

## Supporting Information

### Controllable Synthesis of Graphene scroll and their Performance for Supercapacitor

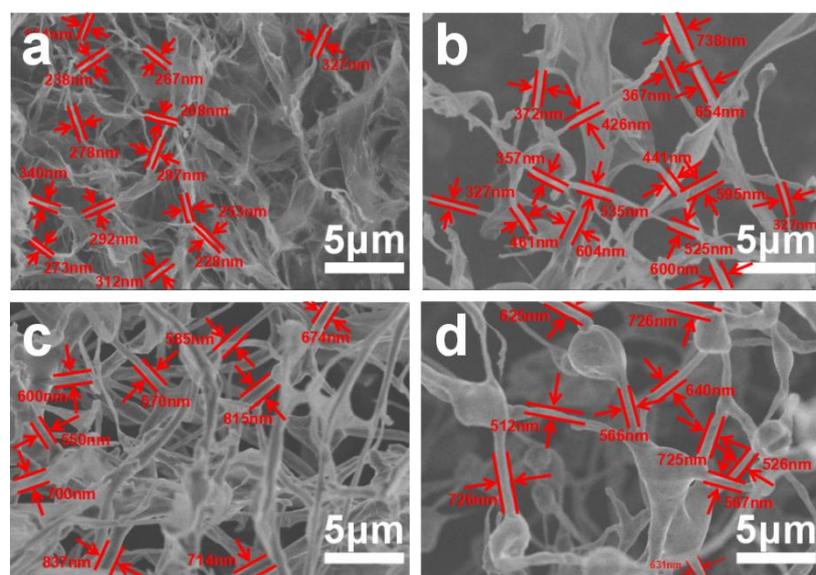
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**Fig. S1.** SEM images of GSC (a), GSC(SC-40) (b), GSC(SC-100) (c) and GSC(SC-600) (d).

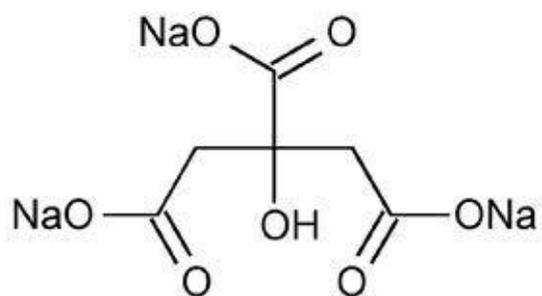
**Tab. S1.** The diameter distribution of GSC, GSC(SC-40), GSC(SC-100) and GSC(SC-600).

Diameter distribution (nm)	Sample			
	GSC	GSC(SC-40)	GSC(SC-100)	GSC(SC-600)
1	208	357	550	505
2	228	367	570	520

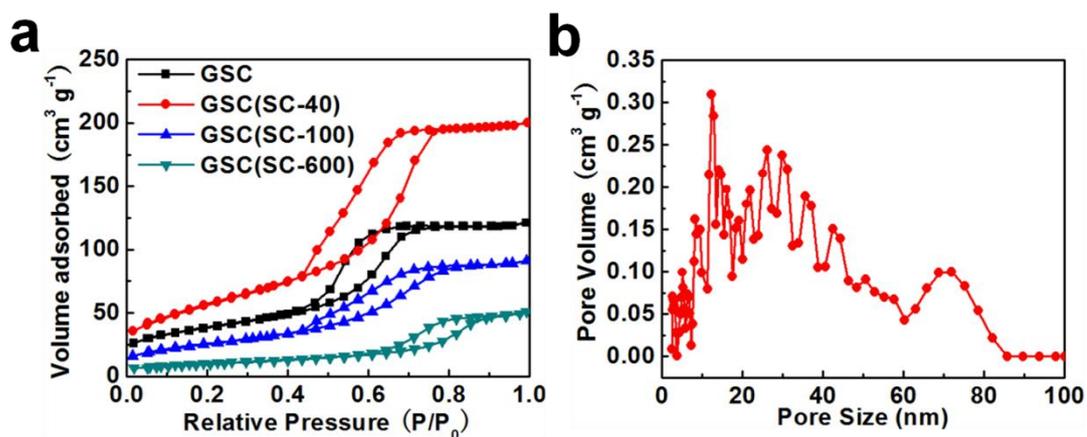
3	238	426	585	560
4	253	441	600	560
5	267	461	674	619
6	273	525	700	625
7	278	535	714	637
8	292	595	743	720
9	297	600	815	720
10	312	604	837	720
Average	265	491	679	619

**Tab. S2.** The element composition by XPS of GSC, GSC(SC-40), GSC(SC-100) and GSC(SC-600).

Sample	Element composition by XPS (at%)				
	C	O	C/O	Na	C/Na
GSC	90.67	9.33	9.72	---	---
GSC(SC-40)	89.64	9.27	9.67	1.09	82.24
GSC(SC-100)	69.56	21.87	3.18	8.57	8.12
GSC(SC-600)	71.74	25.44	2.82	9.36	7.66



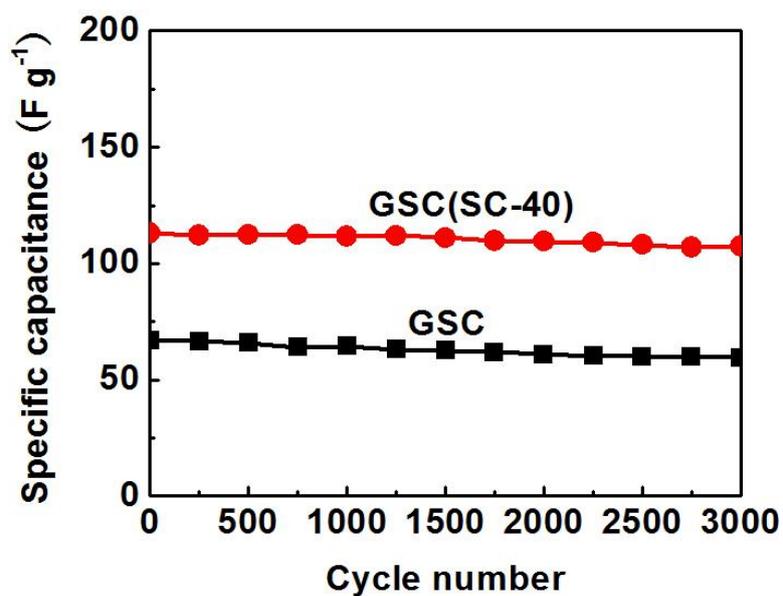
**Fig. S2.** The molecular formula of SC.



**Fig. S3.** (a) N<sub>2</sub> sorption isotherms; (b) pore size distribution plots of GSC(SC-40).

**Tab. S3.** S<sub>BET</sub> of all prepared materials.

Sample	GSC	GSC(SC-40)	GSC(SC-100)	GSC(SC-600)
S <sub>BET</sub> (m <sup>2</sup> g <sup>-1</sup> )	207	318	134	47



**Fig. S4.** Cyclic stability of GSC and GSC(SC-40) at current density of 5 A/g after 3000 cycles.