

Supporting Information:

Polyaniline Nanofiber Wrapped Fabric for High Performance Flexible Pressure Sensors

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Table S1. Sheet resistance of the polyaniline (PANI) coated fabric

Test samples	Concentration of HCl	Sheet resistance (k Ω /sq)
Polyaniline fabric	0.5 mol/L	110.85 \pm 16.20
Polyaniline fabric	1.0 mol/L	32.90 \pm 8.81
Polyaniline fabric	2.0 mol/L	0.97 \pm 0.25

Table S2. Comparison of reported flexible pressure sensors.

Device type	Active materials	Linear pressure range	Sensitivity	Response time (ms)	Ref.
Resistive	CNT	<1.5 kPa	14.4 kPa ⁻¹ below 3.5 kPa, 7.8 kPa ⁻¹ for 3.5-15 kPa	24	1
Resistive	Graphene	0 to 10 kPa	8.5 kPa ⁻¹	40	2
Resistive	ACNT/ Graphene	0 to 0.3 kPa	19.8 kPa ⁻¹ below 0.3 kPa, 0.27 kPa ⁻¹ for 0.3-5.8 kPa	<16.7	3
Resistive	CSilkNM	<0.5 kPa	34.47 kPa ⁻¹ for 0.8-400 Pa, 1.16 kPa ⁻¹ for 400-5000 Pa	<16.6	4
Resistive	Graphene	0 to 2.6 kPa	25.1 kPa ⁻¹	120	5
Resistive	Graphene	0 to 25 kPa	1.2 kPa ⁻¹	-	6
Resistive	Graphene	0 to 0.2 kPa	110 kPa ⁻¹	30	7
Resistive	CB/PVDF- decorated knitted fabric	<1.2 kPa	\approx 1.5 kPa ⁻¹	2	8
Resistive	SWCNT film	0.6 Pa to 300 kPa	1.8 kPa ⁻¹	<10	9
Resistive	Carbonized crepe paper	0 to 0.42 kPa	5.67 kPa ⁻¹	<30	10
Resistive	Laser-scribed graphene	0 to 50 kPa	0.96 kPa ⁻¹ for 0-50 kPa, 0.005 kPa ⁻¹ for 50-113 kPa	72	11
Capacitance	CNT fiber/Ecoflex	0.38 Pa to 0.05 kPa	0.034-0.05 kPa ⁻¹ below 0.1 kPa, 0.5 MPa ⁻¹ above 10 kPa	\approx 63	12
Resistive	PANI	0 to 1.6 kPa	<1 kPa ⁻¹	400	13
Resistive	PANI	<2.2 kPa	Maximum 0.89 kPa ⁻¹	-	14
Resistive	PANI	0 to 4.5 kPa	46.48 kPa⁻¹	7	This work

CNT: carbon nanotube. ACNT: aligned carbon nanotube. CSilkNM: carbonized silk nanofiber membranes
SWCNT: single-walled carbon nanotube. PVDF: polyvinylidene fluoride.

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