

Carbonized Cotton Fabric for High-Performance Wear

Advanced Functional Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Biomass-derived flexible porous carbon materials and their applications in supercapacitor and gas adsorption. <i>Materials and Design</i> , 2017, 129, 164-172.	3.3	105
2	From wheat bran derived carbonaceous materials to a highly stretchable and durable strain sensor. <i>RSC Advances</i> , 2017, 7, 22619-22626.	1.7	21
3	Conductive thermoplastic polyurethane composites with tunable piezoresistivity by modulating the filler dimensionality for flexible strain sensors. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 101, 41-49.	3.8	155
4	Intrinsically Stretchable and Conductive Textile by a Scalable Process for Elastic Wearable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 13331-13338.	4.0	111
5	Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. <i>Small</i> , 2017, 13, 1602790.	5.2	690
6	An All-Silk-Derived Dual-Mode E-skin for Simultaneous Temperature–Pressure Detection. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39484-39492.	4.0	210
7	Three-Dimensional Flexible All-Organic Conductors for Multifunctional Wearable Applications. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 40580-40592.	4.0	15
8	Enabling high-volumetric-energy-density supercapacitors: designing open, low-tortuosity heteroatom-doped porous carbon-tube bundle electrodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23085-23093.	5.2	158
9	Engineering of carbon nanotube/polydimethylsiloxane nanocomposites with enhanced sensitivity for wearable motion sensors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11092-11099.	2.7	112
10	High-performance wearable strain sensors based on fragmented carbonized melamine sponges for human motion detection. <i>Nanoscale</i> , 2017, 9, 17948-17956.	2.8	75
11	Highly Stretchable, Ultrasensitive, and Wearable Strain Sensors Based on Facilely Prepared Reduced Graphene Oxide Woven Fabrics in an Ethanol Flame. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32054-32064.	4.0	156
12	Advanced carbon materials for flexible and wearable sensors. <i>Science China Materials</i> , 2017, 60, 1026-1062.	3.5	170
13	Pressure responsive PET fabrics via constructing conductive wrinkles at room temperature. <i>Chemical Engineering Journal</i> , 2017, 330, 146-156.	6.6	28
14	Weft–Knitted Fabric for a Highly Stretchable and Low–Voltage Wearable Heater. <i>Advanced Electronic Materials</i> , 2017, 3, 1700193.	2.6	133
15	Carbonized silk georgette as an ultrasensitive wearable strain sensor for full-range human activity monitoring. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7604-7611.	2.7	147
16	A flexible and self-formed sandwich structure strain sensor based on AgNW decorated electrospun fibrous mats with excellent sensing capability and good oxidation inhibition properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7035-7042.	2.7	100
17	Highly Sensitive and Stretchable Resistive Strain Sensors Based on Microstructured Metal Nanowire/Elastomer Composite Films. <i>Small</i> , 2018, 14, e1704232.	5.2	156
18	Through-Layer Buckle Wavelength-Gradient Design for the Coupling of High Sensitivity and Stretchability in a Single Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9653-9662.	4.0	29

#	ARTICLE	IF	CITATIONS
19	Functionalized Cellulose for Water Purification, Antimicrobial Applications, and Sensors. <i>Advanced Functional Materials</i> , 2018, 28, 1800409.	7.8	192
20	Lowering Internal Friction of 0D/1D/2D Ternary Nanocomposite-Based Strain Sensor by Fullerene to Boost the Sensing Performance. <i>Advanced Functional Materials</i> , 2018, 28, 1800850.	7.8	179
21	Vertical CNT/Ecoflex nanofins for highly linear broad-range-detection wearable strain sensors. <i>Journal of Materials Chemistry C</i> , 2018, 6, 5132-5139.	2.7	63
22	Mussel-Inspired Cellulose Nanocomposite Tough Hydrogels with Synergistic Self-Healing, Adhesive, and Strain-Sensitive Properties. <i>Chemistry of Materials</i> , 2018, 30, 3110-3121.	3.2	627
23	Carbon/graphene composite nanofiber yarns for highly sensitive strain sensors. <i>Materials and Design</i> , 2018, 143, 214-223.	3.3	126
24	Transparent and stretchable strain sensors based on metal nanowire microgrids for human motion monitoring. <i>Nanotechnology</i> , 2018, 29, 155501.	1.3	30
25	Strain-gauge sensing composite films with self-restoring water-repellent properties for monitoring human movements. <i>Composites Communications</i> , 2018, 7, 23-29.	3.3	23
26	Transparent Polymeric Strain Sensors for Monitoring Vital Signs and Beyond. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3895-3901.	4.0	85
27	Recent biomedical applications of bio-sourced materials. <i>Bio-Design and Manufacturing</i> , 2018, 1, 26-44.	3.9	13
28	A Transfer-Printed, Stretchable, and Reliable Strain Sensor Using PEDOT:PSS/Ag NW Hybrid Films Embedded into Elastomers. <i>Advanced Materials Technologies</i> , 2018, 3, 1800030.	3.0	42
29	Wearable strain sensing textile based on one-dimensional stretchable and weavable yarn sensors. <i>Nano Research</i> , 2018, 11, 5799-5811.	5.8	99
30	Flexible electrically resistive-type strain sensors based on reduced graphene oxide-decorated electrospun polymer fibrous mats for human motion monitoring. <i>Carbon</i> , 2018, 126, 360-371.	5.4	367
31	Highly sensitive, durable and stretchable plastic strain sensors using sandwich structures of PEDOT:PSS and an elastomer. <i>Materials Chemistry Frontiers</i> , 2018, 2, 355-361.	3.2	58
32	Highly stretchable fiber-shaped e-textiles for strain/pressure sensing, full-range human motions detection, health monitoring, and 2D force mapping. <i>Journal of Materials Science</i> , 2018, 53, 2995-3005.	1.7	70
33	CVD growth of fingerprint-like patterned 3D graphene film for an ultrasensitive pressure sensor. <i>Nano Research</i> , 2018, 11, 1124-1134.	5.8	185
34	Flexible strain sensors fabricated using carbon-based nanomaterials: A review. <i>Current Opinion in Solid State and Materials Science</i> , 2018, 22, 213-228.	5.6	161
35	Highly conductive and ultra-durable electronic textiles via covalent immobilization of carbon nanomaterials on cotton fabric. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12273-12282.	2.7	50
36	Cotton fabric and zeolitic imidazolate framework (ZIF-8) derived hierarchical nitrogen-doped porous carbon nanotubes/carbon fabric electrodes for all-solid-state supercapacitors. <i>Journal of Power Sources</i> , 2018, 402, 413-421.	4.0	39

