

Supplementary Information

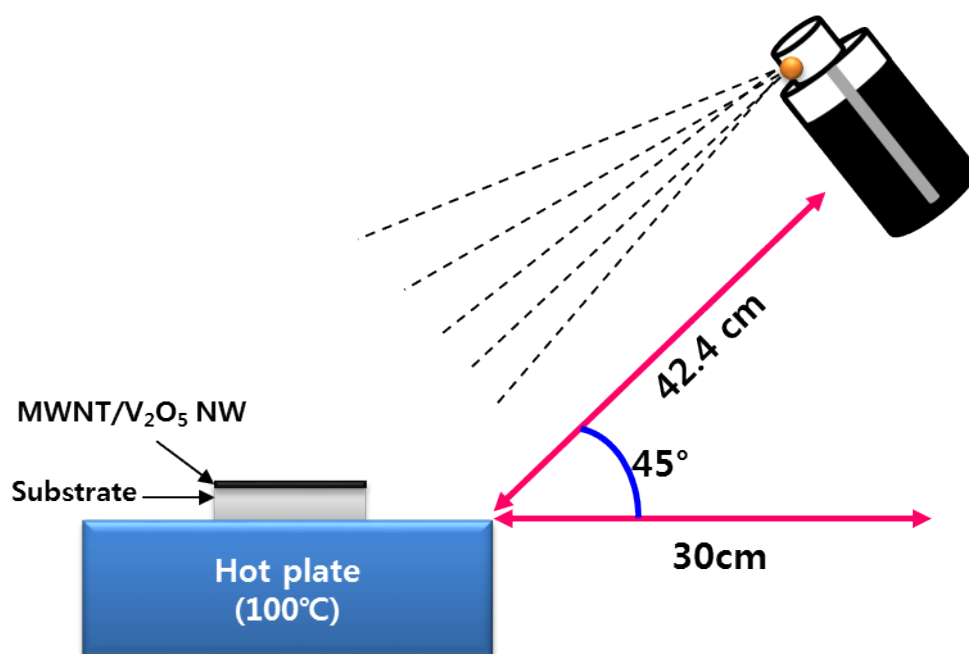


Figure S1. Schematics of spray-coating conditions.

