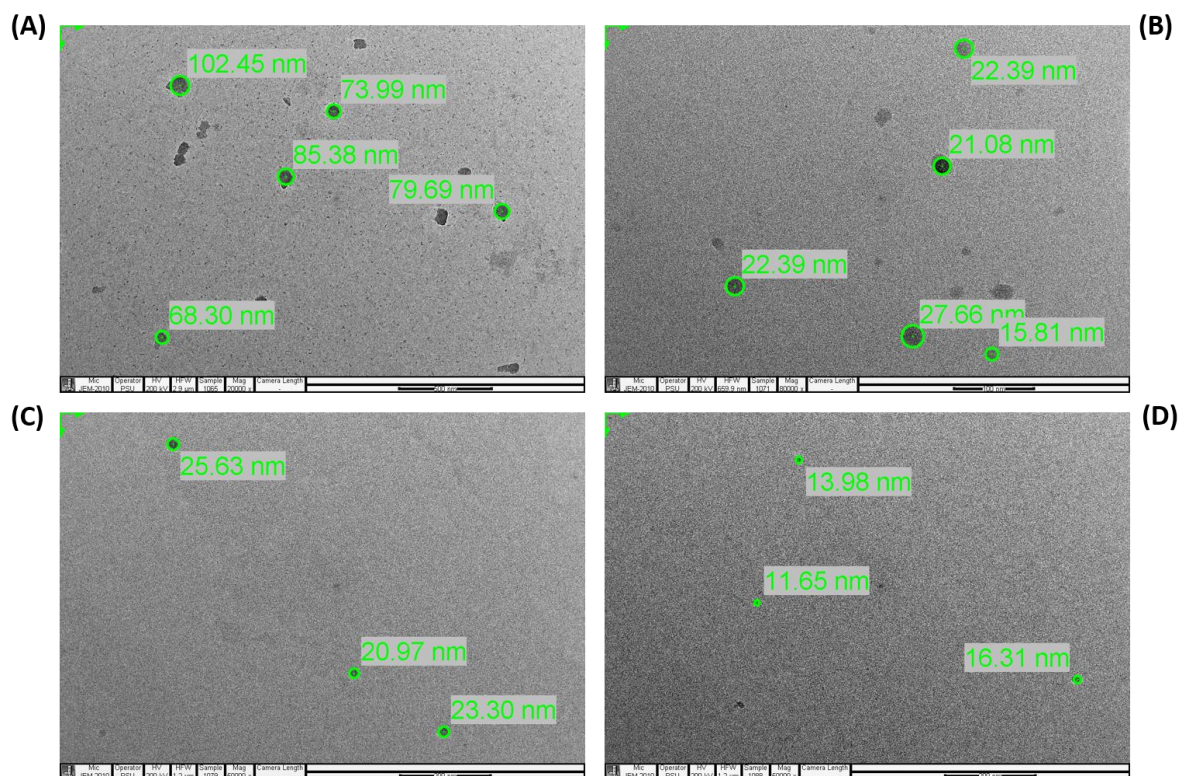
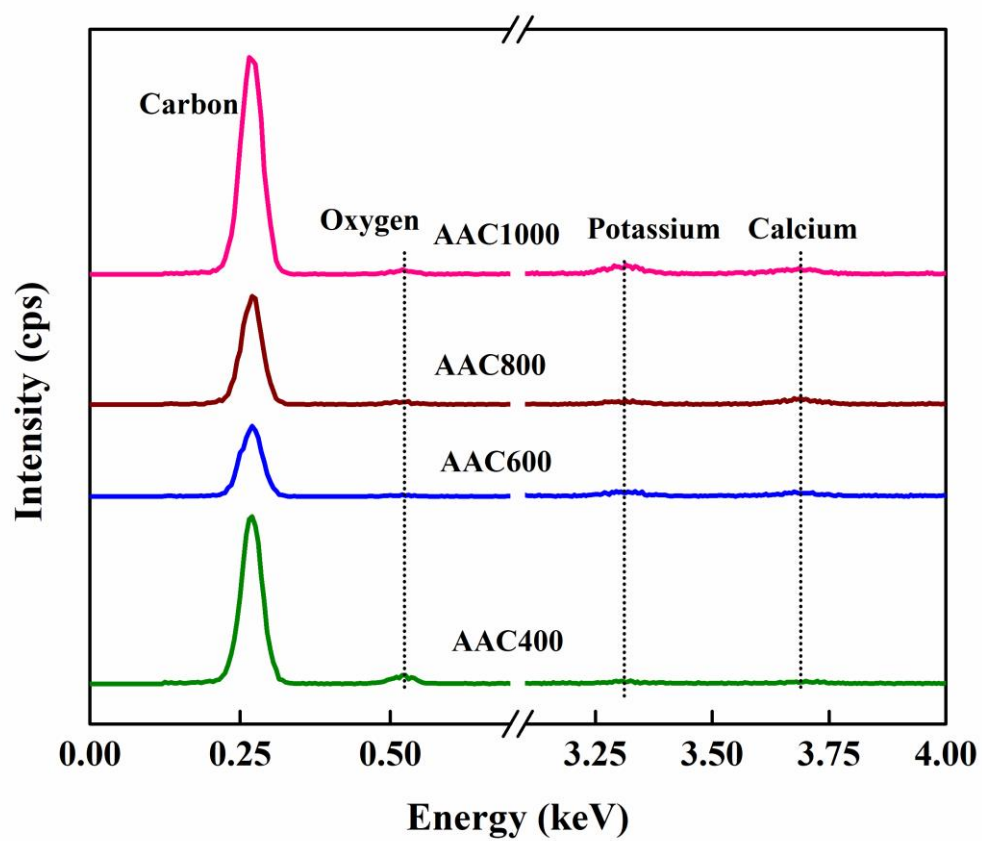