#	ARTICLE	IF	CITATIONS
37	Coaxial carbon nanotube/polymer fibers as wearable piezoresistive sensors. <i>Sensors and Actuators A: Physical</i> , 2018, 284, 85-95.	2.0	39
38	Super-compressible, fatigue resistant and anisotropic carbon aerogels for piezoresistive sensors. <i>Cellulose</i> , 2018, 25, 7329-7340.	2.4	46
39	Highly sensitive, stretchable and wearable strain sensors using fragmented conductive cotton fabric. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10524-10531.	2.7	80
40	Comparison of Direct and Indirect Laser Ablation of Metallized Paper for Inexpensive Paper-Based Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 36332-36341.	4.0	23
41	A highly stretchable carbon nanotubes/thermoplastic polyurethane fiber-shaped strain sensor with porous structure for human motion monitoring. <i>Composites Science and Technology</i> , 2018, 168, 126-132.	3.8	127
42	Directly printed wearable electronic sensing textiles towards human-machine interfaces. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12841-12848.	2.7	54
43	Flexible and Anisotropic Strain Sensor Based on Carbonized Crepe Paper with Aligned Cellulose Fibers. <i>Advanced Functional Materials</i> , 2018, 28, 1802547.	7.8	228
44	Highly Stretchable Multifunctional Wearable Devices Based on Conductive Cotton and Wool Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20845-20853.	4.0	128
45	A highly sensitive strain sensor based on a carbonized polyacrylonitrile nanofiber woven fabric. <i>Journal of Materials Science</i> , 2018, 53, 11917-11931.	1.7	36
46	The effect of dual-scale carbon fibre network on sensitivity and stretchability of wearable sensors. <i>Composites Science and Technology</i> , 2018, 165, 131-139.	3.8	31
47	Isotropic Paper Directly from Anisotropic Wood: Top-Down Green Transparent Substrate Toward Biodegradable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28566-28571.	4.0	79
48	Multilayer Graphene Epidermal Electronic Skin. <i>ACS Nano</i> , 2018, 12, 8839-8846.	7.3	257
49	Polydimethylsiloxane (PDMS)-Based Flexible Resistive Strain Sensors for Wearable Applications. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 345.	1.3	170
50	Conductive Cotton Fabrics for Motion Sensing and Heating Applications. <i>Polymers</i> , 2018, 10, 568.	2.0	76
51	Flexible, Stretchable Sensors for Wearable Health Monitoring: Sensing Mechanisms, Materials, Fabrication Strategies and Features. <i>Sensors</i> , 2018, 18, 645.	2.1	258
52	Fibrous strain sensor with ultra-sensitivity, wide sensing range, and large linearity for full-range detection of human motion. <i>Nanoscale</i> , 2018, 10, 17512-17519.	2.8	46
53	3D Graphene Films Enable Simultaneously High Sensitivity and Large Stretchability for Strain Sensors. <i>Advanced Functional Materials</i> , 2018, 28, 1803221.	7.8	89
54	From Wood to Textiles: Top-Down Assembly of Aligned Cellulose Nanofibers. <i>Advanced Materials</i> , 2018, 30, e1801347.	11.1	121

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55	Recent developments in bio-monitoring via advanced polymer nanocomposite-based wearable strain sensors. <i>Biosensors and Bioelectronics</i> , 2019, 123, 167-177.	5.3	274
56	All-Textile Electronic Skin Enabled by Highly Elastic Spacer Fabric and Conductive Fibers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 33336-33346.	4.0	81
57	Multicolored Photonic Crystal Carbon Fiber Yarns and Fabrics with Mechanical Robustness for Thermal Management. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 32261-32268.	4.0	27
58	Porous Fibers Composed of Polymer Nanoball Decorated Graphene for Wearable and Highly Sensitive Strain Sensors. <i>Advanced Functional Materials</i> , 2019, 29, 1903732.	7.8	111
59	Ultra-Stretchable Porous Fiber-Shaped Strain Sensor with Exponential Response in Full Sensing Range and Excellent Anti-Interference Ability toward Buckling, Torsion, Temperature, and Humidity. <i>Advanced Electronic Materials</i> , 2019, 5, 1900538.	2.6	63
60	Polyaniline Nanofiber Wrapped Fabric for High Performance Flexible Pressure Sensors. <i>Polymers</i> , 2019, 11, 1120.	2.0	39
61	Biomimetic printable nanocomposite for healable, ultrasensitive, stretchable and ultradurable strain sensor. <i>Nano Energy</i> , 2019, 63, 103898.	8.2	53
62	One-step firing of cellulose fiber and ceramic precursors for functional electro-thermal composites. <i>Materials and Design</i> , 2019, 181, 107941.	3.3	11
63	Semiliquid Metal Enabled Highly Conductive Wearable Electronics for Smart Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30019-30027.	4.0	65
64	A numerical calculation method for the precise prediction analysis of relationship between nanostructure and strain sensitivity. <i>AIP Advances</i> , 2019, 9, 065015.	0.6	1
65	PEDOT:PSS for Flexible and Stretchable Electronics: Modifications, Strategies, and Applications. <i>Advanced Science</i> , 2019, 6, 1900813.	5.6	563
66	Highly Stretchable and Self-Healing Strain Sensors Based on Nanocellulose-Supported Graphene Dispersed in Electro-Conductive Hydrogels. <i>Nanomaterials</i> , 2019, 9, 937.	1.9	112
67	Molten Salt Pyrolysis of Melamine-Modified Denim Fabric Waste into Nitrogen-Doped Activated Carbon for Supercapacitor Applications. <i>ChemistrySelect</i> , 2019, 4, 7649-7658.	0.7	14
68	Turning cotton into tough energy textile via metal oxide assisted carbonization. <i>Carbon</i> , 2019, 153, 257-264.	5.4	12
69	Carbonized Chinese Art Paper-Based High-Performance Wearable Strain Sensor for Human Activity Monitoring. <i>ACS Applied Electronic Materials</i> , 2019, 1, 2415-2421.	2.0	38
70	Conductive Hierarchical Hairy Fibers for Highly Sensitive, Stretchable, and Water-Resistant Multimodal Gesture-Distinguishable Sensor, VR Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1905808.	7.8	78
71	Multifunctional Micro/Nanoscale Fibers Based on Microfluidic Spinning Technology. <i>Advanced Materials</i> , 2019, 31, e1903733.	11.1	161
72	Ti ₃ C ₂ T _x MXene-graphene composite films for wearable strain sensors featured with high sensitivity and large range of linear response. <i>Nano Energy</i> , 2019, 66, 104134.	8.2	149