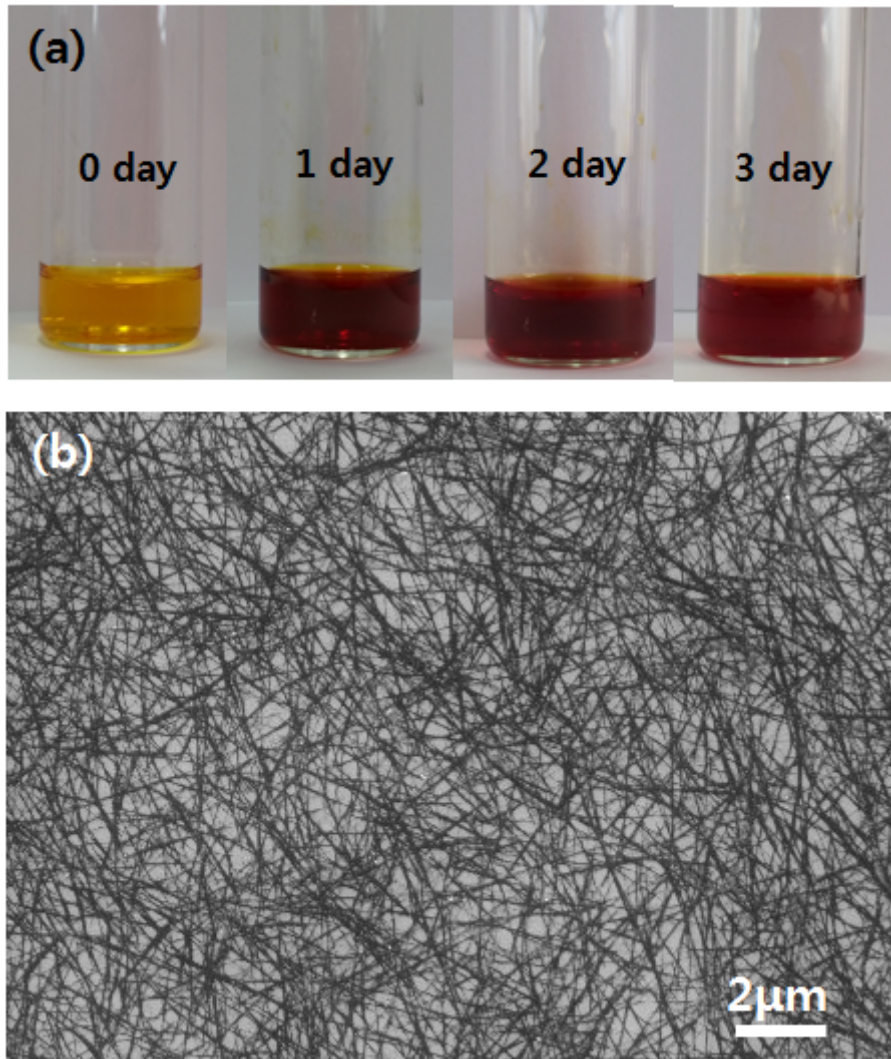


Figure S2. (a) Color change of V_2O_5 NW solution with growth time. (b) SEM image of V_2O_5 NWs grown for 3 days.

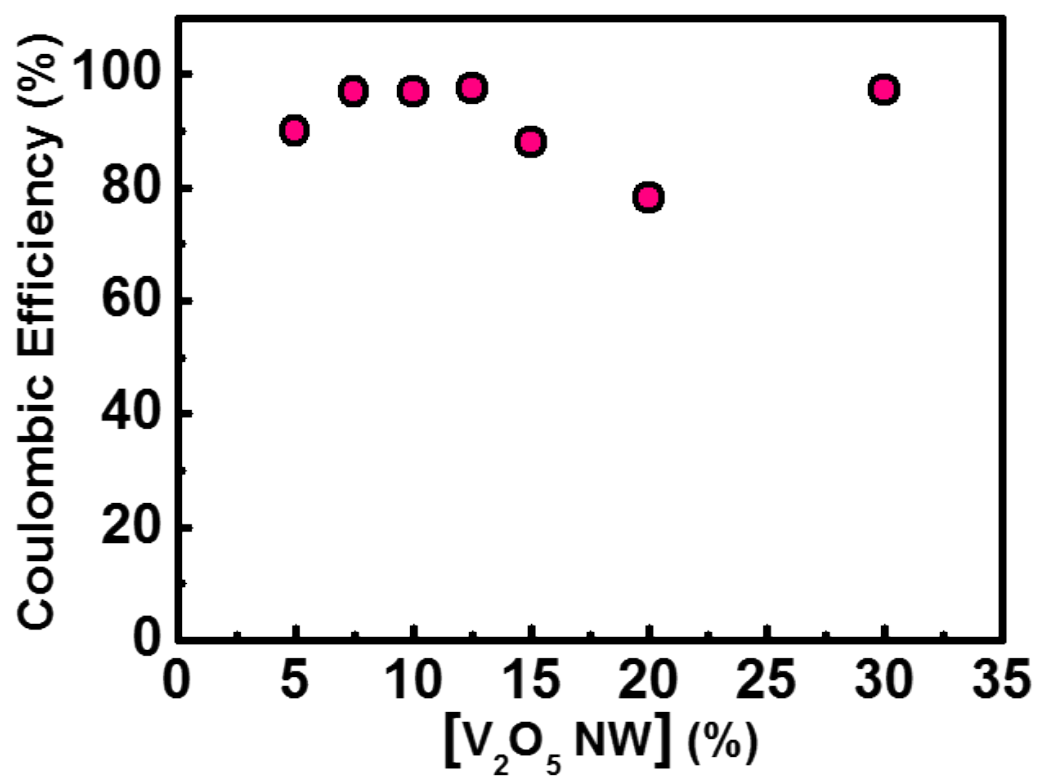


Figure S3. Coulombic efficiency of charge / discharge curves at scan rate of 1.1 A/cm³.

