Supplementary Information

Lithographically Defined Three-dimensional Pore-patterned Carbon with Nitrogen Doping for High-Performance Ultrathin Supercapacitor Applications

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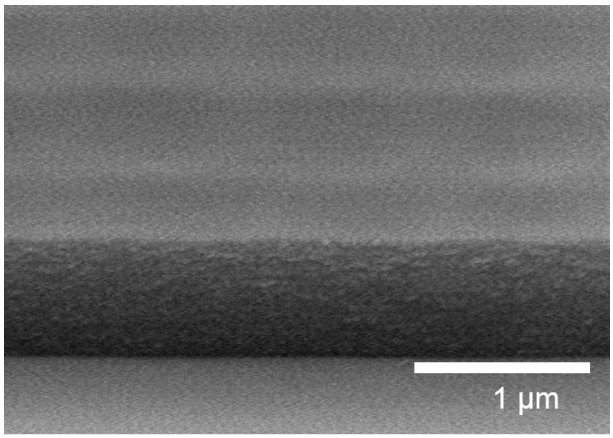

Figure S1. SEM image of SU8 pore patterns after pyrolytic carbonisation at 900°C in the absence of a silica support. The pore collapse of the film is clearly observed.

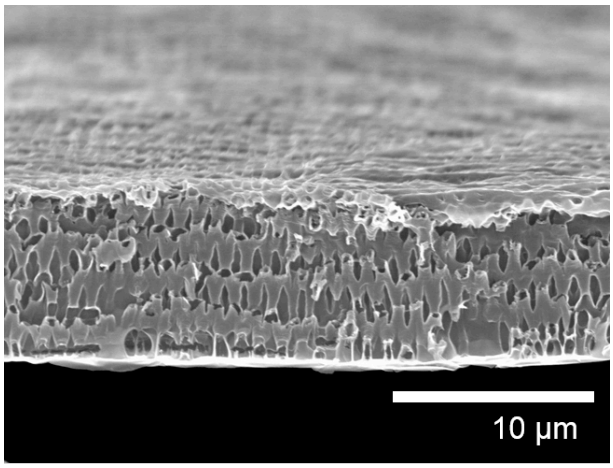

Figure S2. SEM image of the melamine-treated pore patterns without a silica shell.

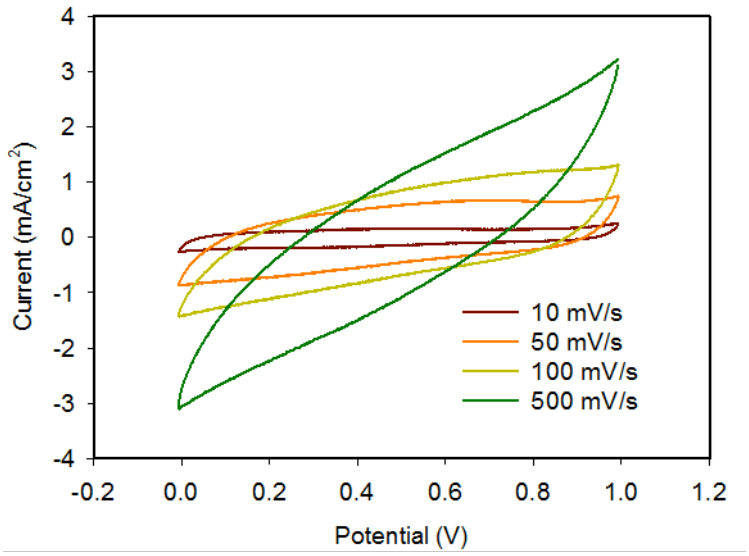

Figure S3. CV curves of the pristine pore-patterned carbon measured at various scan rates in 1 M H_2SO_4.

