

Supplementary Information

Comparison of porous carbons derived from sodium alginate and calcium alginate and their electrochemical properties

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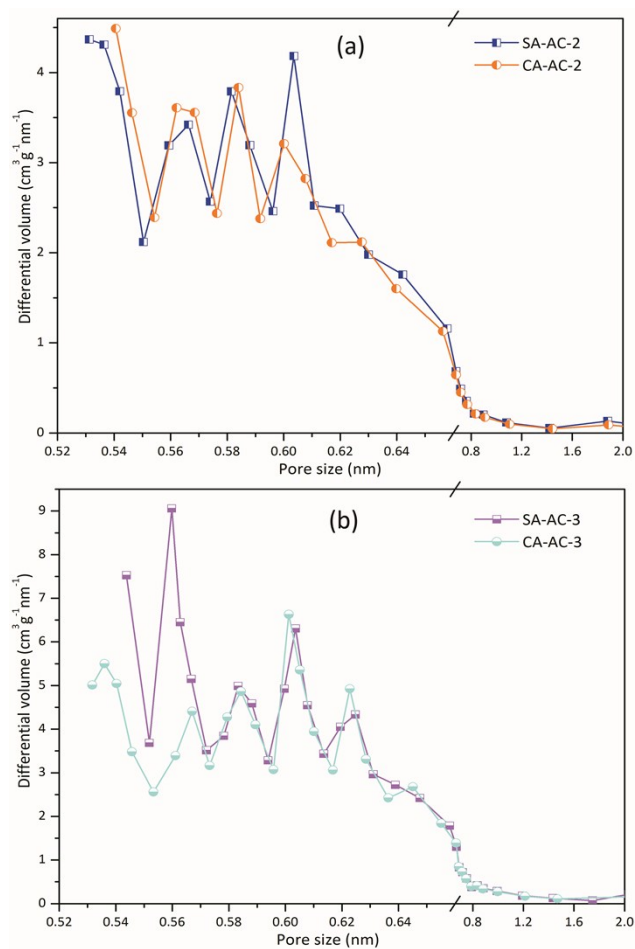


Fig.S1 Micropore size distributions of SA-AC-2 and CA-AC-2 (a) and SA-AC-3 and CA-AC-3 (b).