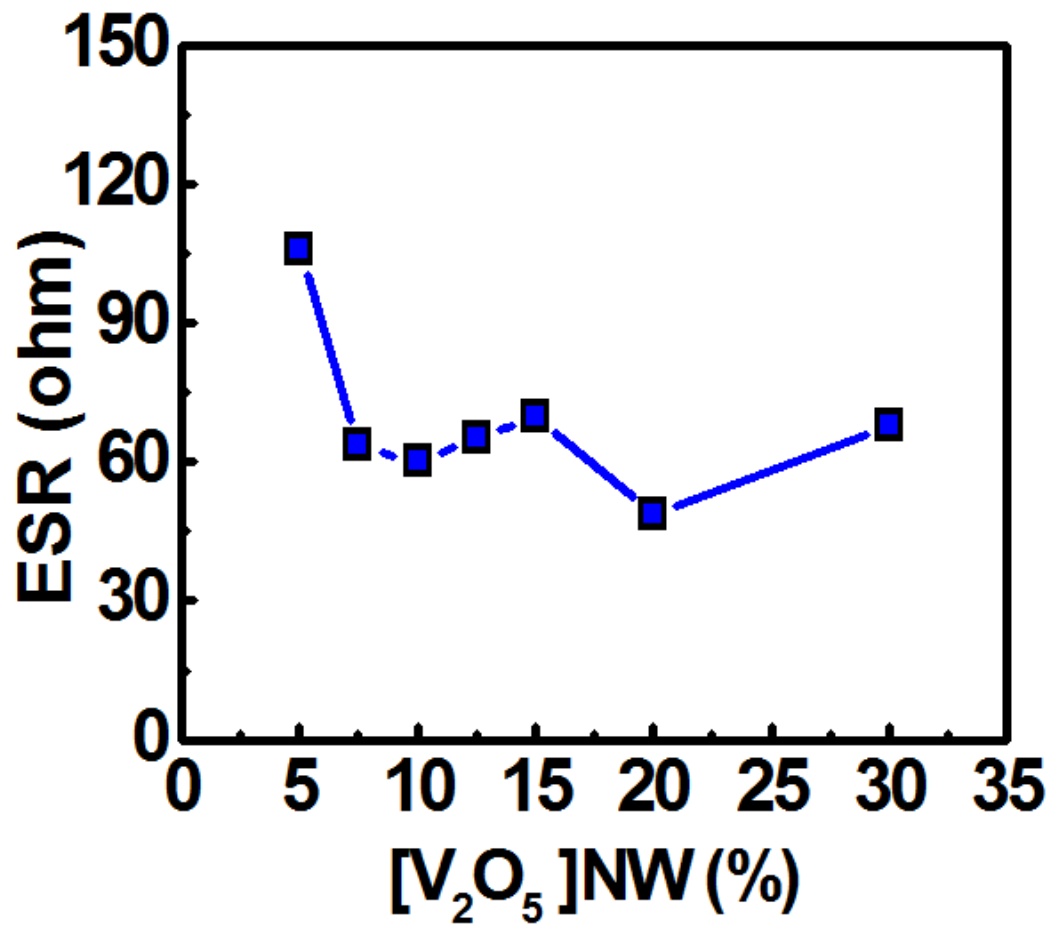


Figure S4. Equivalent series resistance (ESR) of the fabricated MSC as a function of vol% of V₂O₅ NWs in MWNT/V₂O₅ NW composite film.

