

Electronic Supplementary Information

Textile Electrodes Woven by Carbon Nanotube/Graphene Hybrid Fibers for Flexible Electrochemical Capacitors

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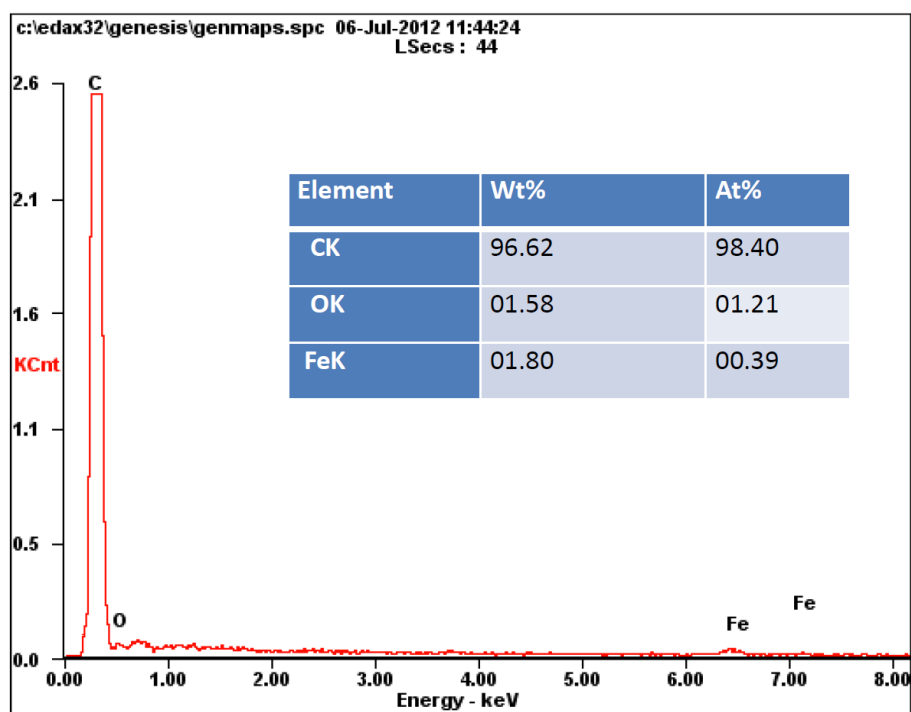


Figure S1. EDS of CNT/G fibers and the corresponding element content.