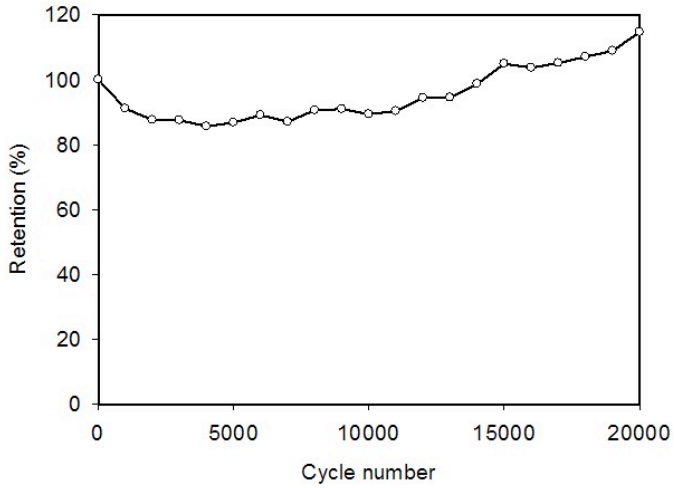

Figure S4. Cycle stability of high-N-doped pore-patterned carbon.

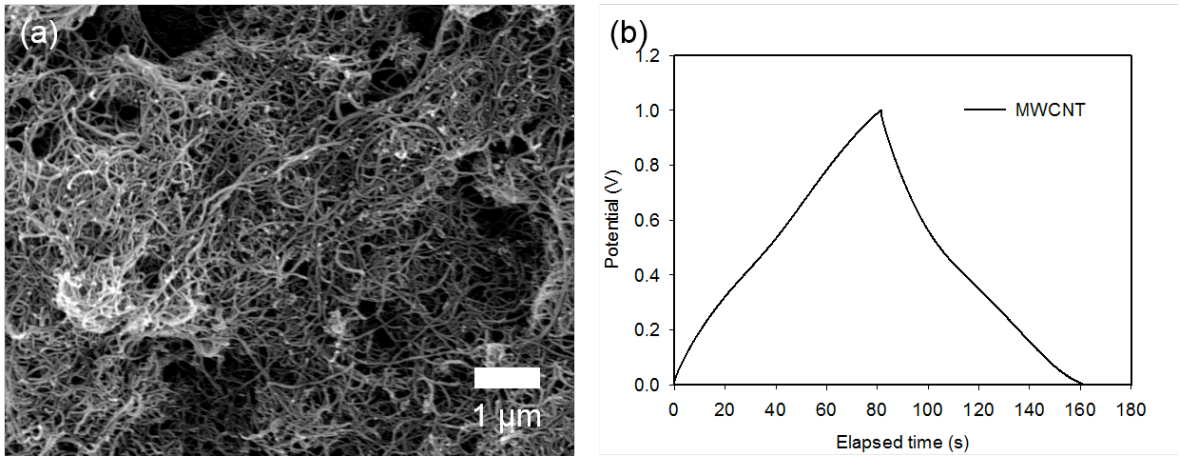

Figure S5. (a) SEM image of commercial MWCNT films (b) Galvanostatic charge/discharge of MWCNT film measured at 1 A/g in 1 M H_2SO_4.

Table S1. EDS results indicating the carbon, oxygen, and silicon chemical compositions for silica-coated pore-patterned carbons before and after the silica was etched.

Chemical	Silica coated	Etched
C	73.20	92.05
O	14.46	7.95
Si	12.33	0

Table S2. The N/C ratio and the fraction of N-6, N-5, N-Q, and N-X configurations for the N-doped samples prepared at various doping temperatures.

	bare	high-N	mid-N	low-N
N/C ratio	0	9.33	6.73	4.70
Pyridinic N (%)	N/A	46.00	39.22	36.81
Pyrrolic N (%)	N/A	25.97	19.02	17.93
Graphitic N (%)	N/A	18.97	31.01	34.43
Oxidized N (%)	N/A	9.06	10.75	10.83