# ***Acacia auriculiformis* Derived Bimodal Porous Nanocarbons via Self-activation for High Performance Supercapacitors**

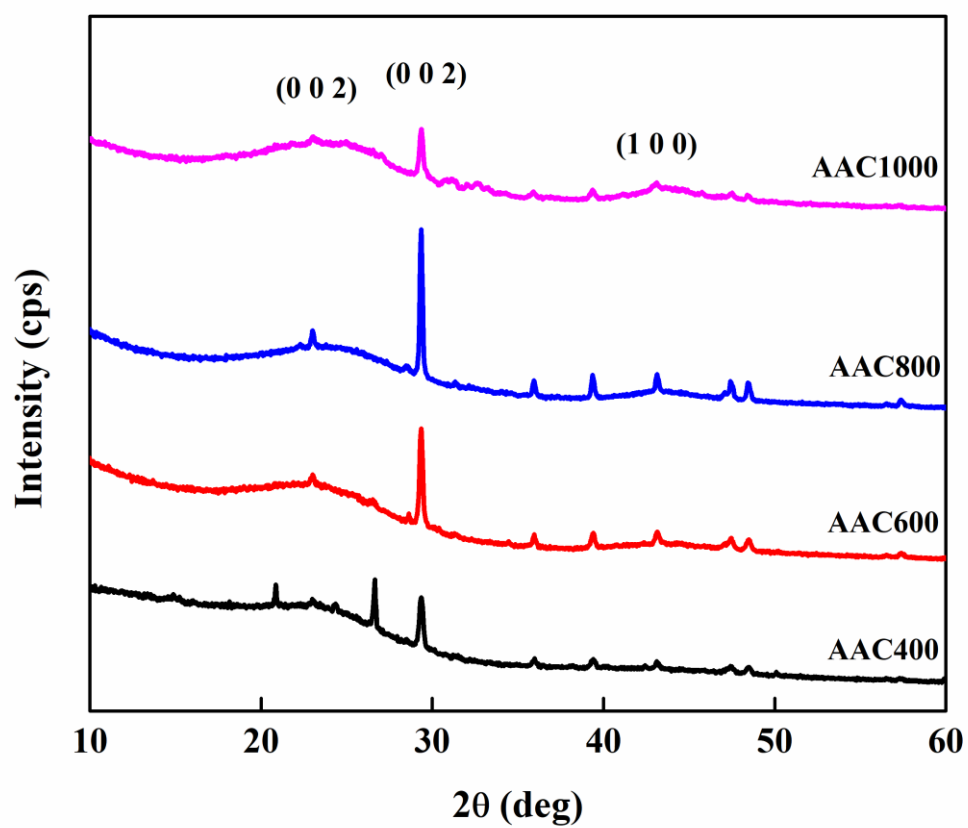
## **Supplementary Information**



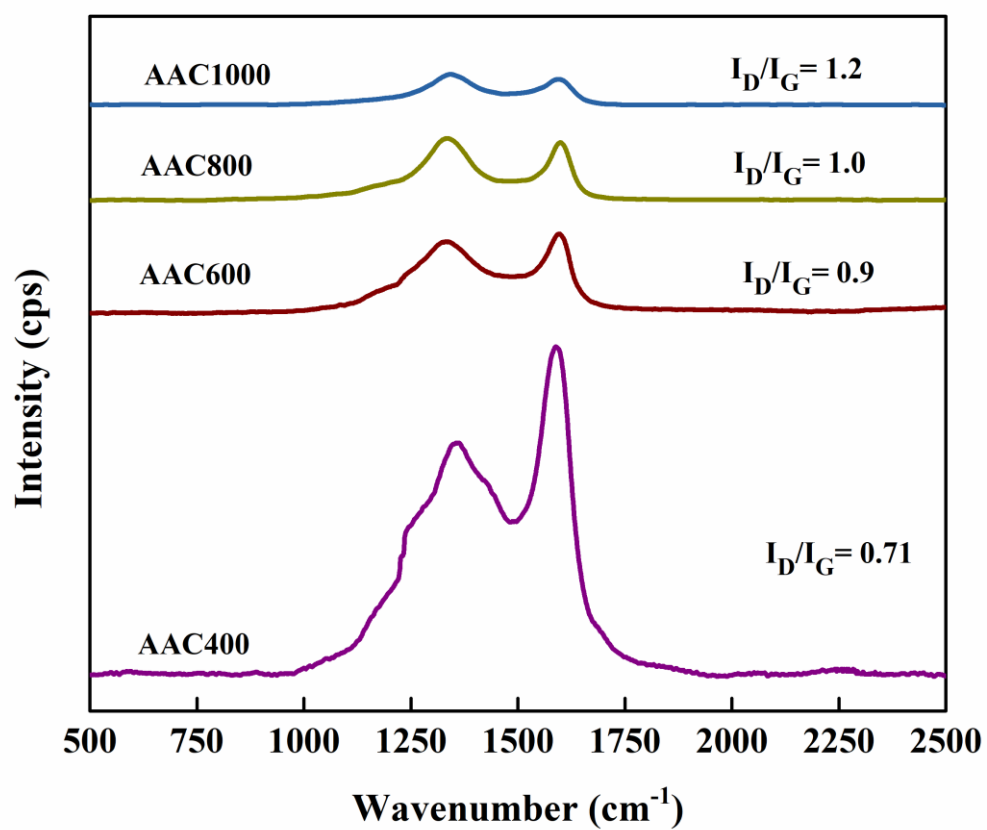