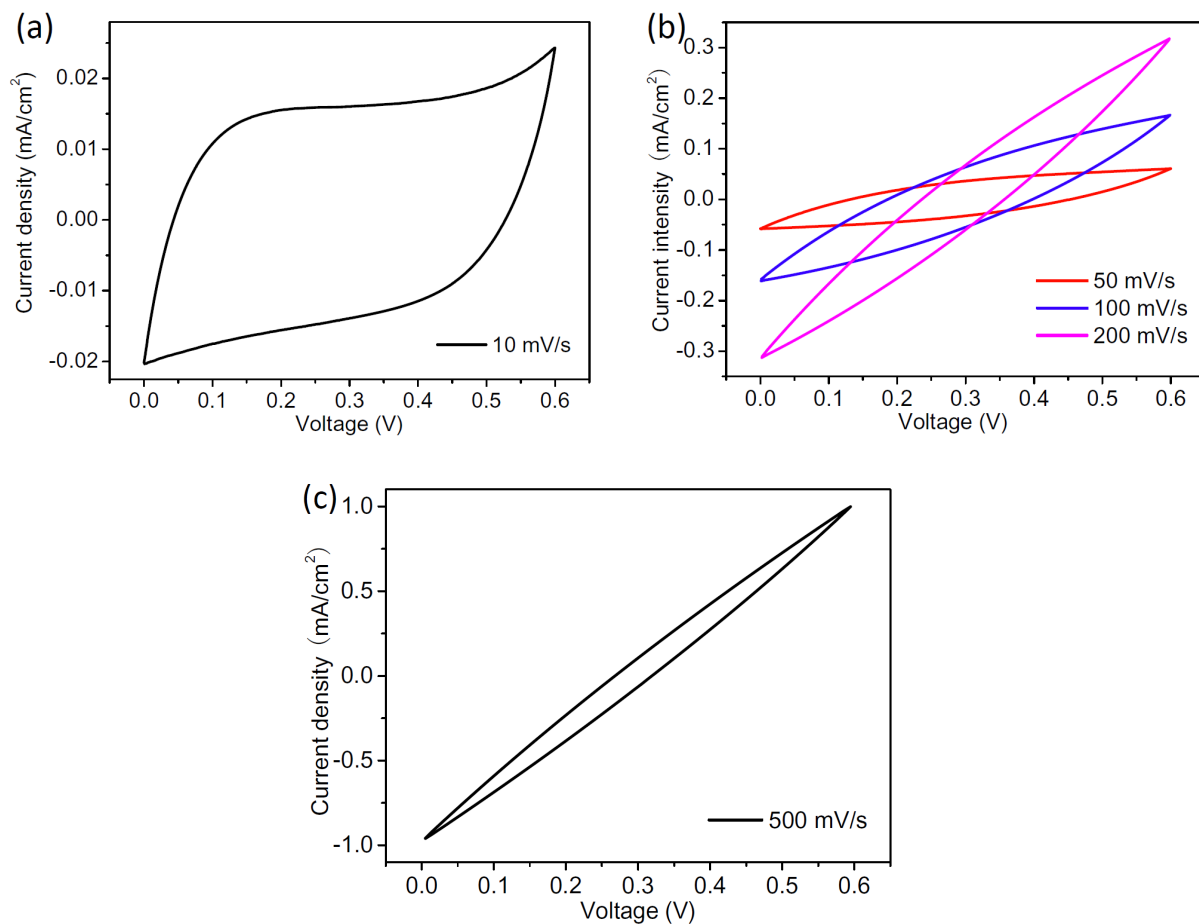


Figure S2. The CV curves of the neat graphene fiber at scan rate of 10 mV/s (a), 50–200 mV/s (b), and 500 mV/s (c) in 1M Na₂SO₄ aqueous solution.

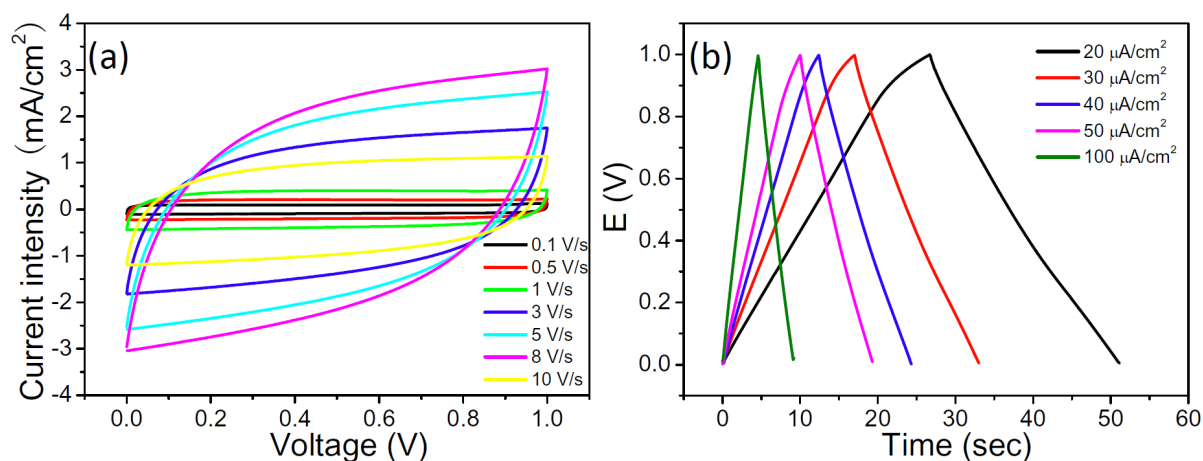


Figure S3. (a) CV curves of the supercapacitor of CNT/G fiber textile under the scan rate ranging from 0.1 to 10 V/s. (b) The galvanostatic charge-discharge curves at current density of 20-100 μ A/cm² of CNT/G fiber textile supercapacitor.

