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Ion and Air tailored Micro-honeycomb Structure for Superior Na-ion Storage in Coir Derived Hard Carbon

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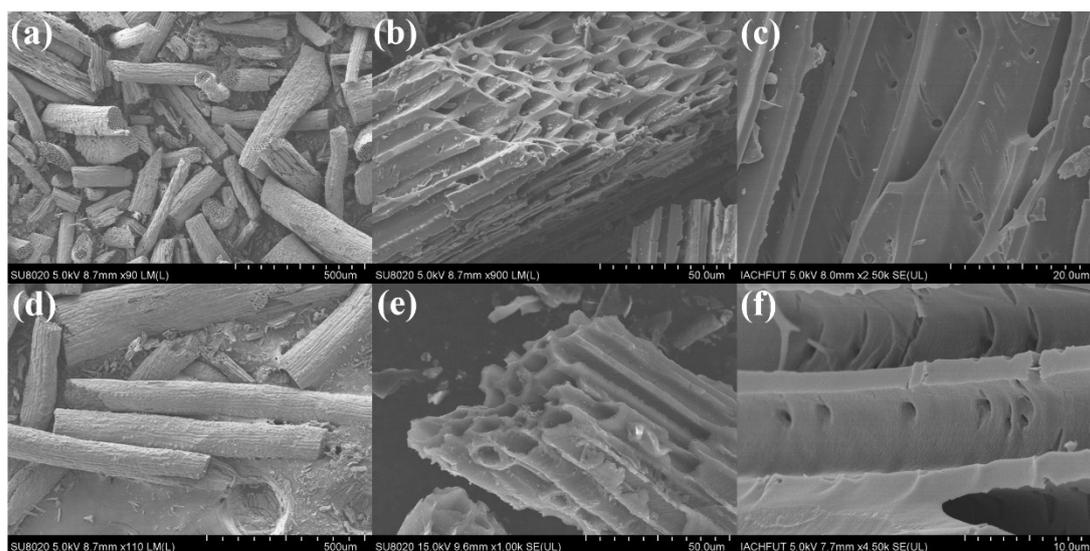


Figure S1. FESEM images of (a, b and c) ion activated and (d, e and f) air activated coir carbon.