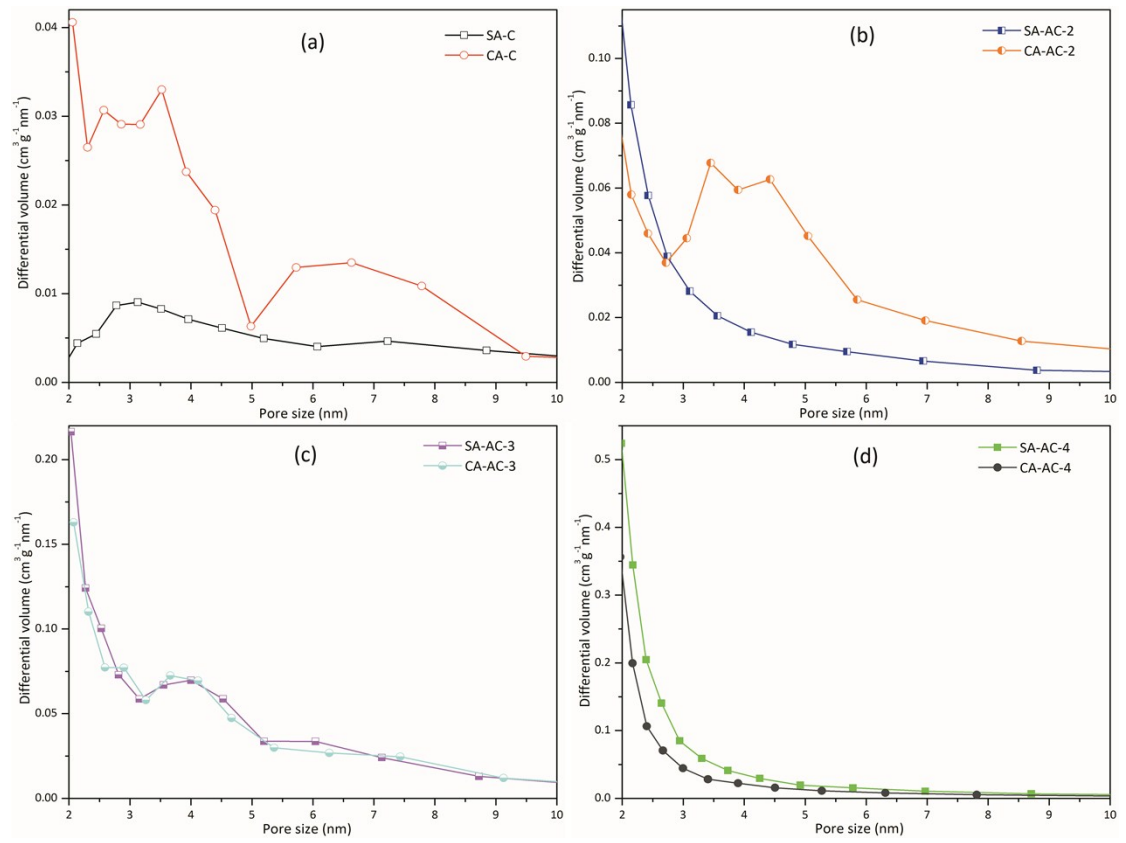


Fig.S2 Mesopore size distributions of charcoals determined by BJH method.

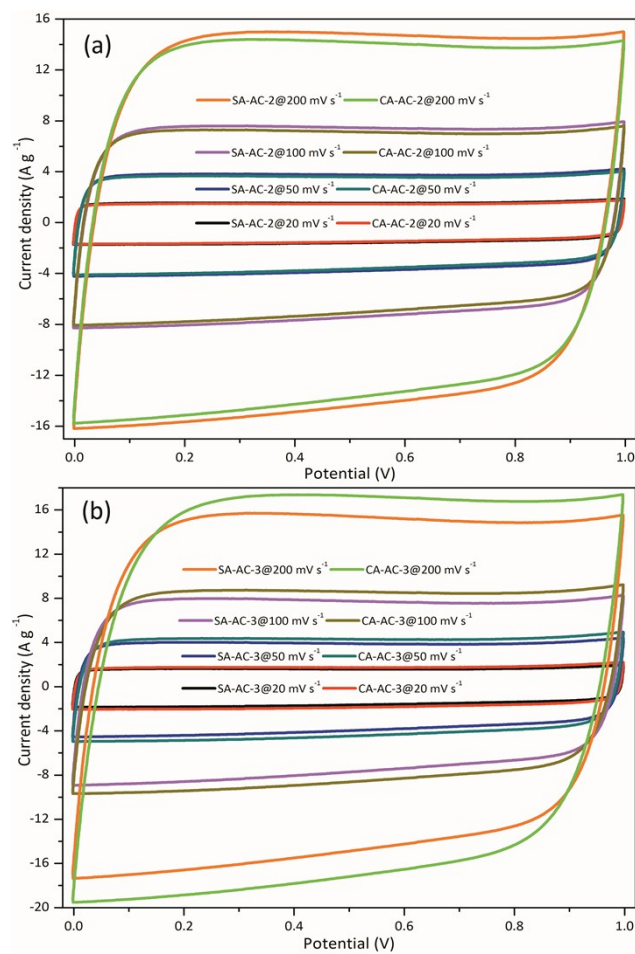


Fig.S3 CV curves of SA-AC-2 and CA-AC-2 (a) and SA-AC-3 and CA-AC-3 (b) at various scan rates.

