

Supporting Information

Electrochemical activation of Carbon Cloth in Aqueous Inorganic Salts

Solution for superior capacitive performance

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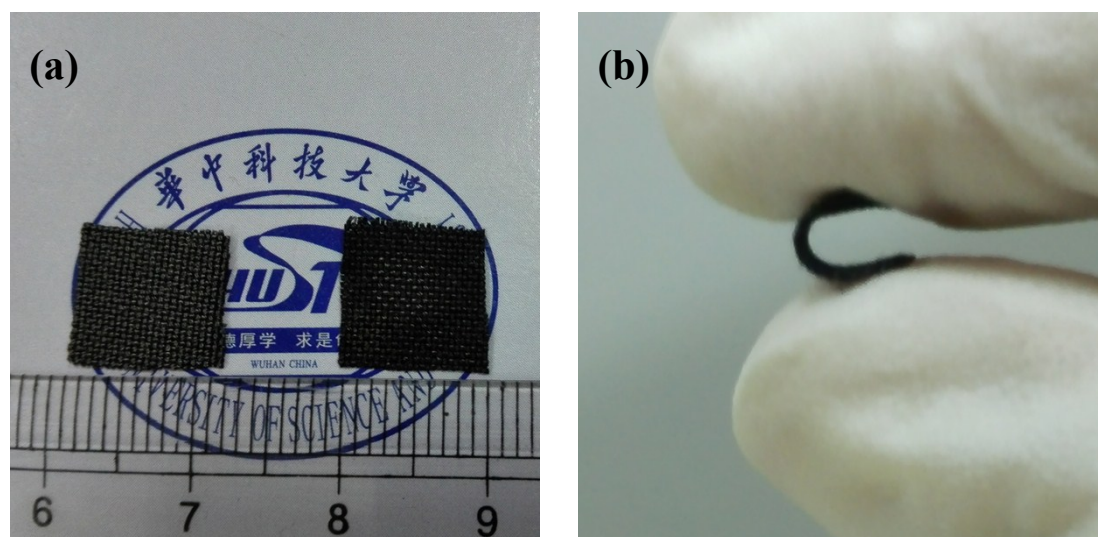


Figure S1. (a) Digital photo of the pristine CC (left) and the ECC-15 sample (right); (b) Digital photo for illustrating the good flexibility of the ECC-15 sample.

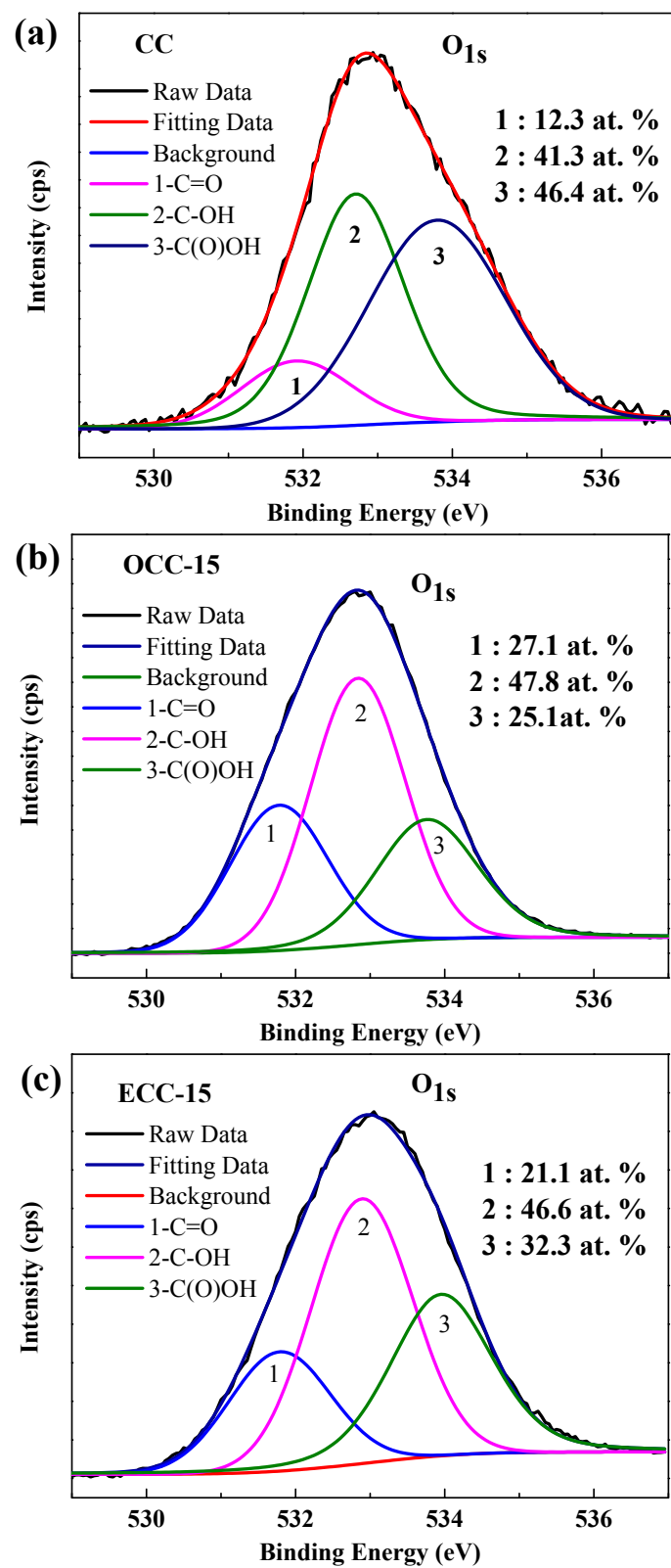


Figure S2. The high-resolution O_{1s} XPS spectra of the CC (a), OCC-15 (b), and ECC-15 sample (c).