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73	Inspiration from Daily Goods: A Low-Cost, Facilely Fabricated, and Environment-Friendly Strain Sensor Based on Common Carbon Ink and Elastic Core-Spun Yarn. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17474-17481.	3.2	76
74	An ultra-stretchable, highly sensitive and biocompatible capacitive strain sensor from an ionic nanocomposite for on-skin monitoring. <i>Nanoscale</i> , 2019, 11, 1570-1578.	2.8	137
75	Ultrasensitive Anti-Interference Voice Recognition by Bio-Inspired Skin-Attachable Self-Cleaning Acoustic Sensors. <i>ACS Nano</i> , 2019, 13, 13293-13303.	7.3	122
76	Flexible Integrated Sensors: Transverse Piezoresistance and Longitudinal Thermal Resistance of One Single Carbon Fiber Beam. <i>Advanced Materials Technologies</i> , 2019, 4, 1900802.	3.0	15
77	Preparation of a Highly Sensitive and Stretchable Strain Sensor of MXene/Silver Nanocomposite-Based Yarn and Wearable Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45930-45938.	4.0	128
78	Carbon Black from Diesel Soot for High-Performance Wearable Pressure Sensors. <i>Advanced Materials Technologies</i> , 2019, 4, 1900475.	3.0	28
79	Willow-like portable triboelectric respiration sensor based on polyethylenimine-assisted CO ₂ capture. <i>Nano Energy</i> , 2019, 65, 103990.	8.2	23
80	Wearable gas/strain sensors based on reduced graphene oxide/linen fabrics. <i>Frontiers of Materials Science</i> , 2019, 13, 305-313.	1.1	20
81	One-step growth of large-area silicon nanowire fabrics for high-performance multifunctional wearable sensors. <i>Nano Research</i> , 2019, 12, 2723-2728.	5.8	11
82	Highly Stretchable and Sensitive Strain Sensor with Porous Segregated Conductive Network. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37094-37102.	4.0	116
83	Reduced Graphene Oxide/Mesoporous ZnO NSs Hybrid Fibers for Flexible, Stretchable, Twisted, and Wearable NO ₂ E-Textile Gas Sensor. <i>ACS Sensors</i> , 2019, 4, 2809-2818.	4.0	114
84	High Temperature Sensitivity Pressure Sensors Based on Filter Paper as a Mold. <i>Journal of the Electrochemical Society</i> , 2019, 166, B1286-B1292.	1.3	6
85	All-printed, low-cost, tunable sensing range strain sensors based on Ag nanodendrite conductive inks for wearable electronics. <i>Journal of Materials Chemistry C</i> , 2019, 7, 809-818.	2.7	82
86	Stretchable and Highly Sensitive Braided Composite Yarn@Polydopamine@Polypyrrole for Wearable Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7338-7348.	4.0	88
87	Significant Stretchability Enhancement of a Crack-Based Strain Sensor Combined with High Sensitivity and Superior Durability for Motion Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7405-7414.	4.0	243
88	Textile strain sensors: a review of the fabrication technologies, performance evaluation and applications. <i>Materials Horizons</i> , 2019, 6, 219-249.	6.4	289
89	Highly sensitive graphene platelets and multi-walled carbon nanotube-based flexible strain sensor for monitoring human joint bending. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	33
90	A highly sensitive and stress-direction-recognizing asterisk-shaped carbon nanotube strain sensor. <i>Journal of Materials Chemistry C</i> , 2019, 7, 9504-9512.	2.7	26

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91	Scalable Manufactured Self-Healing Strain Sensors Based on Ion-Intercalated Graphene Nanosheets and Interfacial Coordination. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23527-23534.	4.0	23
92	Hollow core–sheath nanocarbon spheres grown on carbonized silk fabrics for self-supported and nonenzymatic glucose sensing. <i>Nanoscale</i> , 2019, 11, 11856-11863.	2.8	33
93	A bioinspired multi-functional wearable sensor with an integrated light-induced actuator based on an asymmetric graphene composite film. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6879-6888.	2.7	42
94	MoS ₂ -Decorated Laser-Induced Graphene for a Highly Sensitive, Hysteresis-free, and Reliable Piezoresistive Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 22531-22542.	4.0	120
95	A highly flexible and multifunctional strain sensor based on a network-structured MXene/polyurethane mat with ultra-high sensitivity and a broad sensing range. <i>Nanoscale</i> , 2019, 11, 9949-9957.	2.8	150
96	Mechanically Flexible Conductors for Stretchable and Wearable e–Skin and e–Textile Devices. <i>Advanced Materials</i> , 2019, 31, e1901408.	11.1	313
97	A high-sensitivity and low-hysteresis flexible pressure sensor based on carbonized cotton fabric. <i>Sensors and Actuators A: Physical</i> , 2019, 294, 45-53.	2.0	27
98	Fluorine-free Superhydrophobic and Conductive Rubber Composite with Outstanding Deicing Performance for Highly Sensitive and Stretchable Strain Sensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 17774-17783.	4.0	78
99	Transfer-Medium-Free Nanofiber-Reinforced Graphene Film and Applications in Wearable Transparent Pressure Sensors. <i>ACS Nano</i> , 2019, 13, 5541-5548.	7.3	96
100	Bioinspired Pretextured Reduced Graphene Oxide Patterns with Multiscale Topographies for High-Performance Mechanosensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 18645-18653.	4.0	15
101	Carbonized cotton fabric-based multilayer piezoresistive pressure sensors. <i>Cellulose</i> , 2019, 26, 5001-5014.	2.4	44
102	Highly stretchable multi-walled carbon nanotube/thermoplastic polyurethane composite fibers for ultrasensitive, wearable strain sensors. <i>Nanoscale</i> , 2019, 11, 5884-5890.	2.8	162
103	Carbon-Based Materials for Humidity Sensing: A Short Review. <i>Micromachines</i> , 2019, 10, 232.	1.4	98
104	Textile–Based Wireless Pressure Sensor Array for Human–Interactive Sensing. <i>Advanced Functional Materials</i> , 2019, 29, 1808786.	7.8	122
105	A Wireless Flexible Pressure Sensor for Human Motion Detection. , 2019, , .		2
106	Supramolecular nanofibrillar hydrogels as highly stretchable, elastic and sensitive ionic sensors. <i>Materials Horizons</i> , 2019, 6, 326-333.	6.4	327
107	Design of High-Performance Wearable Energy and Sensor Electronics from Fiber Materials. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2120-2129.	4.0	52
108	Bioinspired Ultrasensitive and Stretchable MXene-Based Strain Sensor via Nacre-Mimetic Microscale –Brick-and-Mortar–Architecture. <i>ACS Nano</i> , 2019, 13, 649-659.	7.3	320