**Figure S1.** TEM images and measurement of particle sizes of AAC400 (A), AAC600 (B), AAC800 (C) and AAC1000 (D).



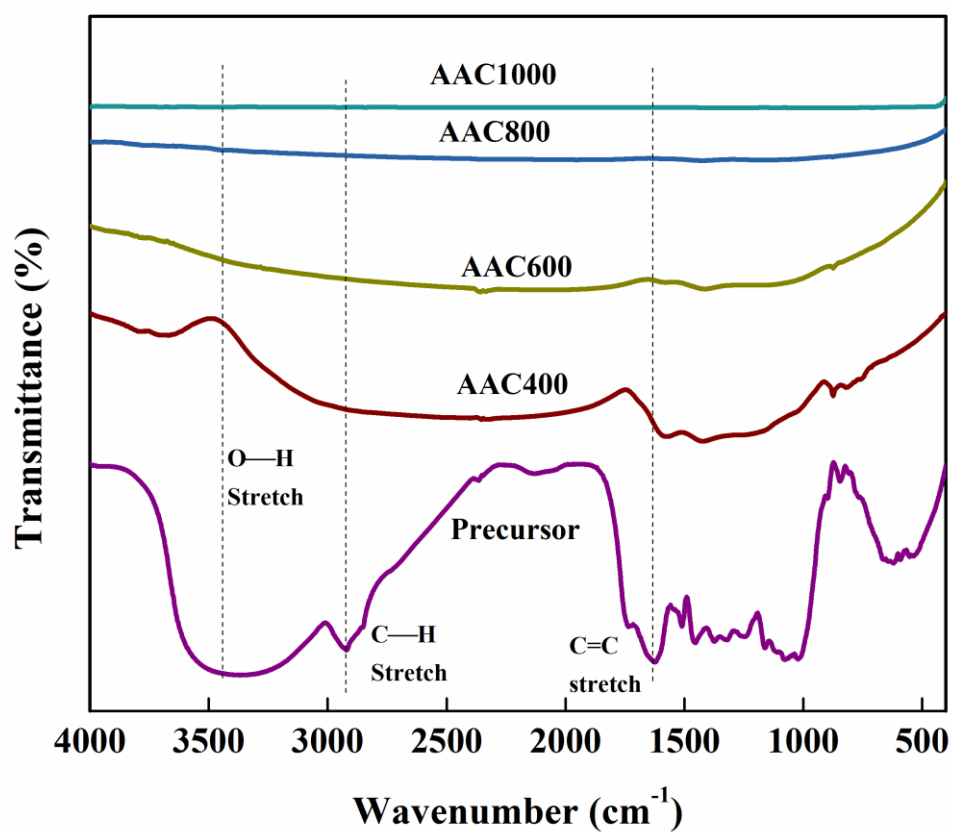
**Figure S2.** Elemental compositions of AACs obtained from SEM coupled with EDS



