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Figure S1. Schematic diagram of the laboratory-scale spray-drying system used to prepare the composite precursor powders of SBR.

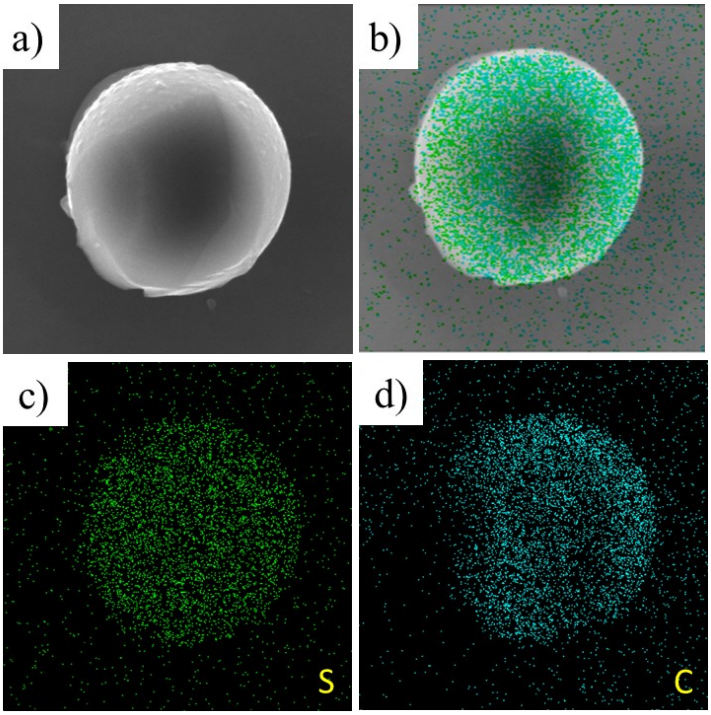

Figure S2. a) SEM image, and b-d) EDS mapping of the SPC-180

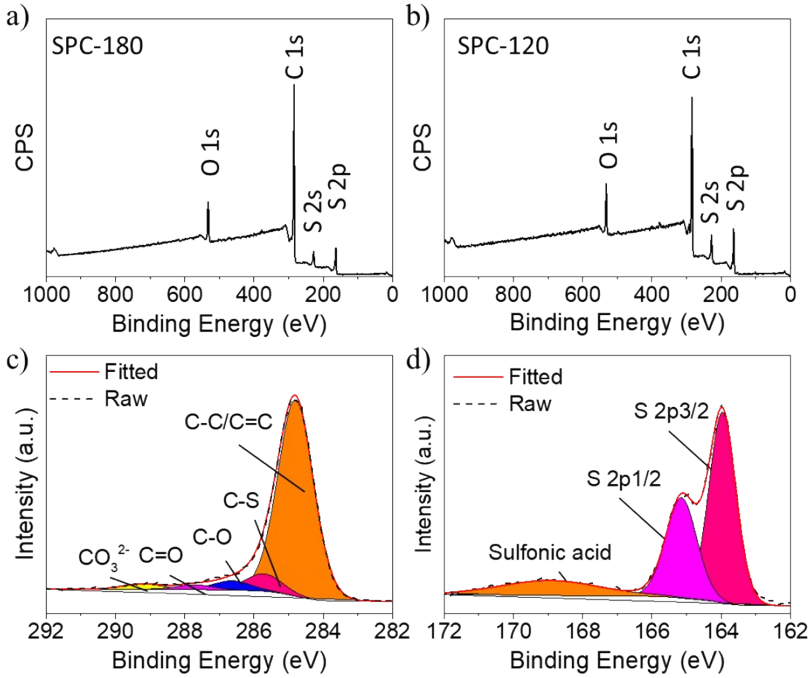

Figure S3. XPS spectra of the as-prepared samples: survey spectrum of a) SPC-180 and b) SPC-120, c) C 1s spectrum and d) S 2p spectrum of SPC-120.

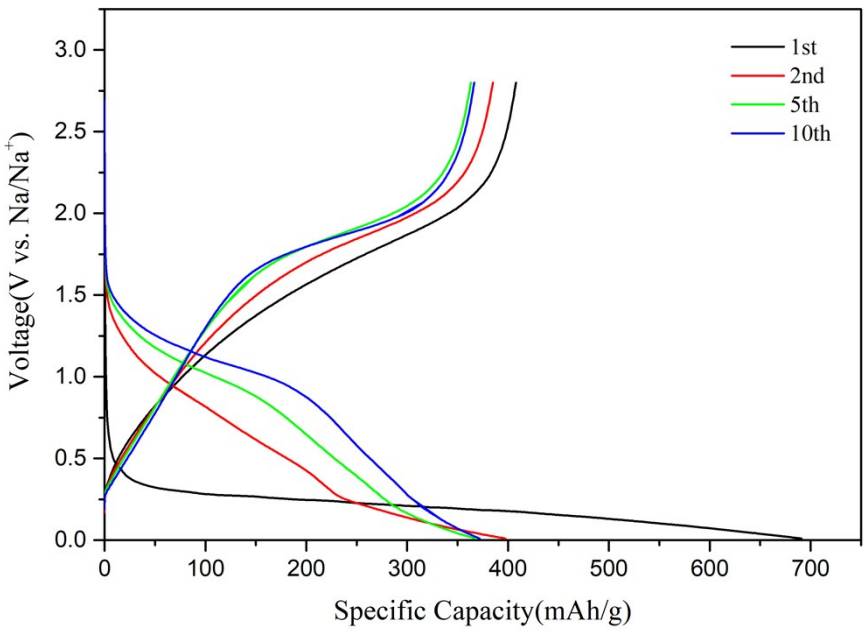

Figure S4. First-ten voltage profiles of the SPC-180 at the current density of 500 mAh g^{-1}.

