

Supporting Information

In-situ N, O co-doped porous carbon derived from antibiotic fermentation residues as electrode material for high-performance supercapacitor

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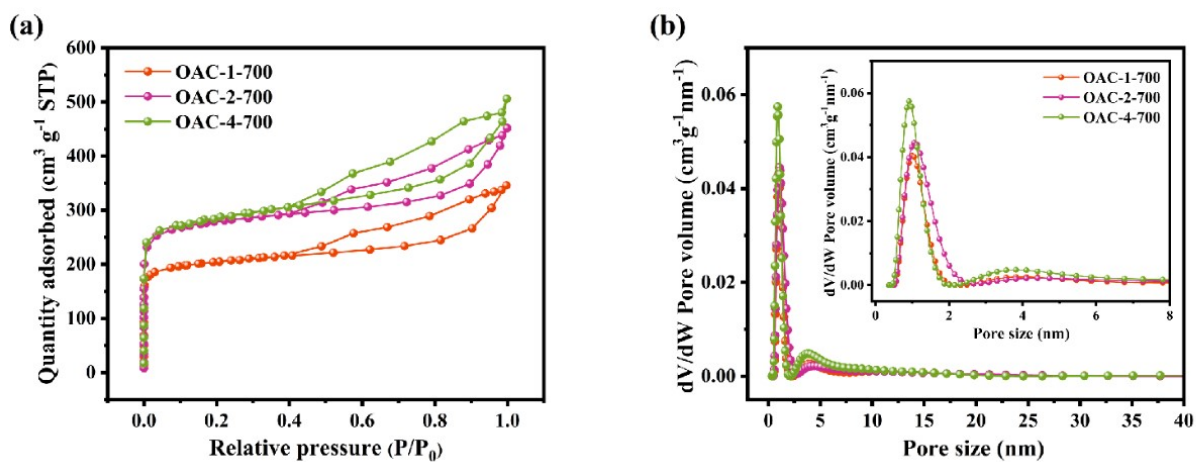


Fig. S1. (a) N₂ adsorption-desorption isotherms and (b) pore size distribution of OAC-1-700, OAC-2-700 and OAC-4-700.

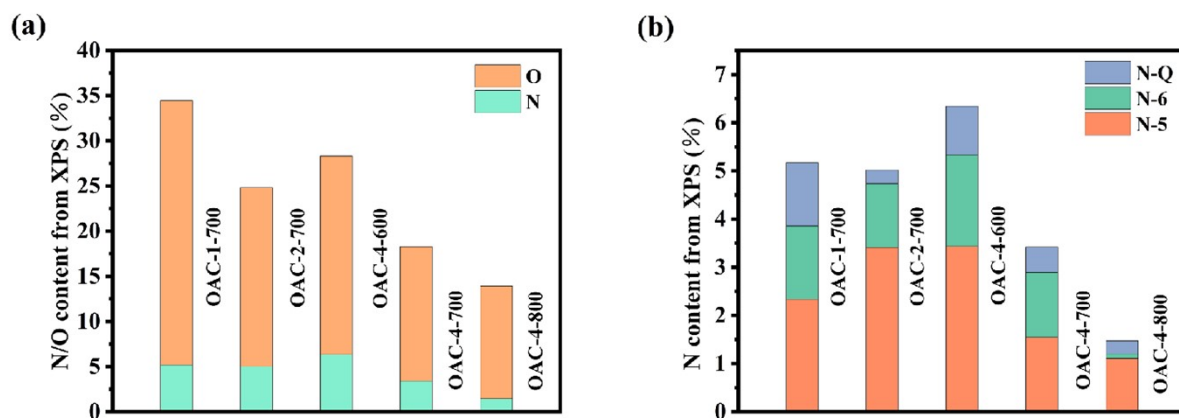


Fig. S2. (a) surface N/O elemental contents and (b) the ratios of different N species determined from the high-resolution XPS N 1s spectra of the different samples.

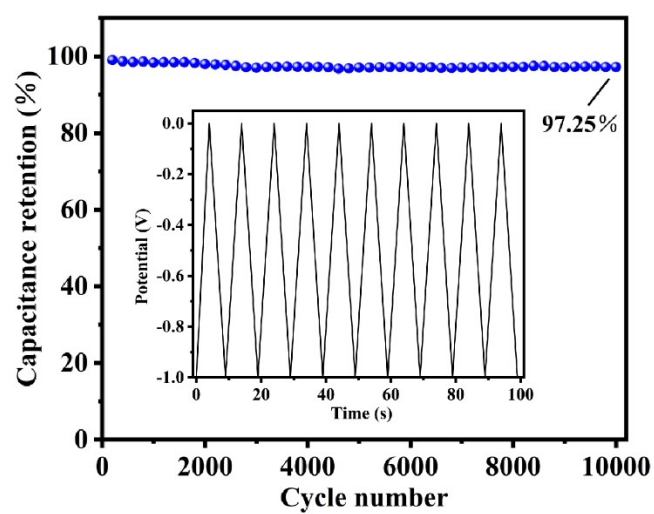


Fig. S3. The cycle stability of OAC-4-700 based symmetric supercapacitor measures at 10 A g⁻¹ current density (the inner picture are the results of the first 10 cycles).

Table S1. Elemental analysis of different samples.

Sample	Yield% ^a	C (wt.%)	H (wt.%)	O (wt.%) ^b	N (wt.%)
OFR	-	46.37	5.41	39.77	8.45
OPC-600	52.4	61.59	2.32	29.33	6.76
OAC-4-600	51.6	69.59	2.11	21.96	6.34
OAC-1-700	52.1	63.42	2.13	29.28	5.17
OAC-2-700	44.5	72.87	2.31	19.80	5.02
OAC-4-700	46.7	79.47	2.25	14.86	3.42
OAC-4-800	45.2	84.83	1.23	12.47	1.47

^a The yield is determined on a dry basis.

^b The oxygen content is obtained by subtraction.

Table S2. R_s and R_{ct} of different samples.

Sample	R_s	R_{ct}
OAC-4-600	0.714	0.365
OAC-1-700	0.662	0.159
OAC-2-700	0.690	0.099
OAC-4-700	0.643	0.092
OAC-4-800	0.853	0.094