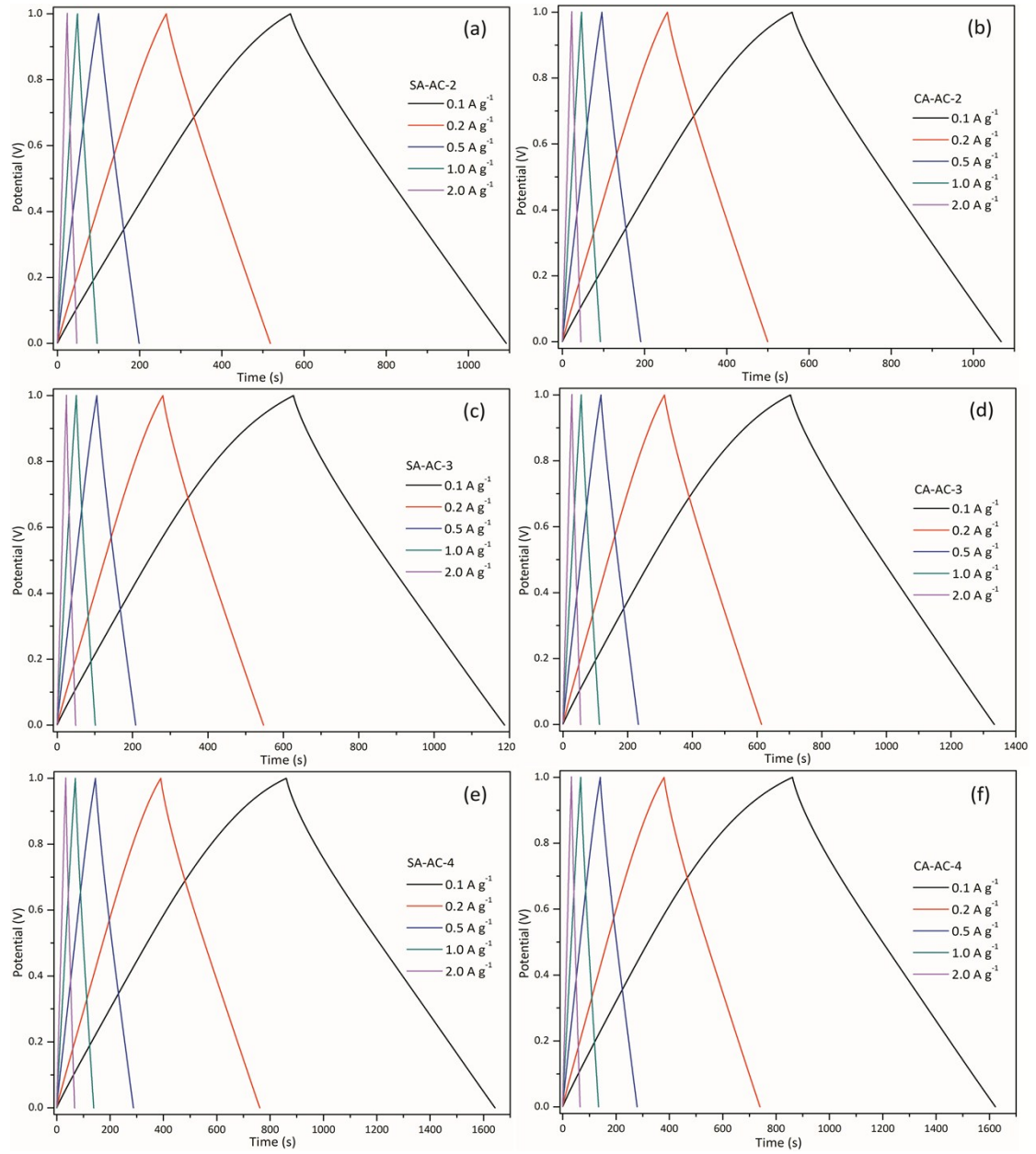


Fig.S4 GCD curves of SA-AC-2 (a), CA-AC-2 (b), SA-AC-3 (c), CA-AC-3 (d), SA-AC-4 (e) and CA-AC-4 (f) at various current densities.