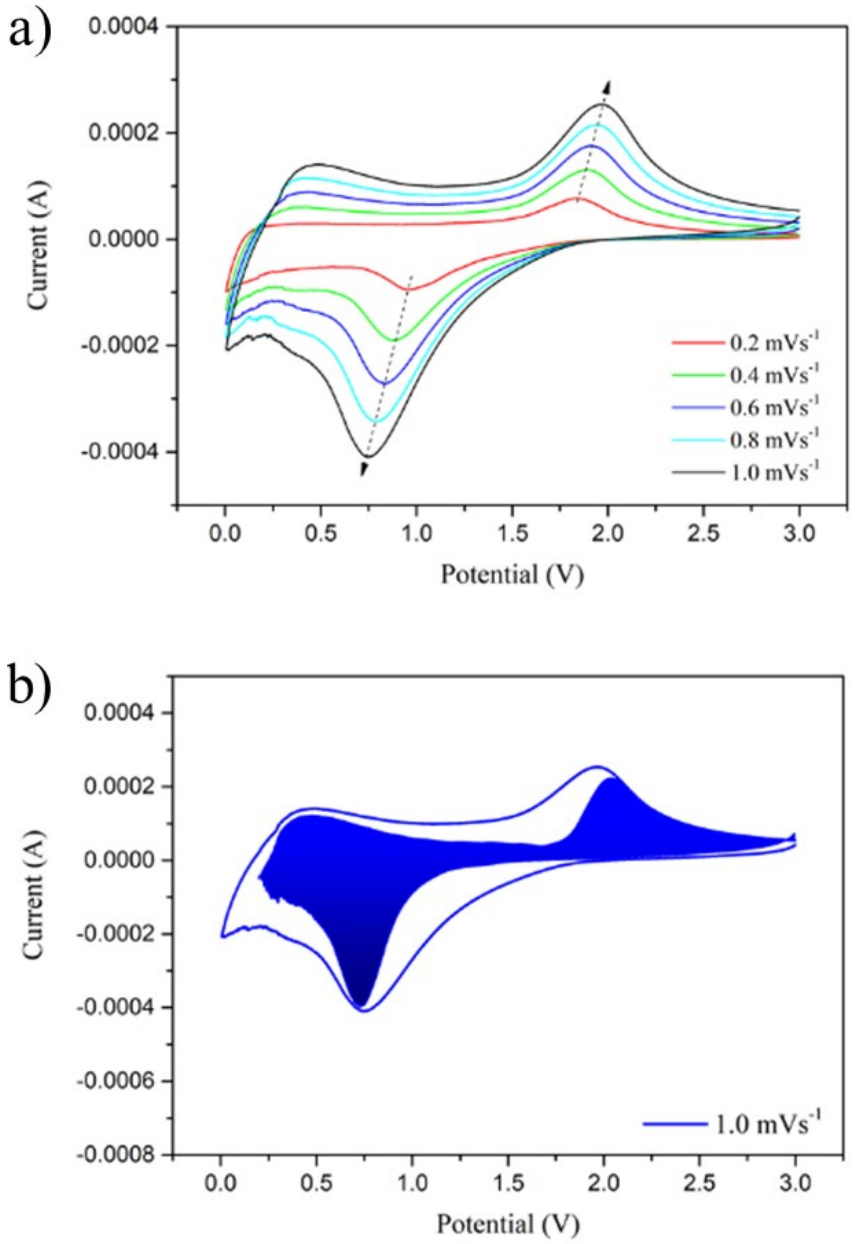

Figure S5. a) Cyclic voltammograms of the SPC-180 electrode at the rates from 0.2 to 1 mV s^{-1} in the potential window of 0.01-3.0 V (vs. Na/Na^{+}), b) Fitted pattern of the pseudocapacitive contribution at the rate of 1 mV s^{-1} of the SPC-180 electrode.

Table S1. Specific capacities of the anode materials based on carbon in NIBs

Materials	Capacity [mAh g^{-1}] / Current density [mA g^{-1}]		Reference
Hollow carbon nanowire	206/ 50 (400 cycles)		[1]
S/N-codoped carbon nanosheets	380/ 100 (100 cycles)		[2]
N/S-codoped carbon	280/ 30		[3]
S-Doped N-Rich Carbon Nanosheets	350 / 50		[4]
Nitrogen doped porous Carbon fibers	215 / 50 (100 cycles)		[5]
Sulfur-doped mesoporous carbon	220 / 20 (50 cycles)		[6]
Hollow Carbon Nanospheres	160 / 100 (100 cycles)		[7]
S-codoped porous carbon	370/ 500 (300 cycles)	197/ 2000 (650 cycles)	This work

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