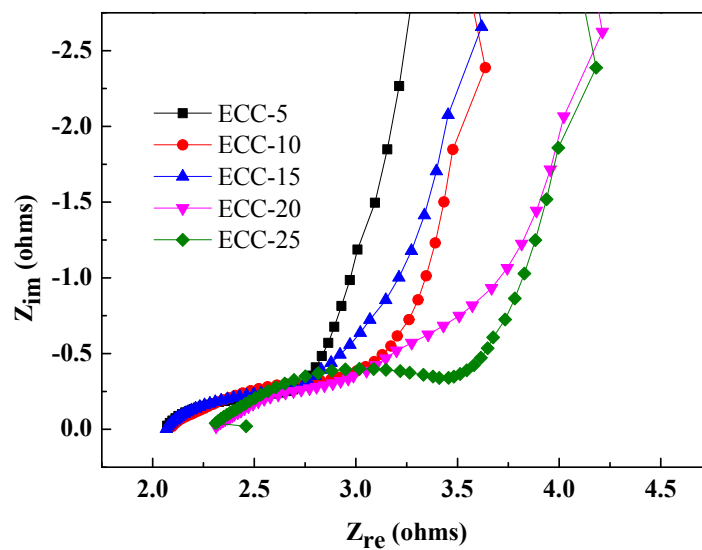


Figure S3. Nyquist plot from the ECC-X samples with different activation time.

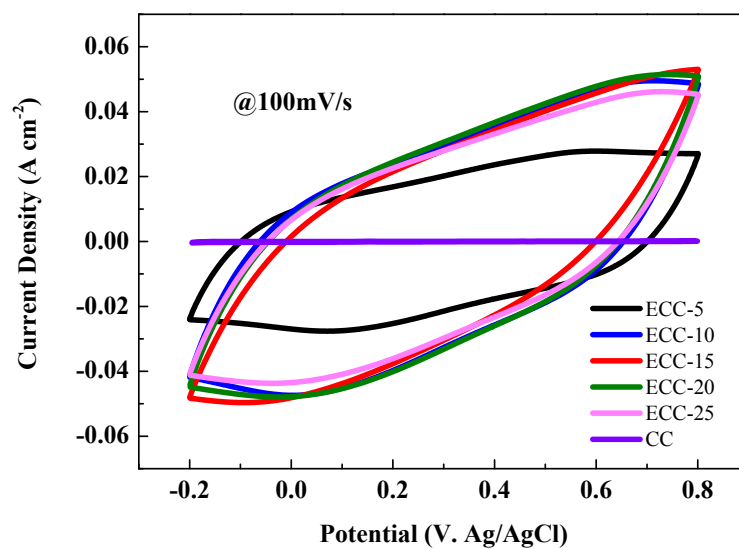


Figure S4. CV curves of the activated CC electrodes collected at a scan rate of $100\ mV\ s^{-1}$ as a function of exfoliation time

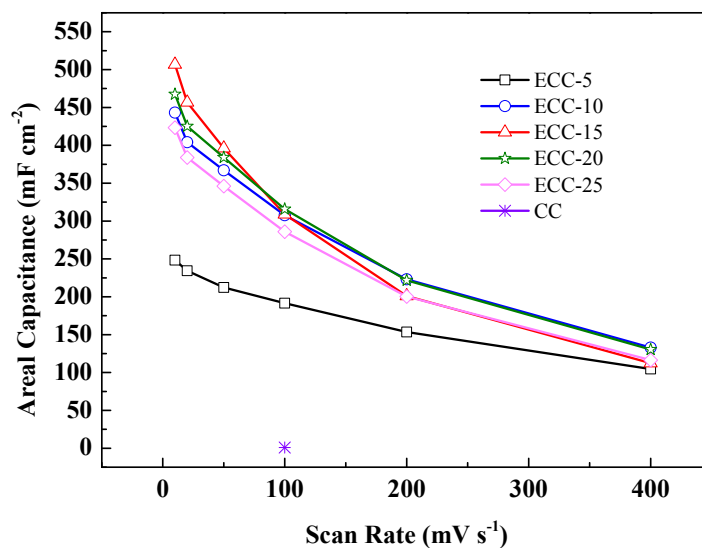


Figure S5. Areal capacitance calculated from CV curve at a scan rate from 10 to 400 mV s⁻¹ for all activated CC electrodes.

Table S1 Given that the carbon fiber cloth is a 3D structure, the areal and volumetric specific capacitances of the pristine CC, OCC-15 and ECC-15 samples. (The volumetric specific capacitance (C_V) is equal to the areal specific capacitance (C_S) over the thickness (d) of the carbon fiber cloth.)

	Areal Capacitance (mF cm ⁻²)		Volumetric Capacitance (mF cm ⁻³)	
	From GCD @ 6 mA cm ⁻²	From CV @ 20 mV s ⁻¹	From GCD @ 6 mA cm ⁻²	From CV @ 20 mV s ⁻¹
CC	0.8	0.9	25	28.1
OCC-15	18.7	48.8	584.4	1525
ECC-15	505.5	456.7	15796.9	14271.9