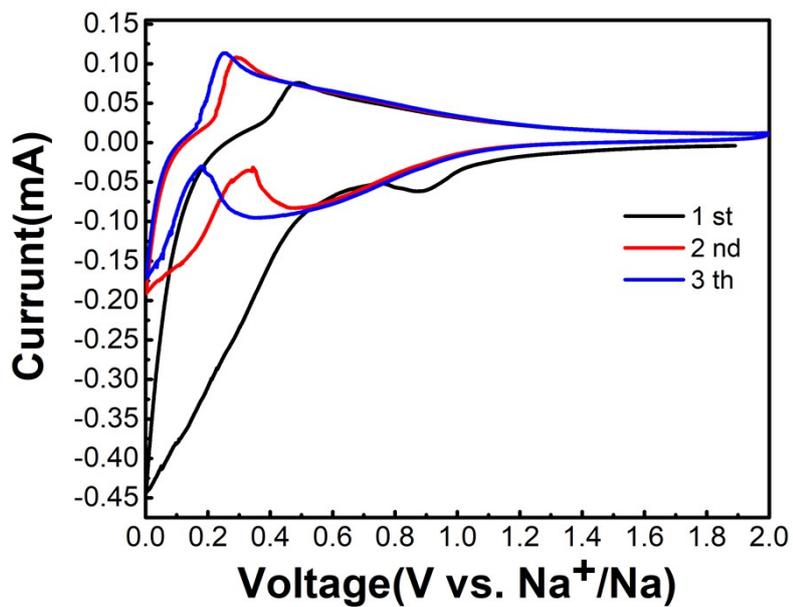


Figure S2. Cyclic voltammetry (CV) curves of CCI-800

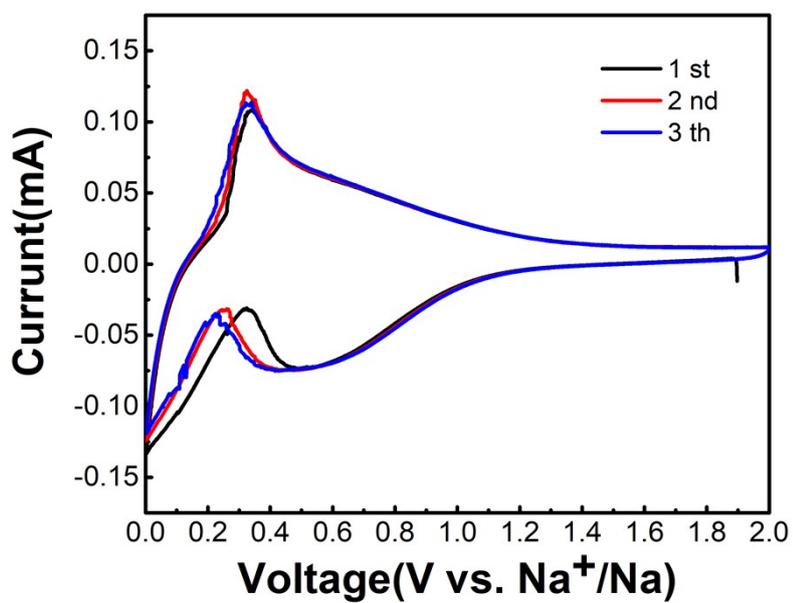


Figure S3. Cyclic voltammetry (CV) curves of CCI-1000

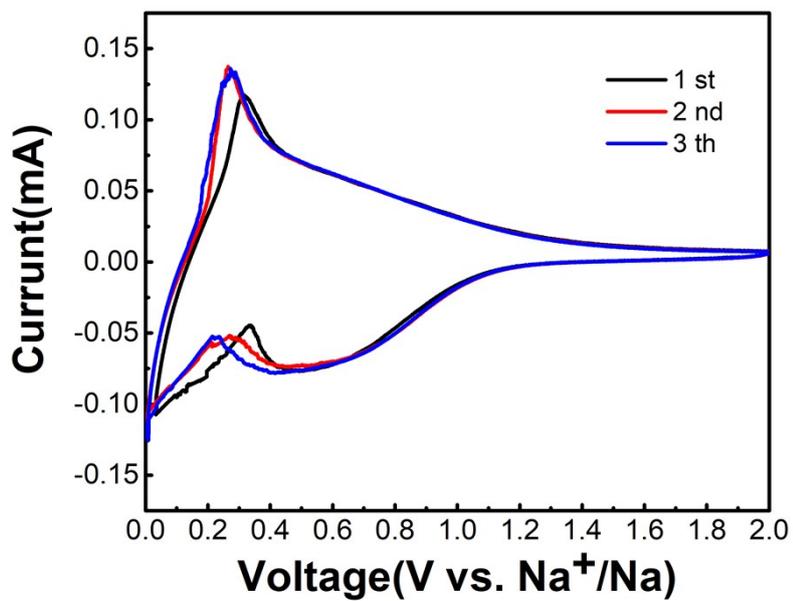


Figure S4. Cyclic voltammetry (CV) curves of CCI-1200

Table S1 Comparison of electrochemical performance for the representative biomass carbon anodes in SIBs from this work and previous reports

Materials description	Cycling data*	Rate performances**	Ref.
Cotton derived carbon	305/97%/30/100 th	275/150 180/300	1
Sucrose derived carbon	290/93%/30/100 th	98/150	2
Macadamia shell derived carbon	~200/67%/30/800 th	249/300	3
Coconut oil derived carbon	203 /73%/100/50 th	107 /400 78/1000	4
Apple derived carbon	85/100%/1000/1000 th	155/400 86/2000	5
Pomelo peels derived carbon	181/84.6%/200/220 th	182.3/500 71/5000	6
Sorghum stalk derived carbon	245/84%/20/50 th	212/100 172/200	7
Orange peel derived carbon	117/100%/1000/1000 th	125/1000	8
Eggshell membranes derived carbon	246/~99%/50/200 th	110/500 77/1000	9
Butterfly wings derived carbon	125/~99%/250/400 th	210/50 90/1000	10
Coir derived carbon	168/~93%/500/500 th	408/20 152/1000	This work

*) : Capacity [mA h g⁻¹]/ Capacity retention/Current Density[mA g⁻¹]/Cycles;
 **): Capacity [mA h g⁻¹]/Current Density [mA g⁻¹];

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