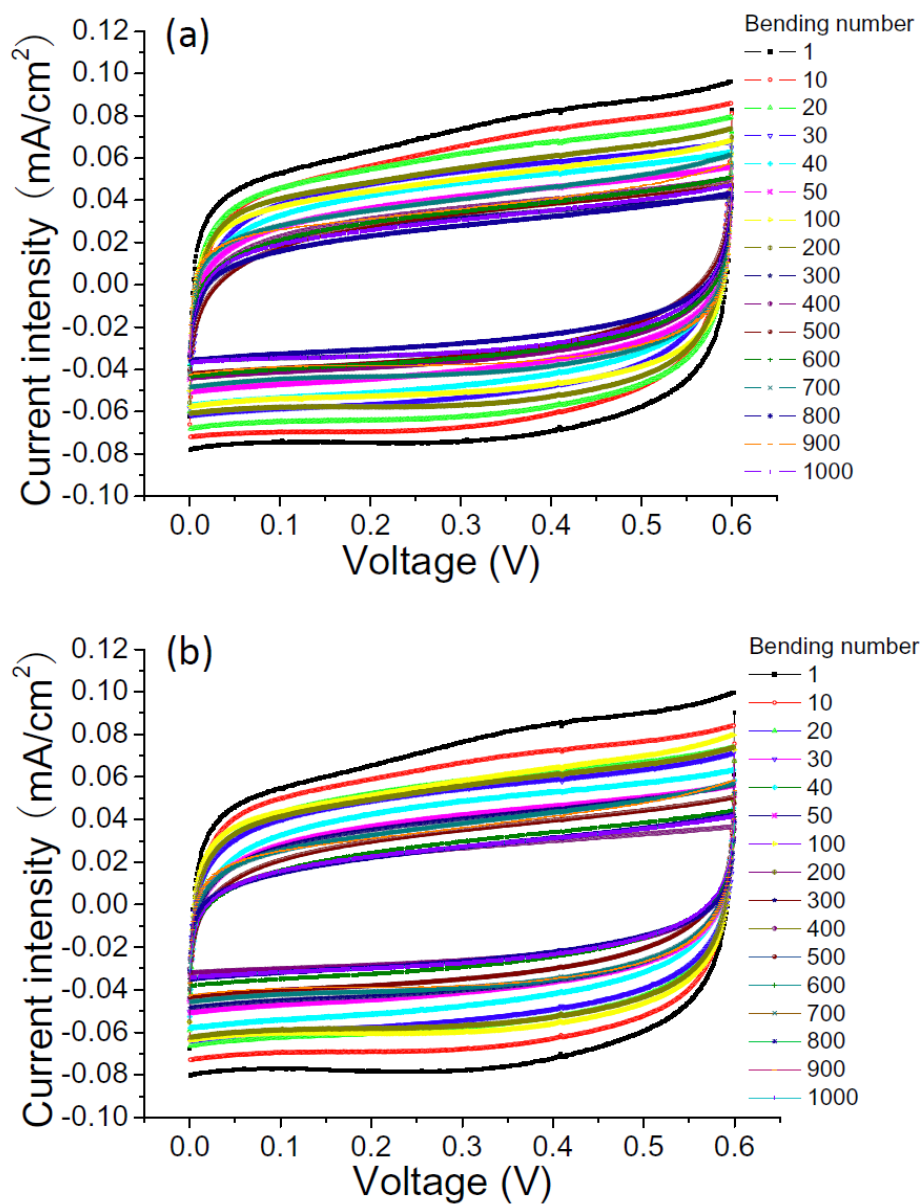


Figure S4. CV curves of CNT/G fiber textile supercapacitor undergoing the repeated flat-to-bending cycles at 200 mV/s scan rate in the flat (a) and the bending (b) states.