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109	Adhesion-Free Thin-Film-Like Curvature Sensors Integrated on Flexible and Wearable Electronics for Monitoring Bending of Joints and Various Body Gestures. <i>Advanced Materials Technologies</i> , 2019, 4, 1800327.	3.0	41
110	Design of Helically Double-Leveled Gaps for Stretchable Fiber Strain Sensor with Ultralow Detection Limit, Broad Sensing Range, and High Repeatability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4345-4352.	4.0	91
111	Cowpea-structured PVDF/ZnO nanofibers based flexible self-powered piezoelectric bending motion sensor towards remote control of gestures. <i>Nano Energy</i> , 2019, 55, 516-525.	8.2	331
112	Advanced Carbon for Flexible and Wearable Electronics. <i>Advanced Materials</i> , 2019, 31, e1801072.	11.1	779
113	Highly stretchable and durable strain sensor based on carbon nanotubes decorated thermoplastic polyurethane fibrous network with aligned wave-like structure. <i>Chemical Engineering Journal</i> , 2019, 360, 762-777.	6.6	190
114	Recent Advances in 1D Stretchable Electrodes and Devices for Textile and Wearable Electronics: Materials, Fabrications, and Applications. <i>Advanced Materials</i> , 2020, 32, e1902532.	11.1	219
115	In situ hydrothermal growth of Cu NPs on knitted fabrics through polydopamine templates for heating and sensing. <i>Chemical Engineering Journal</i> , 2020, 382, 123036.	6.6	63
116	Smart Textile-Integrated Microelectronic Systems for Wearable Applications. <i>Advanced Materials</i> , 2020, 32, e1901958.	11.1	427
117	Flexible Hybrid Sensors for Health Monitoring: Materials and Mechanisms to Render Wearability. <i>Advanced Materials</i> , 2020, 32, e1902133.	11.1	232
118	Textile-Based Strain Sensor for Human Motion Detection. <i>Energy and Environmental Materials</i> , 2020, 3, 80-100.	7.3	159
119	Environmentally-Friendly and Multifunctional Graphene-Silk Fabric Strain Sensor for Human Motion Detection. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901507.	1.9	65
120	A semi-interpenetrating network ionic hydrogel for strain sensing with high sensitivity, large strain range, and stable cycle performance. <i>Chemical Engineering Journal</i> , 2020, 385, 123912.	6.6	128
121	Highly Conductive PVA/Ag Coating by Aqueous in Situ Reduction and Its Stretchable Structure for Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 1427-1435.	4.0	36
122	Recent progress on flexible and stretchable piezoresistive strain sensors: From design to application. <i>Progress in Materials Science</i> , 2020, 114, 100617.	16.0	267
123	Effects of carbonization temperature and substrate concentration on the sensing performance of flexible pressure sensor. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	8
124	Physical sensors for skin-inspired electronics. <i>Informa-Ån-Å-Materi-Åly</i> , 2020, 2, 184-211.	8.5	159
125	Highly sensitive and durable wearable strain sensors from a core-sheath nanocomposite yarn. <i>Composites Part B: Engineering</i> , 2020, 183, 107683.	5.9	38
126	Fabrication, characterization and modelling of triple hierarchic PET/CB/TPU composite fibres for strain sensing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 129, 105724.	3.8	39

