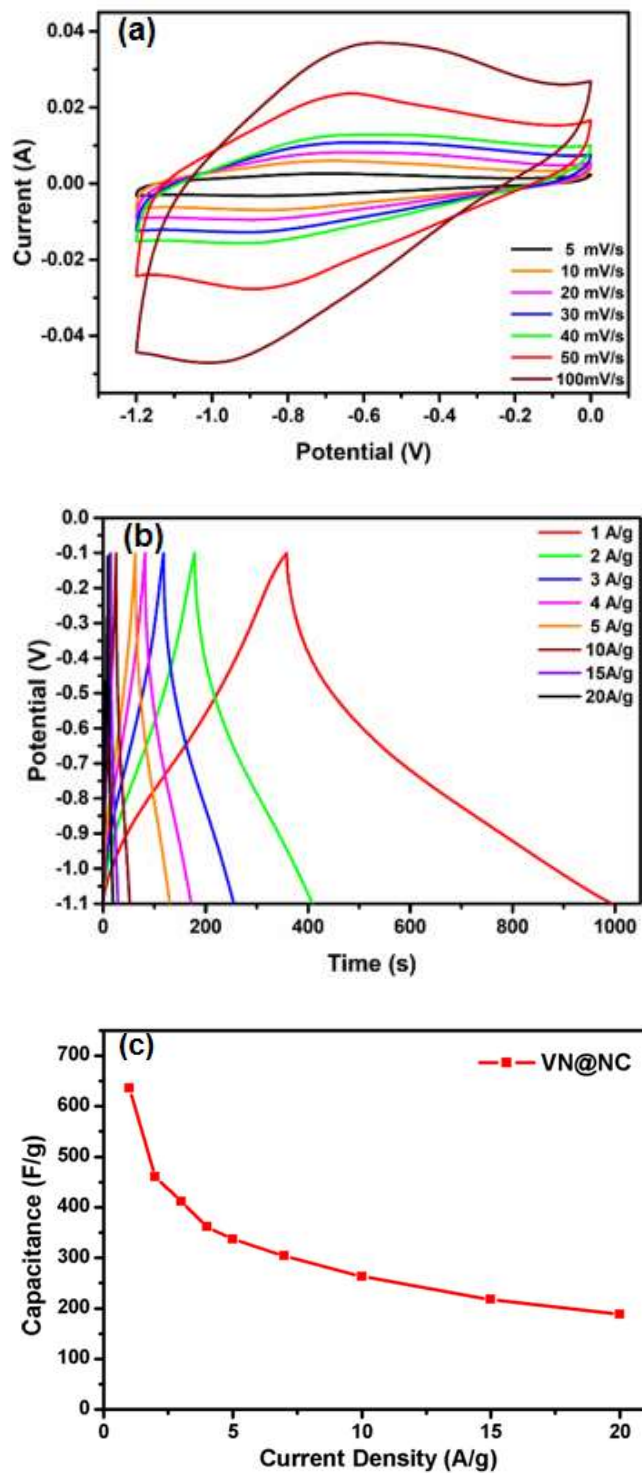


Figure S10. Electrochemical performance of VN@NC NWs electrode, (a) CV curves, (b) GCD curves, (c) Corresponding specific capacitances as function of discharging density.