Supplementary Materials

Synthesis of Low-Cost and High-Performance Dual-Atom Doped Carbon-Based Materials with a Simple Green Route as Anodes for Sodium-Ion Batteries

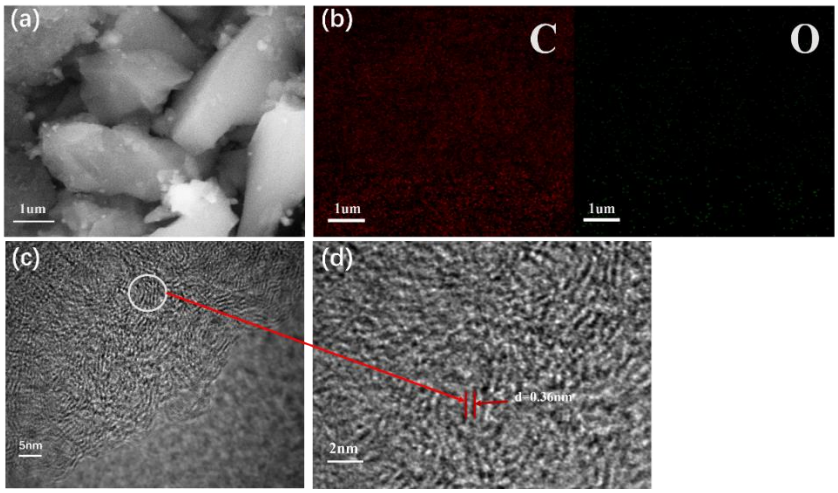

Figure S1 (a) SEM images of OC (b) the EDS of OC, (c, d) TEM images of OC respectively.

Table S1 Comparison of the electrochemical performance of N, S co-doped carbon with other carbon materials reported in previous literature.

Precursor	Capacity and cycle stability	High-Rate Capability (mAh g^{-1})	ICE	Ref
This work	183 mAh g^{-1} after 3000 cycles at 1A g^{-1}	170 mAh g^{-1} at 10 A g^{-1}	81%	
Bagasse	155 mAh g^{-1} after 2000 cycles at 1 A g^{-1}	148 mAh g^{-1} at 5 A g^{-1}	58.7%	33
$SnCl_4 \cdot 5H_2O$	380.1 mAh g^{-1} after 200 cycles at 500 mA g^{-1}	310.6 mAh g^{-1} at 4 A g^{-1}	68.9%	36
algae-Carrageen	227 mAh g^{-1} after 100 cycles at 0.1 A g^{-1}	109 mAh g^{-1} at 10 A g^{-1}	32.7%	39
donkey-hide gelatin pulp	266 mAh g^{-1} after 500 cycles at 0.5 A g^{-1}	98 mAh g^{-1} at 5 A g^{-1}	62%	41
citrate sodium	223 mAh g^{-1} after 2000 cycles at 1 A g^{-1}	102 mAh g^{-1} at 10 A g^{-1}	/	42
Mango-peels	351 mAh g^{-1} after 200	136 mAh g^{-1} at 4 A	52.03%	43

	cycles at 100 mA g^{-1}	g^{-1}		
medicine residue	801 mAh g^{-1} at 0.1A g^{-1}	402 mAh g^{-1} at 5 A g^{-1}	/	44

Table S2 Comparison of the electrochemical performance of N, S co-doped carbon with this work

Sample	C	O	N	S
NSC1100	92.09%	5.39%	1.08%	1.44%
NSC1150	87.92%	9.22%	1.16%	1.7%
NSC1190	92.04%	6.07%	0.78%	1.11%