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127	High-Performance Flexible Sensors of Self-Healing, Reversibly Adhesive, and Stretchable Hydrogels for Monitoring Large and Subtle Strains. <i>Macromolecular Materials and Engineering</i> , 2020, 305, 1900621.	1.7	19
128	Smart Urban Living: Enabling Emotion-Guided Interaction With Next Generation Sensing Fabric. <i>IEEE Access</i> , 2020, 8, 28395-28402.	2.6	7
129	Utilizing human hair for solid-state flexible fiber-based asymmetric supercapacitors. <i>Applied Surface Science</i> , 2020, 508, 145260.	3.1	21
130	Patterned Carbon Nanotube Bundles as Stretchable Strain Sensors for Human Motion Detection. <i>ACS Applied Nano Materials</i> , 2020, 3, 11408-11415.	2.4	13
131	Substrate-Free Multilayer Graphene Electronic Skin for Intelligent Diagnosis. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49945-49956.	4.0	43
132	Ultra-sensitive and durable strain sensor with sandwich structure and excellent anti-interference ability for wearable electronic skins. <i>Composites Science and Technology</i> , 2020, 200, 108448.	3.8	85
133	Textile Electronics for VR/AR Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2007254.	7.8	50
134	High-Performance Fiber-Film Hybrid-Structured Wearable Strain Sensor from a Highly Robust and Conductive Carbonized Bamboo Aerogel. <i>ACS Applied Bio Materials</i> , 2020, 3, 8748-8756.	2.3	12
135	A wearable strain sensor based on carbon derived from linen fabrics. <i>New Carbon Materials</i> , 2020, 35, 522-530.	2.9	14
136	Recent Advances of Carbon-Based Flexible Strain Sensors in Physiological Signal Monitoring. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2282-2300.	2.0	64
137	High performance flexible wearable strain sensor based on rGO and AgNWs decorated PBT melt-blown non-woven fabrics. <i>Sensors and Actuators A: Physical</i> , 2020, 315, 112174.	2.0	15
138	Advances in chemical sensing technology for enabling the next-generation self-sustainable integrated wearable system in the IoT era. <i>Nano Energy</i> , 2020, 78, 105155.	8.2	105
139	Highly Filled Glycerol/Graphite Suspensions as Fluidic Soft Sensors and Their Responsive Mechanism to Shear. <i>Advanced Materials Technologies</i> , 2020, 5, 2000508.	3.0	2
140	Wearable MXene nanocomposites-based strain sensor with tile-like stacked hierarchical microstructure for broad-range ultrasensitive sensing. <i>Nano Energy</i> , 2020, 78, 105187.	8.2	140
141	A durable nanomesh on-skin strain gauge for natural skin motion monitoring with minimum mechanical constraints. <i>Science Advances</i> , 2020, 6, eabb7043.	4.7	155
142	Weavable and stretchable piezoresistive carbon nanotubes-embedded nanofiber sensing yarns for highly sensitive and multimodal wearable textile sensor. <i>Carbon</i> , 2020, 170, 464-476.	5.4	94
143	Inorganic Photonic Microspheres with Localized Concentric Ordering for Deep Pattern Encoding and Triple Sensory Microsensor. <i>Small</i> , 2020, 16, e2003638.	5.2	10
144	Multifunctional Wearable Strain Sensor Made with an Elastic Interwoven Fabric for Patients with Motor Dysfunction. <i>Advanced Materials Technologies</i> , 2020, 5, 2000560.	3.0	21

#	ARTICLE	IF	CITATIONS
145	Reduced graphene oxide-coated carbonized cotton fabric wearable strain sensors with ultralow detection limit. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 17233-17248.	1.1	14
146	Contact/Release Coordinated Antibacterial Cotton Fabrics Coated with N-Halamine and Cationic Antibacterial Agent for Durable Bacteria-Killing Application. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6531.	1.8	5
147	Overlarge Gauge Factor Yields a Large Measuring Error for Resistive-type Stretchable Strain Sensors. <i>Advanced Electronic Materials</i> , 2020, 6, 2000618.	2.6	12
148	Biocompatible, Flexible Strain Sensor Fabricated with Polydopamine-Coated Nanocomposites of Nitrile Rubber and Carbon Black. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 42140-42152.	4.0	78
149	Mechanically Cloaked Multiphase Magnetic Elastomer Soft Composites for Wearable Wireless Power Transfer. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 50909-50917.	4.0	21
150	Flexible strain sensor based on biomass-derived material. <i>Polymer Composites</i> , 2020, 41, 3459-3467.	2.3	10
151	Highly sensitive and stretchable strain sensors based on serpentine-shaped composite films for flexible electronic skin applications. <i>Composites Science and Technology</i> , 2020, 197, 108215.	3.8	73
152	Strain based electrical resistance behaviour of graphene-coated elastomeric yarns. <i>Materials Letters</i> , 2020, 273, 127948.	1.3	6
153	Graphene decorated carbonized cellulose fabric for physiological signal monitoring and energy harvesting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12665-12673.	5.2	68
154	Highly Stretchable Sheath-Core Yarns for Multifunctional Wearable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29717-29727.	4.0	20
155	Sensitive piezoresistive sensors using ink-modified plant fiber sponges. <i>Chemical Engineering Journal</i> , 2020, 401, 126029.	6.6	22
156	Fully-Textile Seam-Line Sensors for Facile Textile Integration and Tunable Multi-Modal Sensing of Pressure, Humidity, and Wetness. <i>Advanced Materials Technologies</i> , 2020, 5, 2000155.	3.0	14
157	Wearable and Stretchable Strain Sensors: Materials, Sensing Mechanisms, and Applications. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000039.	3.3	327
158	Development and fabrication of highly flexible, stretchable, and sensitive strain sensor for long durability based on silver nanoparticles-polydimethylsiloxane composite. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 11897-11910.	1.1	21
159	Tailoring sensing behavior of Cu@multi-wall carbon nanotubes/polydimethylsiloxane strain sensors through surface Cu geometrical structures. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5202-5210.	2.7	8
160	Highly Air/Water-Permeable Hierarchical Mesh Architectures for Stretchable Underwater Electronic Skin Patches. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 14425-14432.	4.0	34
161	Highly Tough, Stretchable, Self-Adhesive and Strain-Sensitive DNA-Inspired Hydrogels for Monitoring Human Motion. <i>Chemistry - A European Journal</i> , 2020, 26, 11604-11613.	1.7	13
162	Linearly Sensitive and Flexible Pressure Sensor Based on Porous Carbon Nanotube/Polydimethylsiloxane Composite Structure. <i>Polymers</i> , 2020, 12, 1499.	2.0	31