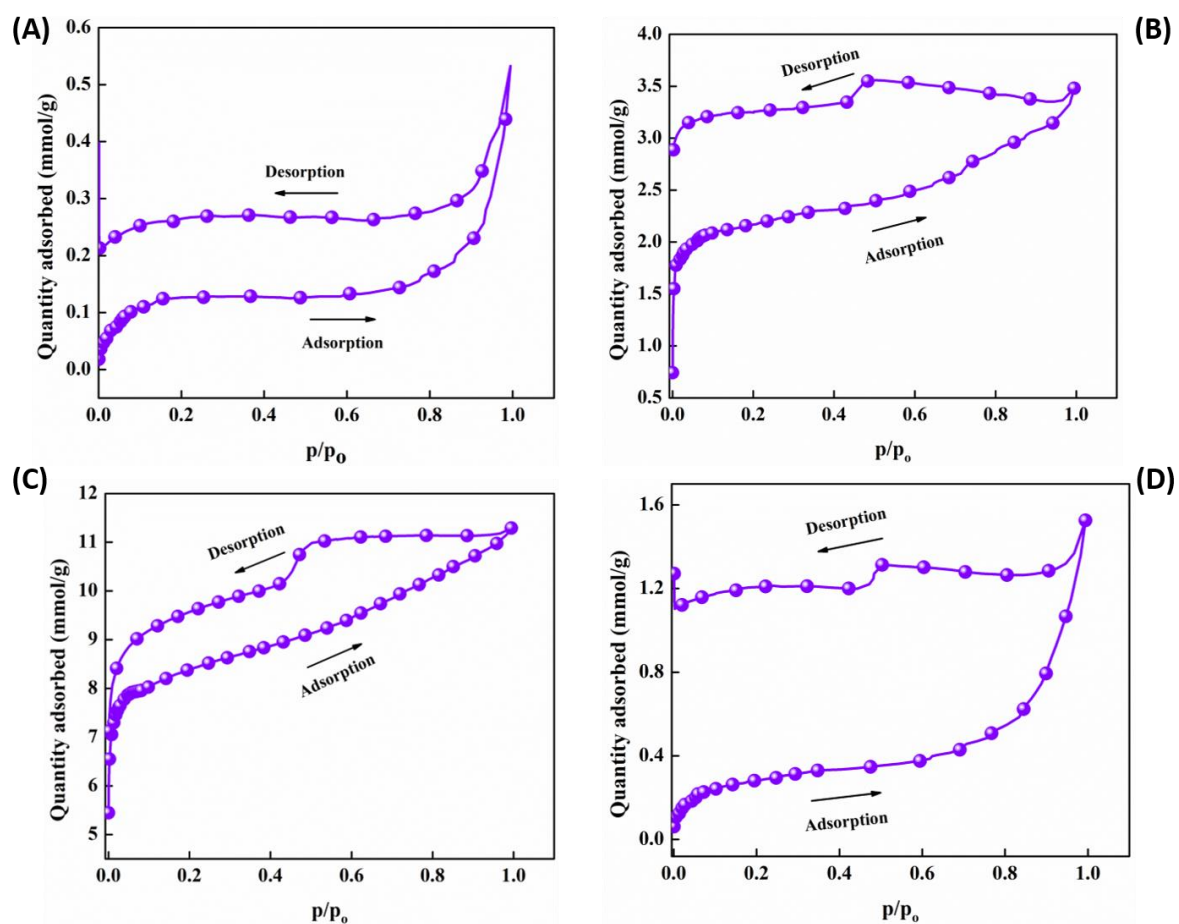
**Figure S3.** XRD patterns of AACs



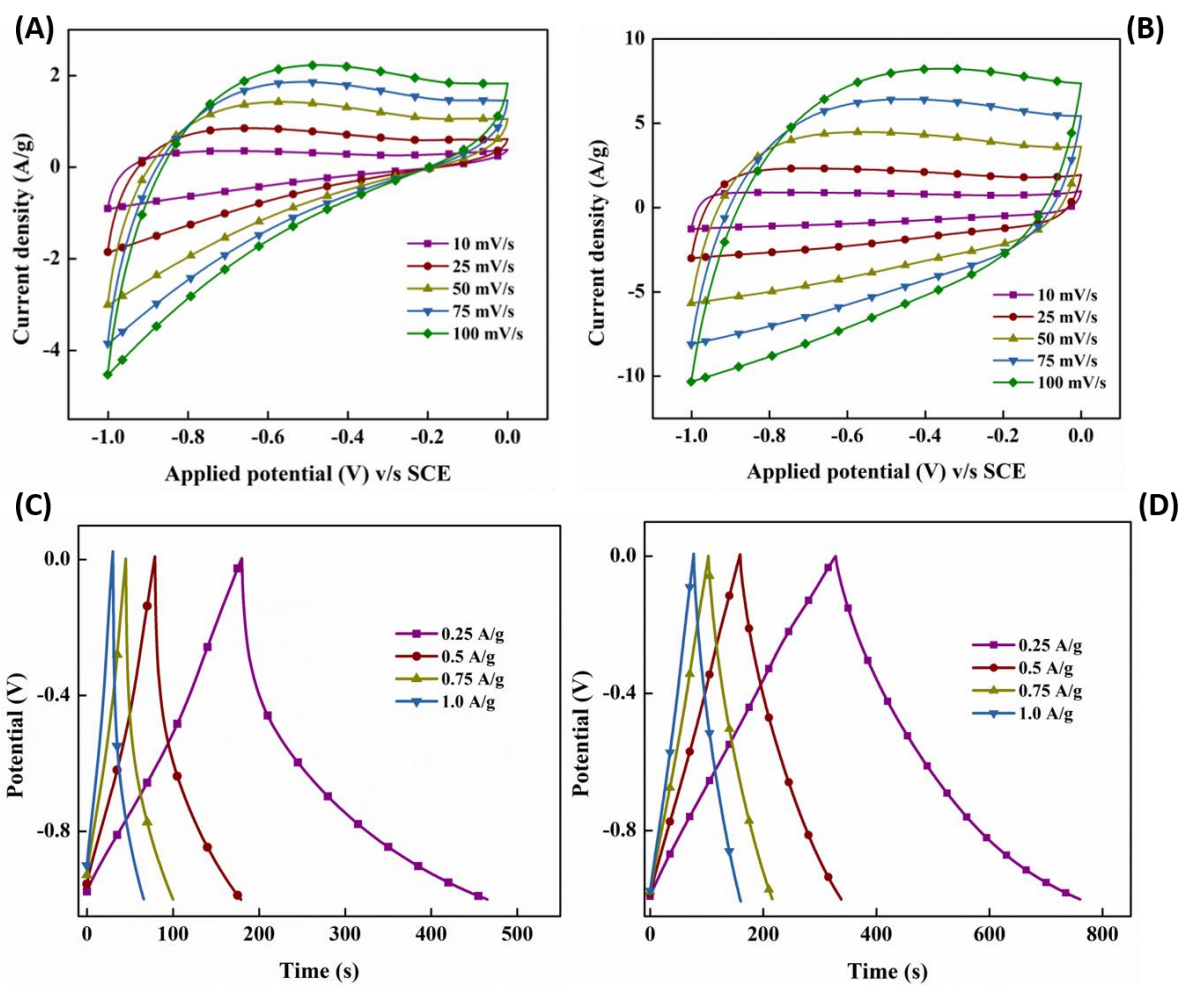
**Figure S4.** Raman spectra of AACs with  $I_D/I_G$  value calculated for respective AACs.



