

Supporting information

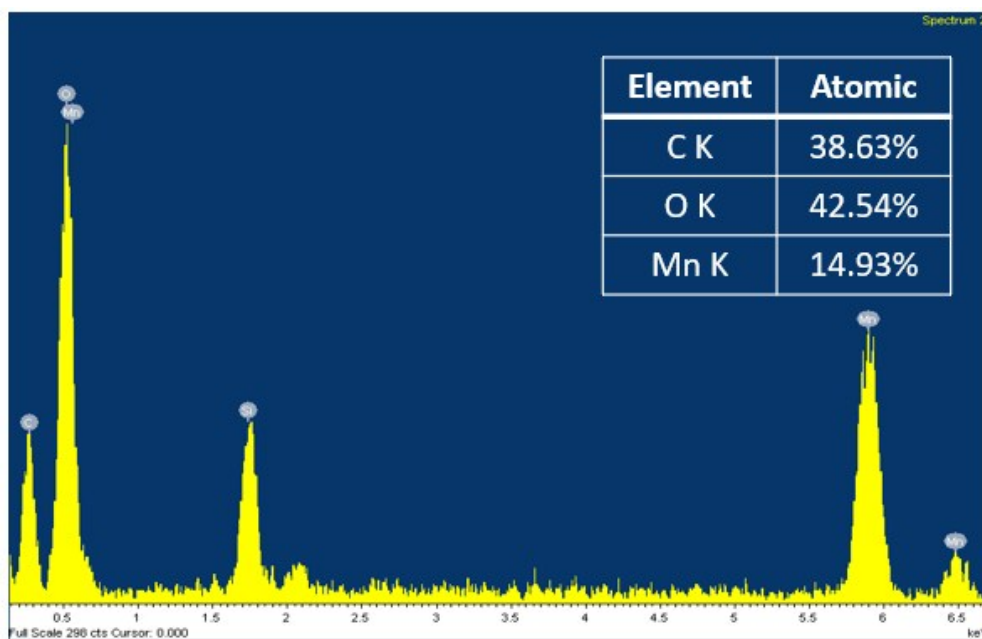


Figure S1. EDS analysis for knitted CNT@MnO₂ fiber supercapacitor, EDS analysis show that the atomic ratio of C, O, Mn are 38.63%, 42.54%, and 14.93% respectively.

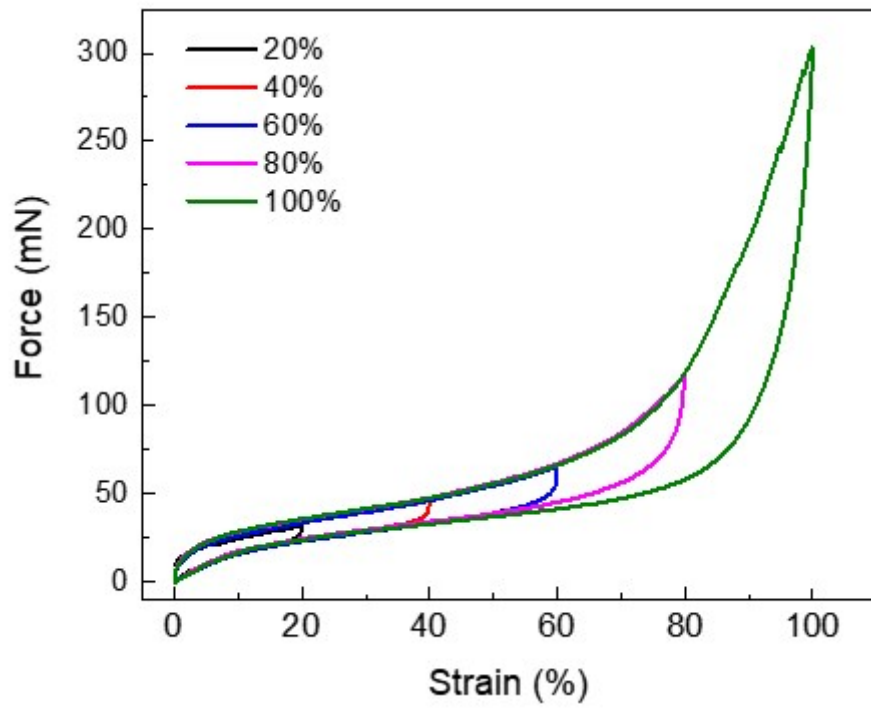


Figure S2. Stress-strain curves of one-bodyknitted $\text{MnO}_2@\text{CNT}$ fiber supercapacitor measured for stretched states ($\epsilon=20, 40, 60, 80, 100\%$).