#	ARTICLE	IF	CITATIONS
163	Kraft lignin-based piezoresistive sensors: Effect of chemical structure on the microstructure of ultrathin carbon fibers. <i>International Journal of Biological Macromolecules</i> , 2020, 151, 730-739.	3.6	13
164	Natural Biopolymers for Flexible Sensing and Energy Devices. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2020, 38, 459-490.	2.0	69
165	Molybdenum Disulfide Nanosheets Aligned Vertically on Carbonized Silk Fabric as Smart Textile for Wearable Pressure-Sensing and Energy Devices. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11825-11832.	4.0	67
166	Scalable manufacturing of real-time self-healing strain sensors based on brominated natural rubber. <i>Chemical Engineering Journal</i> , 2020, 389, 124448.	6.6	72
167	Solution-Processed Sensing Textiles with Adjustable Sensitivity and Linear Detection Range Enabled by Twisting Structure. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 12155-12164.	4.0	28
168	Moisture-Resilient Graphene-Dyed Wool Fabric for Strain Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13265-13274.	4.0	60
169	Dynamic Measurement of Legs Motion in Sagittal Plane Based on Soft Wearable Sensors. <i>Journal of Sensors</i> , 2020, 2020, 1-10.	0.6	10
170	Flexible TPU strain sensors with tunable sensitivity and stretchability by coupling AgNWs with rGO. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4040-4048.	2.7	70
171	Superelastic EGaIn Composite Fibers Sustaining 500% Tensile Strain with Superior Electrical Conductivity for Wearable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6112-6118.	4.0	113
172	Growing NiS ₂ nanosheets on porous carbon microtubes for hybrid sodium-ion capacitors. <i>Journal of Power Sources</i> , 2020, 451, 227737.	4.0	55
173	Highly stretchable and durable fiber-shaped strain sensor with porous core-sheath structure for human motion monitoring. <i>Composites Science and Technology</i> , 2020, 189, 108038.	3.8	81
174	Multifunctional Conductive Hydrogel/Thermochromic Elastomer Hybrid Fibers with a Core-Shell Segmental Configuration for Wearable Strain and Temperature Sensors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 7565-7574.	4.0	114
175	Mechanically and Electronically Robust Transparent Organohydrogel Fibers. <i>Advanced Materials</i> , 2020, 32, e1906994.	11.1	207
176	Reduced graphene oxide-based highly sensitive pressure sensor for wearable electronics via an ordered structure and enhanced interlayer interaction mechanism. <i>RSC Advances</i> , 2020, 10, 2150-2159.	1.7	33
177	A wearable breathable pressure sensor from metal-organic framework derived nanocomposites for highly sensitive broad-range healthcare monitoring. <i>Nano Energy</i> , 2020, 70, 104560.	8.2	118
178	Fabrication of aramid nanofiber-wrapped graphene fibers by coaxial spinning. <i>Carbon</i> , 2020, 165, 340-348.	5.4	23
179	Facile Fabrication of High-Performance Pen Ink-Decorated Textile Strain Sensors for Human Motion Detection. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 19874-19881.	4.0	74
180	A highly stretchable strain sensor based on CNT/graphene/fullerene-SEBS. <i>RSC Advances</i> , 2020, 10, 11225-11232.	1.7	45

#	ARTICLE	IF	CITATIONS
181	Ultrasensitive micro/nanocrack-based graphene nanowall strain sensors derived from the substrate's Poisson's ratio effect. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10310-10317.	5.2	28
182	Multimodal Capacitive and Piezoresistive Sensor for Simultaneous Measurement of Multiple Forces. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22179-22190.	4.0	66
183	Nano Carbon Black-Based High Performance Wearable Pressure Sensors. <i>Nanomaterials</i> , 2020, 10, 664.	1.9	40
184	High-performance ionic conductive poly(vinyl alcohol) hydrogels for flexible strain sensors based on a universal soaking strategy. <i>Materials Chemistry Frontiers</i> , 2021, 5, 315-323.	3.2	51
185	One-pot synthesis of multi-functional cellulose-based ionic conductive organohydrogel with low-temperature strain sensitivity. <i>Carbohydrate Polymers</i> , 2021, 251, 117019.	5.1	27
186	Eco-friendly Strategies for the Material and Fabrication of Wearable Sensors. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2021, 8, 1323-1346.	2.7	35
187	Textile Technology for Soft Robotic and Autonomous Garments. <i>Advanced Functional Materials</i> , 2021, 31, 2008278.	7.8	127
188	Review of flexible strain sensors based on cellulose composites for multi-faceted applications. <i>Cellulose</i> , 2021, 28, 615-645.	2.4	39
189	Unpredictable recombination of PB transposon in Silkworm: a potential risk. <i>Molecular Genetics and Genomics</i> , 2021, 296, 271-277.	1.0	2
190	Multifunctional and Ultrasensitive-Reduced Graphene Oxide and Pen Ink/Polyvinyl Alcohol-Decorated Modal/Spandex Fabric for High-Performance Wearable Sensors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 2100-2109.	4.0	43
191	Developing Conductive Fabric Threads for Human Respiratory Rate Monitoring. <i>IEEE Sensors Journal</i> , 2021, 21, 4350-4356.	2.4	20
192	Emerging cellulose-derived materials: a promising platform for the design of flexible wearable sensors toward health and environment monitoring. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2051-2091.	3.2	54
193	Facile fabrication of highly conductive, waterproof, and washable e-textiles for wearable applications. <i>Nano Research</i> , 2021, 14, 1043-1052.	5.8	46
194	Freestanding MoS ₂ @carbonized cellulose aerogel derived from waste cotton for sustainable and highly efficient particulate matter capturing. <i>Separation and Purification Technology</i> , 2021, 254, 117571.	3.9	23
195	Natural Biopolymer-Based Biocompatible Conductors for Stretchable Bioelectronics. <i>Chemical Reviews</i> , 2021, 121, 2109-2146.	23.0	199
196	Ultra-sensitive flexible sandwich structural strain sensors based on a silver nanowire supported PDMS/PVDF electrospun membrane substrate. <i>Journal of Materials Chemistry C</i> , 2021, 9, 2752-2762.	2.7	41
197	Anisotropic conductive networks for multidimensional sensing. <i>Materials Horizons</i> , 2021, 8, 2615-2653.	6.4	30
198	Highly Sensitive and Selective Two-Dimensional Resistance Strain Sensor Based on Carbonized Silk Fiber. <i>Material Sciences</i> , 2021, 11, 151-159.	0.0	0