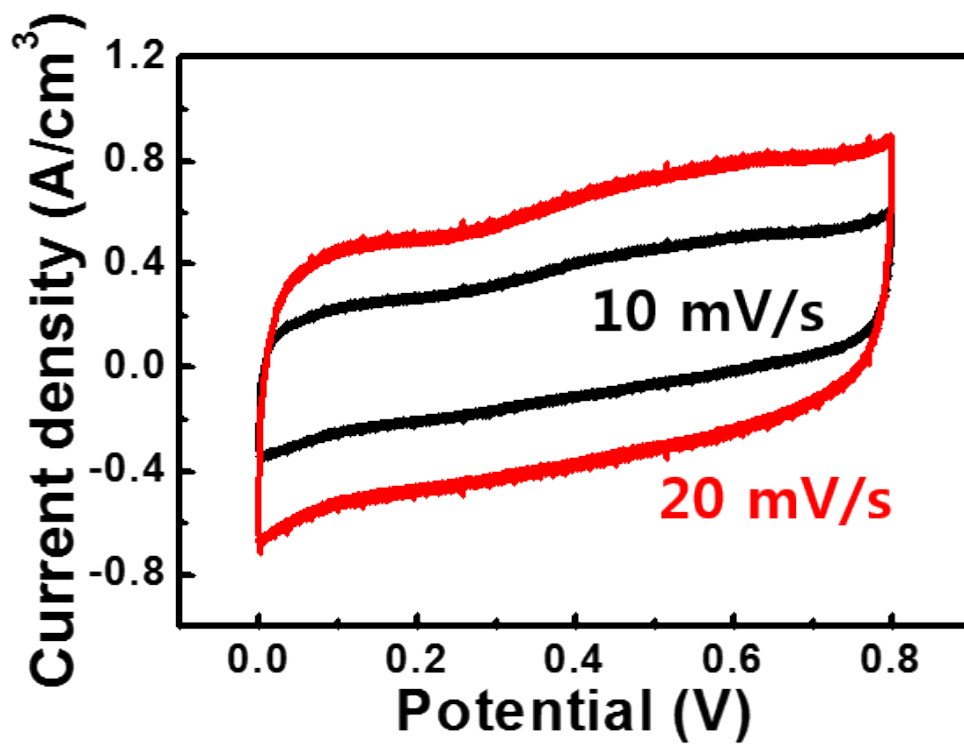


Figure S5. Cyclic voltammetry curves taken at scan rates from 10 and 20 mV/s.