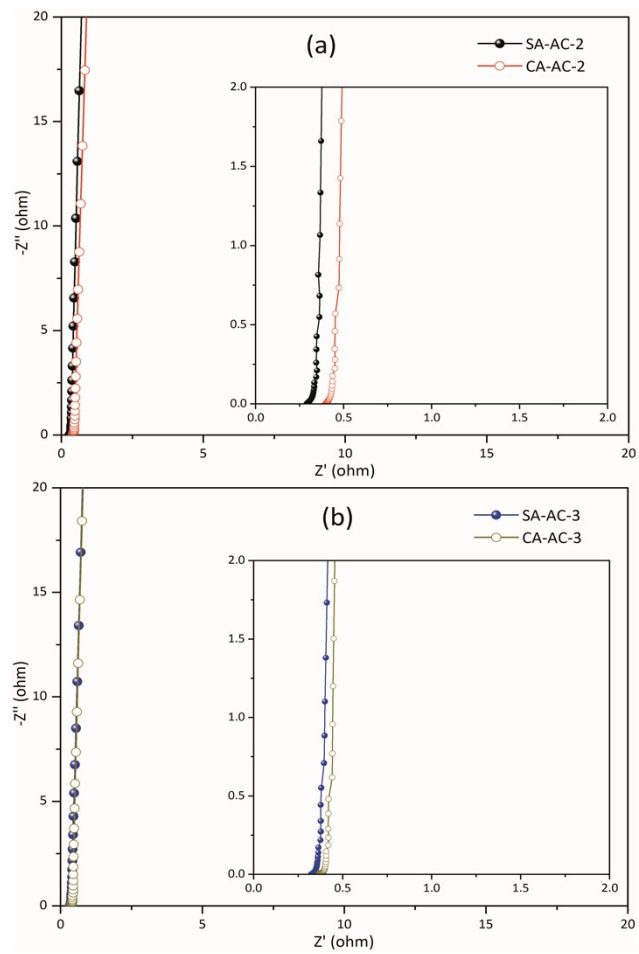


Fig.S5 Nyquist plots for SA-AC-2 and CA-AC-2 (a) and SA-AC-3 and CA-AC-3 (b). Insets provide the data at high frequency.

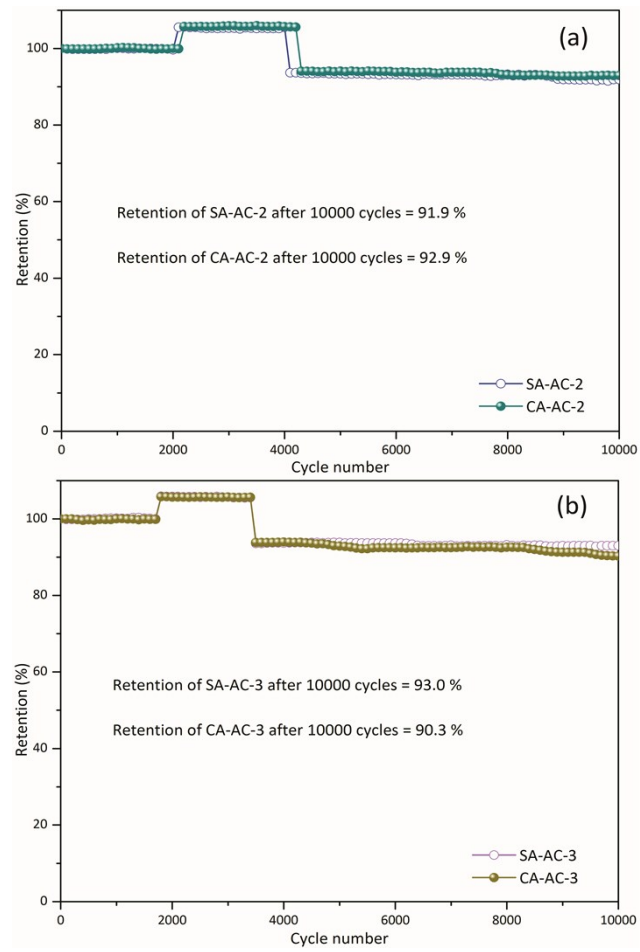


Fig.S6 Cycle performance curves of SA-AC-2 and CA-AC-2 (a) and SA-AC-3 and CA-AC-3 (b) at the current density of 5 A g^{-1} .

Table S1 Mass specific capacitance of charcoals at various current densities.

	SA-AC-2	CA-AC-2	SA-AC-3	CA-AC-3	SA-AC-4	CA-AC-4
Current density	Mass specific capacitance					
A g ⁻¹	F g ⁻¹					
0.1	209.5	203.0	223.9	251.9	312.9	304.3
0.2	201.7	194.5	212.7	239.0	295.6	286.3
0.5	195.7	187.8	205.3	229.9	283.2	274.5
1	191.0	182.8	199.8	223.5	274.1	265.9
2	184.0	176.0	192.2	215.1	262.3	254.3
5	176.1	167.9	183.0	204.2	248.8	240.4
10	162.6	153.5	171.0	190.1	232.0	220.5
20	144.2	141.7	153.9	165.3	207.4	194.0
30	124.4	124.1	133.7	135.8	185.9	168.9
40	105.9	109.0	119.1	122.5	165.5	139.3
50	92.2	92.0	101.6	95.8	144.8	118.2