#	ARTICLE	IF	CITATIONS
199	Hollow-porous fibers for intrinsically thermally insulating textiles and wearable electronics with ultrahigh working sensitivity. <i>Materials Horizons</i> , 2021, 8, 1037-1046.	6.4	59
200	Anisotropy of resistance-type strain sensing networks based on aligned carbon nanofiber membrane. <i>Journal of Materials Science</i> , 2021, 56, 6292-6305.	1.7	13
201	High sensitivity and flexible fabric strain sensor based on electrochemical graphene. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SCCD04.	0.8	8
202	Flexible and Sensitivity-Adjustable Pressure Sensors Based on Carbonized Bacterial Nanocellulose/Wood-Derived Cellulose Nanofibril Composite Aerogels. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8754-8763.	4.0	76
203	Wearable Carbon-Based Resistive Sensors for Strain Detection: A Review. <i>IEEE Sensors Journal</i> , 2021, 21, 4030-4043.	2.4	40
204	High-Performance Wearable Strain Sensor Based on MXene@Cotton Fabric with Network Structure. <i>Nanomaterials</i> , 2021, 11, 889.	1.9	31
205	Self-Restoring Capacitive Pressure Sensor Based on Three-Dimensional Porous Structure and Shape Memory Polymer. <i>Polymers</i> , 2021, 13, 824.	2.0	11
206	High Sensitivity Polyurethane-Based Fiber Strain Sensor with Porous Structure via Incorporation of Bacterial Cellulose Nanofibers. <i>Advanced Electronic Materials</i> , 2021, 7, 2001235.	2.6	27
207	A Highly Stable and Durable Capacitive Strain Sensor Based on Dynamically Super-Tough Hydro/Organo-Gels. <i>Advanced Functional Materials</i> , 2021, 31, 2010830.	7.8	84
208	High-performance strain sensors based on bilayer carbon black/PDMS hybrids. <i>Advanced Composites and Hybrid Materials</i> , 2021, 4, 514-520.	9.9	70
209	Printable wet-resistive textile strain sensors using bead-blended composite ink for robustly integrative wearable electronics. <i>Composites Part B: Engineering</i> , 2021, 210, 108674.	5.9	29
210	A Sensitive and Response-Stable Strain Sensor with 30% Sensing Regions. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2021, 16, 597-601.	0.1	1
211	Strategies for Scalable Gas-Phase Preparation of Free-Standing Graphene. <i>CCS Chemistry</i> , 2021, 3, 1058-1077.	4.6	7
212	Carbonized Cellulose Nanofibril with Individualized Fibrous Morphology: toward Multifunctional Applications in Polycaprolactone Conductive Composites. <i>ACS Applied Bio Materials</i> , 2021, 4, 5169-5179.	2.3	3
213	Solution-based deposition of nano-embossed metal electrodes on cotton fabrics for wearable heaters and supercapacitors. <i>International Journal of Energy Research</i> , 2021, 45, 15438-15451.	2.2	6
214	Wearable Strain Sensors with Aligned Macro Carbon Cracks Using a Two-Dimensional Triaxial-Braided Fabric Structure for Monitoring Human Health. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22926-22934.	4.0	30
215	Anisotropic, Wrinkled, and Crack-Bridging Structure for Ultrasensitive, Highly Selective Multidirectional Strain Sensors. <i>Nano-Micro Letters</i> , 2021, 13, 122.	14.4	74
216	Materials, Electrical Performance, Mechanisms, Applications, and Manufacturing Approaches for Flexible Strain Sensors. <i>Nanomaterials</i> , 2021, 11, 1220.	1.9	35

#	ARTICLE	IF	CITATIONS
217	A Novel Oriented CNT fiber/PDMS Elastic Conductive Composite with Reversible Two-Stage Conductivity. <i>Nano</i> , 2021, 16, 2150062.	0.5	0
218	Preparation of Laser-Induced Graphene Fabric from Silk and Its Application Examples for Flexible Sensor. <i>Advanced Engineering Materials</i> , 2021, 23, 2100195.	1.6	24
219	Light-weight strain sensor based on carbon nanotube/epoxy composite yarn. <i>Journal of Materials Science</i> , 2021, 56, 13156-13164.	1.7	7
220	Multi-functionalization Strategies Using Nanomaterials: A Review and Case Study in Sensing Applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2022, 9, 323-347.	2.7	23
221	Flexible Multifunctional Photonic Crystal Fibers with Shape Memory Capability for Optical Waveguides and Electrical Sensors. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 8442-8450.	1.8	8
222	Biomass-Derived Carbon Materials: Controllable Preparation and Versatile Applications. <i>Small</i> , 2021, 17, e2008079.	5.2	105
223	Reduced graphene oxide decorated amorphous NiS ₂ nanosheets as high-performance anode materials for enhanced sodium-ion hybrid capacitors. <i>Ionics</i> , 2021, 27, 3315-3325.	1.2	11
224	Eliminating the hairiness of ramie fabrics by micro-dissolution technology in copper ammonia solution. <i>Cellulose</i> , 2021, 28, 8177-8185.	2.4	3
225	Carbonized Cotton Fabric-Based Flexible Capacitive Pressure Sensor Using a Porous Dielectric Layer with Tilted Air Gaps. <i>Sensors</i> , 2021, 21, 3895.	2.1	15
226	A Highly Stretchable and Sensitive Strain Sensor Based on Dopamine Modified Electrospun SEBS Fibers and MWCNTs with Carboxylation. <i>Advanced Electronic Materials</i> , 2021, 7, 2100233.	2.6	97
227	High-Performance Foam-Shaped Strain Sensor Based on Carbon Nanotubes and Ti ₃ C ₂ T _x MXene for the Monitoring of Human Activities. <i>ACS Nano</i> , 2021, 15, 9690-9700.	7.3	191
228	Bio-inspired flexible electronics for smart E-skin. <i>Acta Biomaterialia</i> , 2022, 139, 280-295.	4.1	48
229	Stretchable Strain Sensors Based on Two- and Three-Dimensional Carbonized Cotton Fabrics for the Detection of Full Range of Human Motions. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3287-3295.	2.0	14
230	Achieving Super Sensitivity in Capacitive Strain Sensing by Electrode Fragmentation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36062-36070.	4.0	12
231	Graphene Decorated Fiber for Wearable Strain Sensor with High Sensitivity at Tiny Strain. <i>Advanced Materials Technologies</i> , 2021, 6, 2100421.	3.0	24
232	Flexible and Anisotropic Strain Sensors Based on Highly Aligned Carbon Fiber Membrane for Exercise Monitoring. <i>Advanced Materials Technologies</i> , 2021, 6, 2100643.	3.0	19
233	Strain sensors fabricated by surface assembly of nanoparticles. <i>Biosensors and Bioelectronics</i> , 2021, 186, 113268.	5.3	28
234	Polypyrrole-coated copper nanowire-threaded silver nanoflowers for wearable strain sensors with high sensing performance. <i>Chemical Engineering Journal</i> , 2021, 417, 127966.	6.6	20