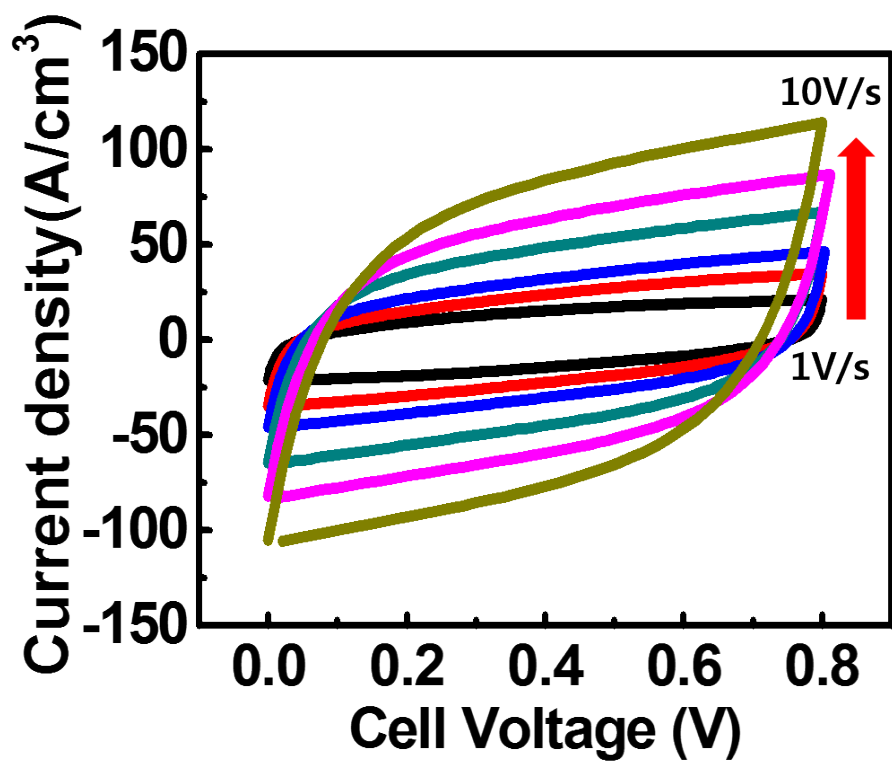


Figure S6. Cyclic voltammetry curves taken at scan rates from 1 to 10 V/s.

