

## Supporting information

### **Hierarchical porous structure Carbon Nanosheets derived from Sodium Lignosulfonate for High-performance Supercapacitor**

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Table. S1 the summary of different porous carbon nanosheets

Raw materials	Template	Specific surface area(m <sup>2</sup> /g)	Electrochemical performance	Ref. No
Wasted litchi shell	none	1122.6 m <sup>2</sup> /g	222.0 F/g at 0.1 A/g	S1
Sodium gluconate	none	1390 m <sup>2</sup> /g	140F/g at 150 A/g	S2
GO	Amino-functionalized-GO	399 m <sup>2</sup> /g	424F/g at 0.1 A/g	S3
coal tar pitch	urea	1181 m <sup>2</sup> / g	210 F/g at 0.1 A/g	S4
resorcinol-formaldehyde resin oligomers	Mg(OH) <sup>2</sup>	1520 m <sup>2</sup> / g	201 F/g at 1 A/g	S5
Sodium Lignosulfonate	Boric acid	2453.91 m <sup>2</sup> /g	198.90 F/g at 1 A/g	<b>This work</b>

Table. S2 specific capacitor based on CV curves of different samples

Scan rates (mV/S)	PCN-0	PCN-2	PCN-4	PCN-8	PCN-10
	Specific capacitor (F/g)				
5	196.35	185.99	198.90	153.32	172.70
10	185.15	178.66	192.71	149.49	164.88
20	170.89	170.83	186.90	145.97	158.15
50	162.88	166.63	182.13	140.27	152.31
100	155.80	160.46	177.66	138.55	145.23

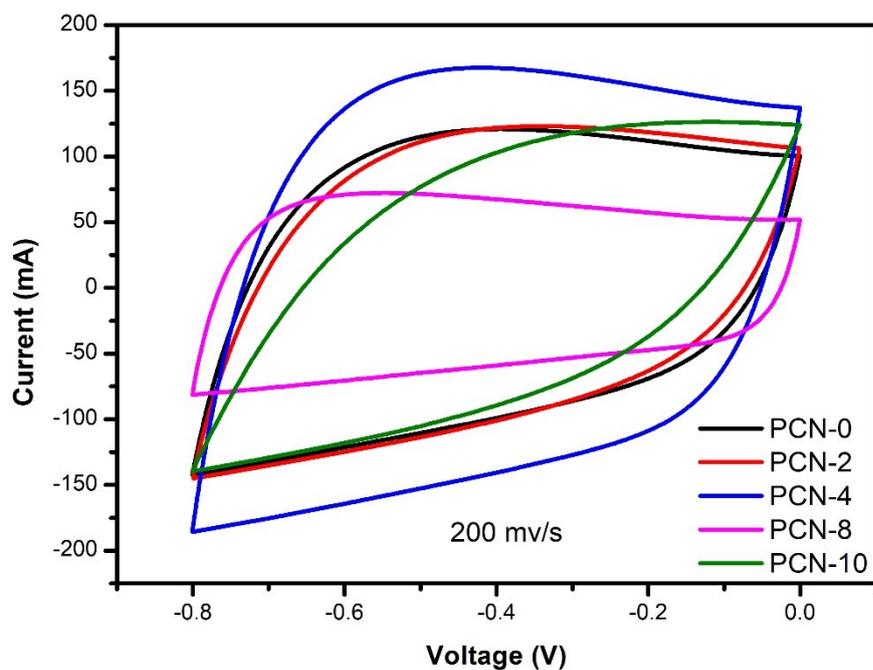


Fig. S1. CV curves of PCN-0, PCN-2, PCN-4, PCN-8 and PCN-10 under 200 mV/s

#### Reference

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