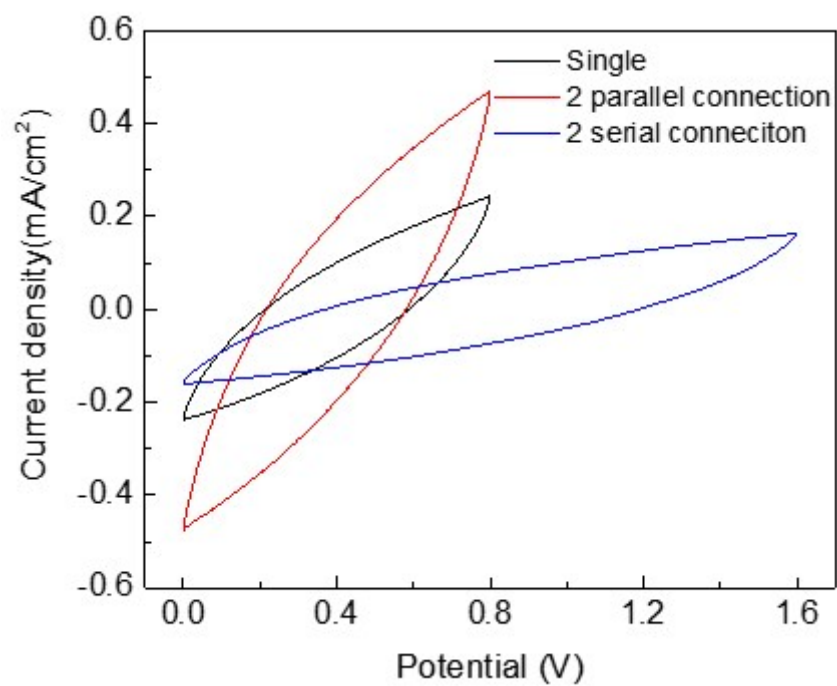


Figure S3. CV curves were measured in parallel and series connection compared to single connection.

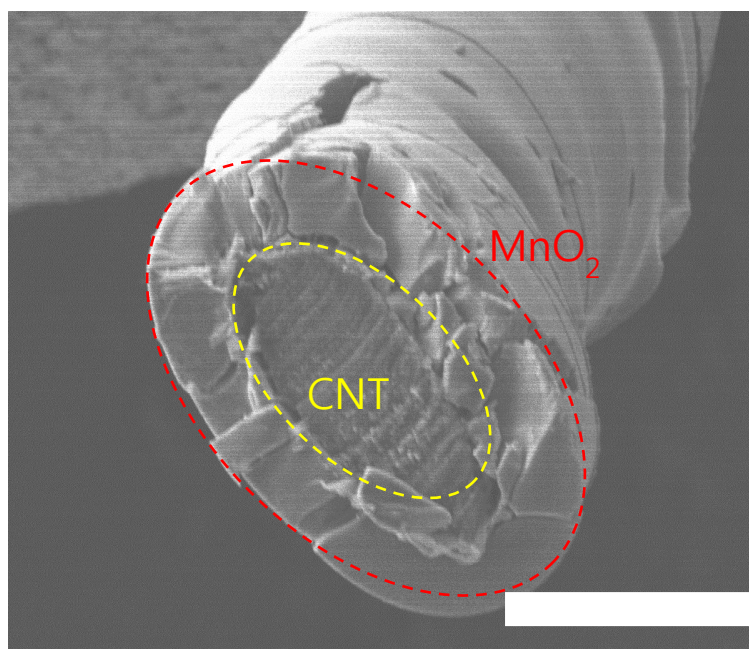


Figure S4. The cross-section SEM image of MnO₂@CNT single fiber

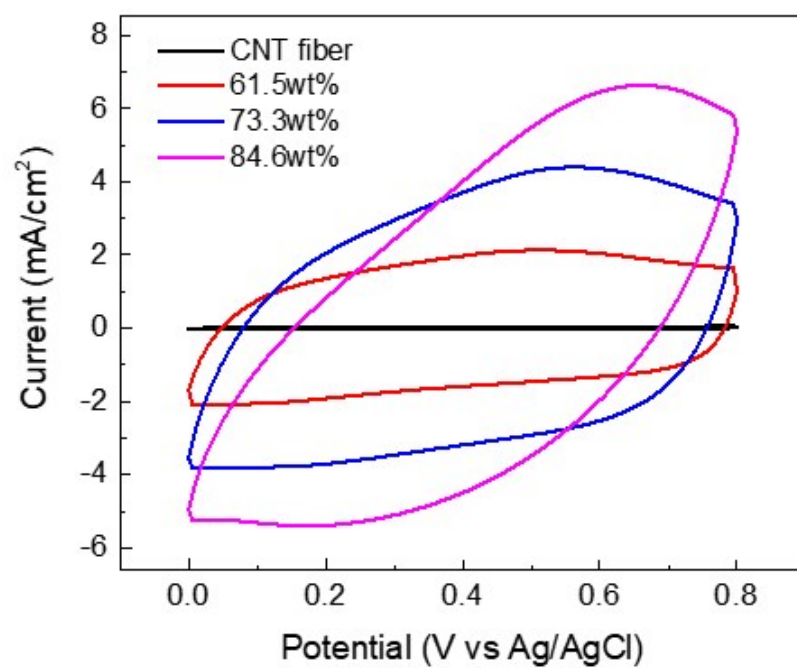


Figure S5. CV curves measured from 10mV/s of MnO₂@CNT knitted fiber for gravimetric specific capacitance (bare CNT fiber, 61.5wt%, 73.3wt%, 84.6wt%, respectively)