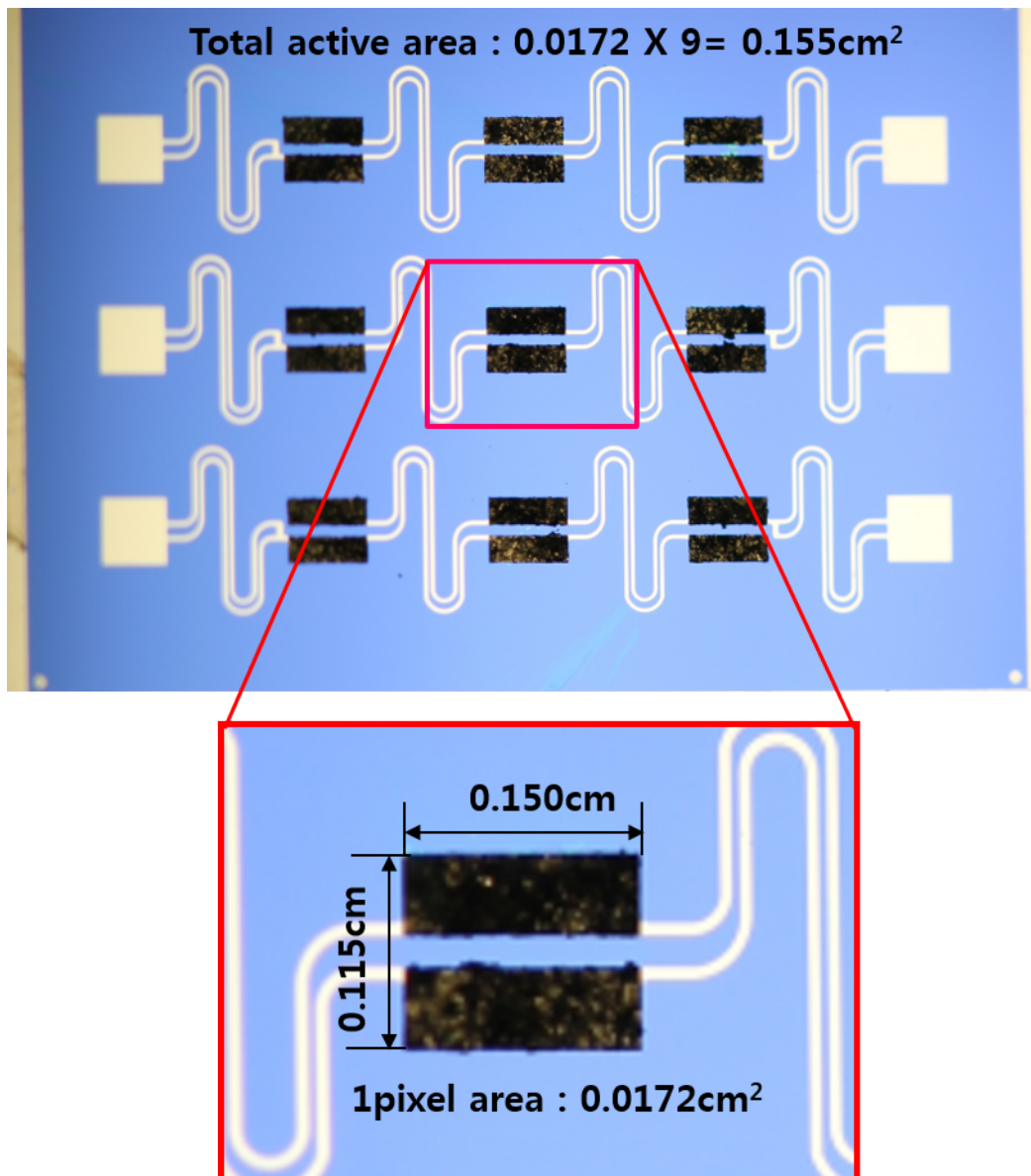


Figure S7. Estimation of the total active area of the MSC array. Width including the channel, and the length of each MSC are 0.115 cm and 0.150 cm, respectively. Thus, the active area of one MSC is 0.0172 cm^2 and the total active area of 9 MSCs is 0.155 cm^2 .

