

Fig. S1 HRTEM image of the SANGs. It presents both the structure of graphite and pyrolytic carbon. The d-spacing value is 0.342 nm, which should be corresponding to the crystal lattice of graphite (002). The crystalline degree of the pyrolytic carbon is low.

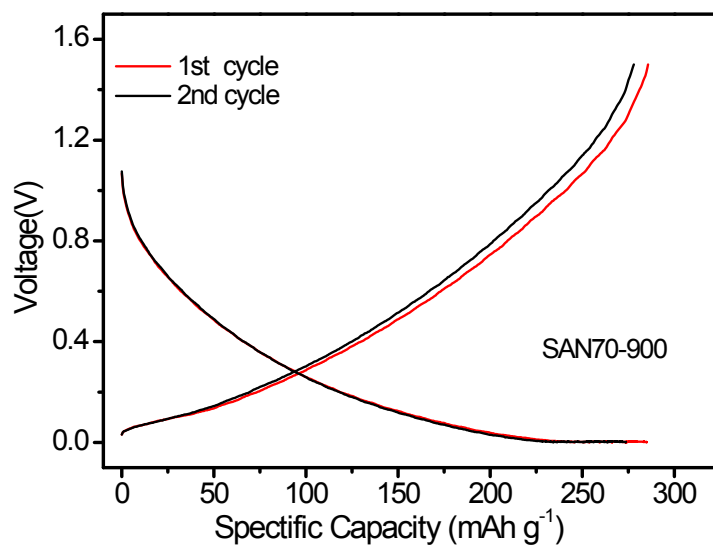


Fig. S2 Voltage profiles of SAN70-900 electrode at the first two cycles (current density: 100 mA g^{-1}).

Table S1 Electrical resistivity of NG and SANGs films established by four point probe measurements.

Sample	Electrical resistivity ($\text{m}\Omega\cdot\text{cm}$)
NG:PVDF (89/11 wt%)	6.2
SANGs:PVDF (89/11 wt%)	28.4