**Figure S5.** FTIR spectra of carbon precursor and all the synthesized AACs.

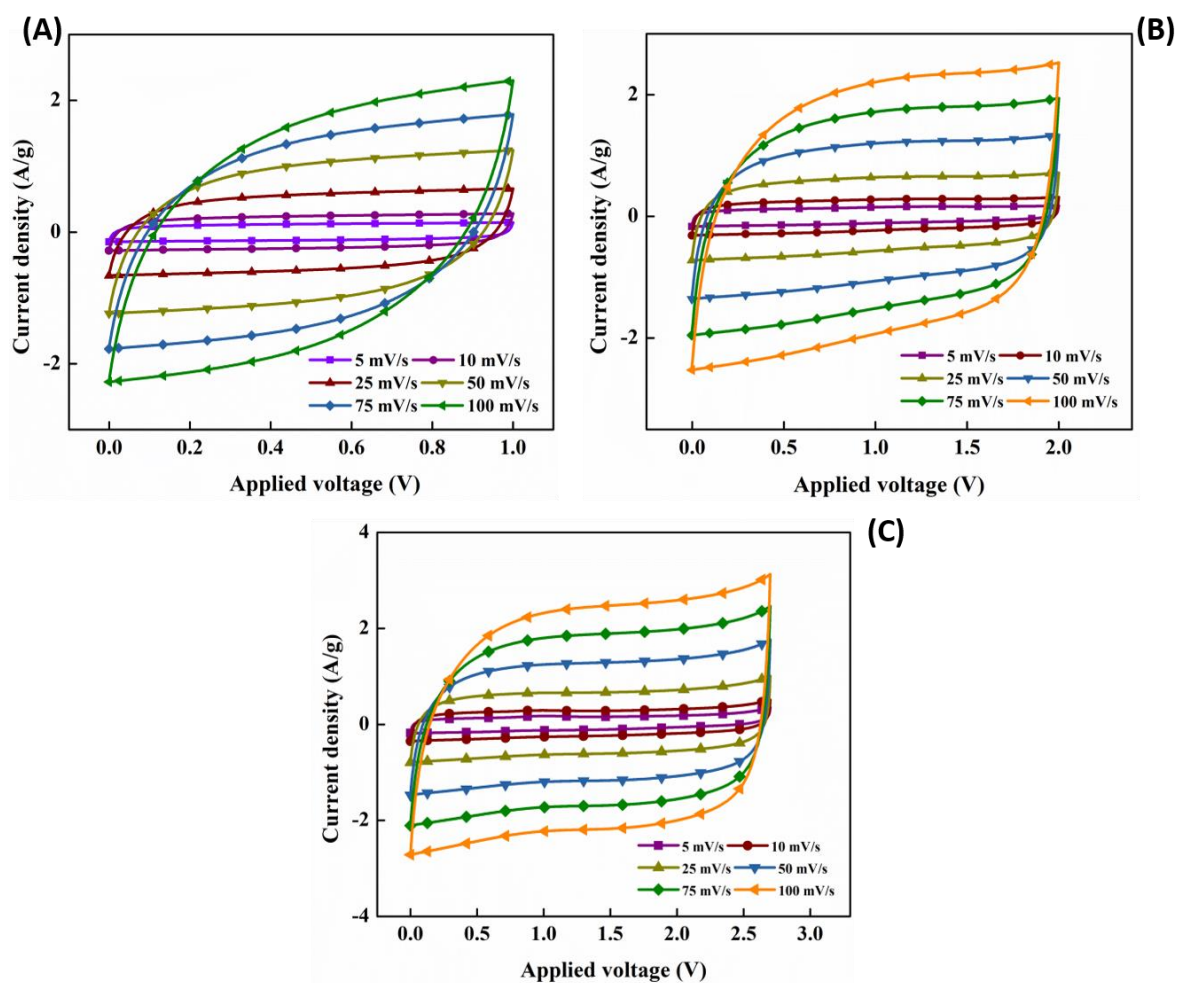


**Figure S6.**  $N_2$  adsorption-desorption isotherms for AAC400 (A), AAC600 (B), AAC800 (C) and AAC1000 (D).



**Figure S7.** CV and GCD plot of AAC600 (A & C) and AAC1000 (B & D)





**Figure S8.** CV of OSSc operated at 1.0 V (A), 2.0 V (B) and 2.7 V (C) at different scan rates (5-100 mV/s).

**Table S1.** Energy parameters of OSSc at 2.3 V

Current density (A/g)	Specific capacitance (F/g)	Energy density (Wh/kg)	Power density (W/kg)
0.1	52.3	16.7	98.0
0.25	48.3	15.4	252.5
0.5	45.1	14.4	513.5
0.75	44	14.1	778.5
1	43.2	13.8	1057.0
2.5	38	12.1	2300
5	37.6	12.0	2882.7