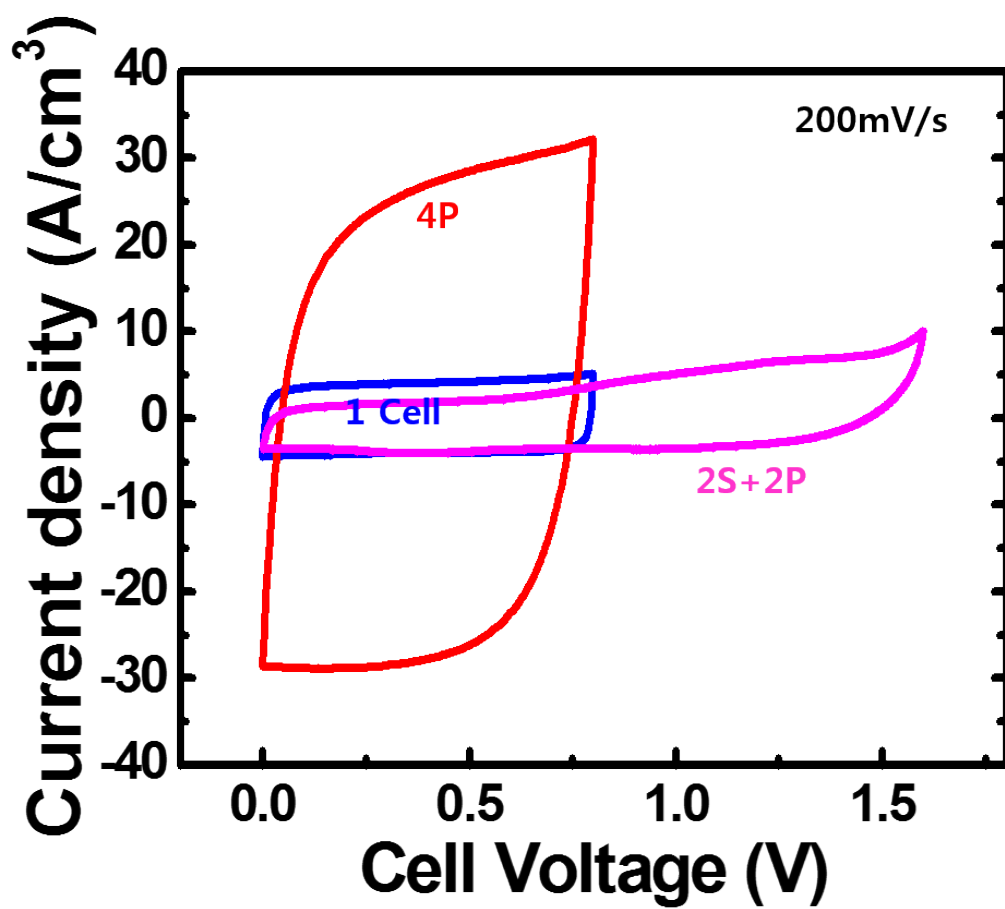


Figure S8. Electrochemical properties of various types of MSCs: Single MSC (blue), four parallel MSCs (4P, red), and two series and two parallel MSCs (2S+2P, pink).

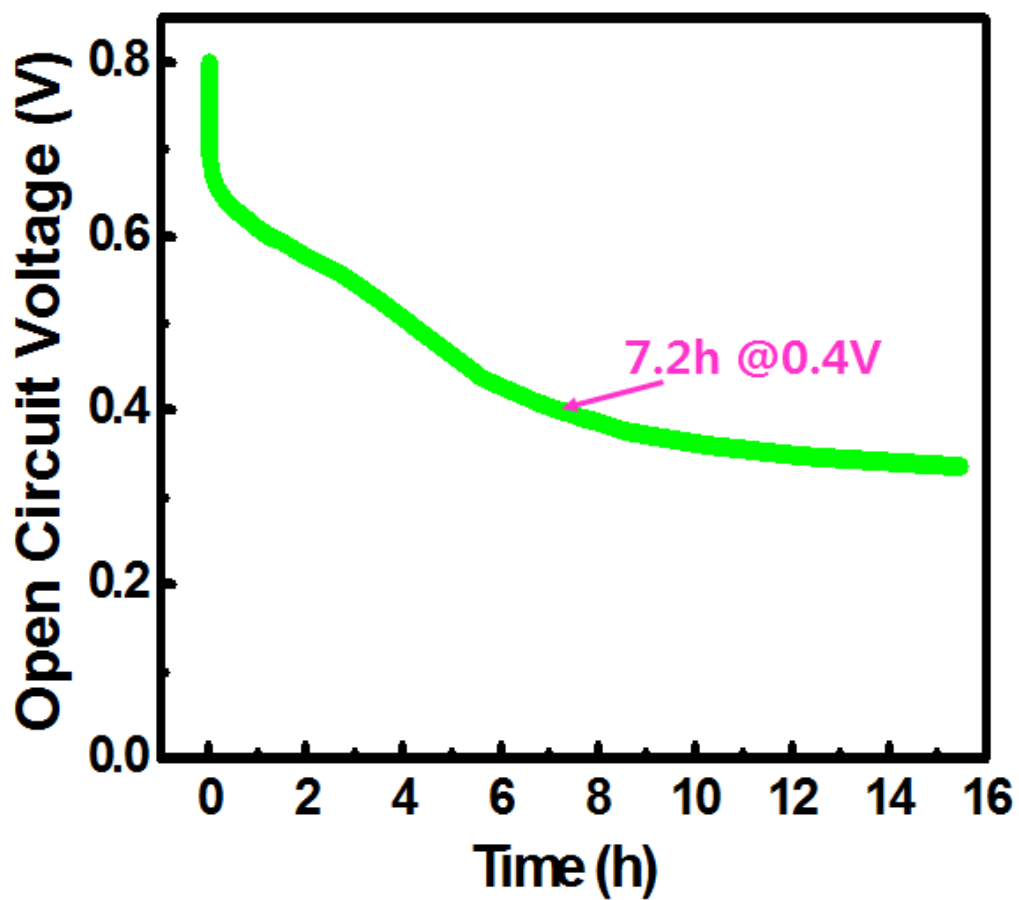


Figure S9. Self-discharge profile of MWNT/V₂O₅ NW MSC in PVA/LiCl solid electrolyte obtained immediately after charging to 0.8 V. The charging rate is 0.35 A/cm³.

v