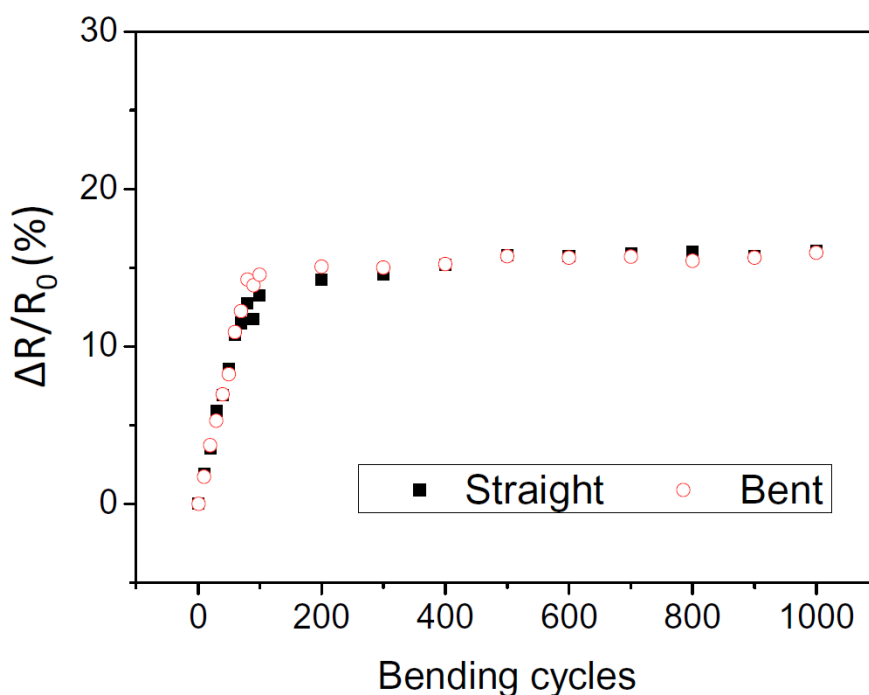


Figure S5. Electrical-resistance change of a CNT/G fiber upon the repeated bending for 1000 cycles.

Table S1. Typical EDL capacitance of some carbonaceous materials.

Materials	Current density and/or scan rate	Electrode system	Capacitance (F/g)	Ref.
N-doped graphene	1–33A/g, 20mV/s	Two	165–282	[s1]
N-doped graphene	0.5 –15A/g, 5mV/s	Two	99.6–145	[s2]
Graphene aerogel	0.05A/g	Two	128	[s3]
Graphene foam	0.5A/g	Two	110	[s4]
Graphene hydrogel	1A/g, 10mV/s & 20mv/s	Two	160±5	[s5]
3D macroporous Graphene	1A/g, 50mV/s	Three	202	[s6]

Exfoliated graphene	0.1A/g	Two	~150	[s7]
Exfoliated graphitic oxide	100mV/s	Two	117	[s8]
Chemical converted graphene sheets	0~100A/g, 2.0~10.0 V /s	Two	175–273	[s9]
Laser reduction of graphite oxide films	< 10A/g	Two	~276	[s10]
Chemically modified graphene		Two	135–128	[s11]
Graphene paper	1A/g, 5mV/s	Two	122	[s12]
Graphene composite	1A/g, 10-50mV/s	Two	100–250	[s13]
Graphene composite	0.1A/g	Two	205	[s14]
Graphene/Multiwalled -CNTs	2A/g	Two	ca. 150	[s15]
Graphene/Multiwalled -CNTs	0.1A/g	Two	318	[s16]
Graphene/Multiwalled -CNTs	20mV/s	Three	326.5	[s17]
Graphene/Single walled-CNTs	1A/g	Two	222	[s18]
Graphene/Single walled-CNTs	0.5A/g	Two	290.4 (aqueous), 201.0 (organic)	[s19]
Graphene/CNFs	1.25A/g	Three	197	[s20]
Carbon nanotubes (CNTs)			<135	[s21, s22, s23]
Activated carbon fibers (ACFs)			<370	[s21, s22]
Carbon cloth			<200	[s21]

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