#	ARTICLE	IF	CITATIONS
235	Highly Sensitive and Stretchable c-MWCNTs/PPy Embedded Multidirectional Strain Sensor Based on Double Elastic Fabric for Human Motion Detection. <i>Nanomaterials</i> , 2021, 11, 2333.	1.9	12
236	Vitrimer-based soft actuators with multiple responsiveness and self-healing ability triggered by multiple stimuli. <i>Matter</i> , 2021, 4, 3354-3365.	5.0	38
237	Bioinspired Multifunctional Photonic-Electronic Smart Skin for Ultrasensitive Health Monitoring, for Visual and Self-Powered Sensing. <i>Advanced Materials</i> , 2021, 33, e2102332.	11.1	107
238	Synergistic effect of carbon nanotubes and wood-derived carbon scaffold on natural rubber-based high-performance thermally conductive composites. <i>Composites Science and Technology</i> , 2021, 213, 108963.	3.8	21
239	Wearable and self-healable textile-based strain sensors to monitor human muscular activities. <i>Composites Part B: Engineering</i> , 2021, 220, 108969.	5.9	23
240	Highly stretchable and sensitive strain sensor based on liquid metal composite for wearable sign language communication device. <i>Smart Materials and Structures</i> , 2021, 30, 115005.	1.8	11
241	Digital Process Chain for Processing of Bend-Sensitive Functional Structures on a Flexible Substrate. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2021, 11, 1417-1425.	1.4	1
242	Ti ₃ C ₂ T _x MXene/polyvinyl alcohol decorated polyester warp knitting fabric for flexible wearable strain sensors. <i>Textile Research Journal</i> , 2022, 92, 810-824.	1.1	11
243	Flexible and superhydrophobic carbonized cotton fabrics for effective electromagnetic interference shielding. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 540, 168434.	1.0	4
244	Biomaterials- and biostructures Inspired high-performance flexible stretchable strain sensors: A review. <i>Chemical Engineering Journal</i> , 2021, 425, 129949.	6.6	65
245	A highly sensitive stretchable strain sensor based on multi-functionalized fabric for respiration monitoring and identification. <i>Chemical Engineering Journal</i> , 2021, 426, 130869.	6.6	51
246	Interactively mechanochromic electronic textile sensor with rapid and durable electrical/optical response for visualized stretchable electronics. <i>Chemical Engineering Journal</i> , 2021, 426, 130870.	6.6	31
247	Toward high-performance multifunctional electronics: Knitted fabric-based composite with electrically conductive anisotropy and self-healing capacity. <i>Chemical Engineering Journal</i> , 2021, 426, 131931.	6.6	19
248	Review of Graphene-Based Textile Strain Sensors, with Emphasis on Structure Activity Relationship. <i>Polymers</i> , 2021, 13, 151.	2.0	44
249	Stretchable and highly sensitive strain sensor based on conductive polymer aerogel for human physiological information detection. <i>Nano Select</i> , 2021, 2, 802-809.	1.9	9
250	Underwater, Multifunctional Superhydrophobic Sensor for Human Motion Detection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4740-4749.	4.0	63
251	Mechanical Properties of Hybrid Carbonized Plant Fibers Reinforced Bio-Based Epoxy Laminates. <i>Polymers</i> , 2021, 13, 3435.	2.0	7
252	Fabrication of serpentine and I structured graphene-CNT based highly sensitive and flexible strain sensors. <i>Microelectronic Engineering</i> , 2021, 250, 111631.	1.1	7

#	ARTICLE	IF	CITATIONS
253	Bacterial Community under the Influence of Microplastics in Indoor Environment and the Health Hazards Associated with Antibiotic Resistance Genes. <i>Environmental Science & Technology</i> , 2022, 56, 422-432.	4.6	44
254	Potential Application of Graphene-TPE Nanocomposite. <i>Engineering Materials</i> , 2020, , 183-221.	0.3	0
255	Research progress of smart response composite hydrogels based on nanocellulose. <i>Carbohydrate Polymers</i> , 2022, 275, 118741.	5.1	23
256	On the Report of Performance Analysis of Electrospun Carbon Nanofibers based Strain Sensor for Applications in Human Motion Monitoring. , 2020, , .		0
257	Superelastic and Fire-Retardant Nano-/Microfibrous Sponges for High-Efficiency Warmth Retention. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58027-58035.	4.0	15
259	Vapor-Phase Polymerization of PEDOT for Wearable Fabric Pressure Sensors. <i>Journal of Electronic Materials</i> , 2022, 51, 1128-1136.	1.0	1
260	Flexible carbonized cotton/thermoplastic polyurethane composites with outstanding electric heating and pressure sensing performance. <i>Textile Research Journal</i> , 2022, 92, 1760-1770.	1.1	2
261	Flexible strain sensors for wearable applications fabricated using novel functional nanocomposites: A review. <i>Composite Structures</i> , 2022, 284, 115214.	3.1	85
262	A novel method to synthesize high-strength elastic gel and carbonized aerogel. <i>Applied Surface Science</i> , 2022, 580, 152240.	3.1	6
263	Upcycling textile wastes: challenges and innovations. <i>Textile Progress</i> , 2021, 53, 65-122.	1.3	11
264	A Capacitive and Piezoresistive Hybrid Sensor for Longâ€Distance Proximity and Wideâ€Range Force Detection in Humanâ€Robot Collaboration. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	12
265	Stretchable Unsymmetrical Piezoelectric BaTiO ₃ Composite Hydrogel for Triboelectric Nanogenerators and Multimodal Sensors. <i>ACS Nano</i> , 2022, 16, 1661-1670.	7.3	104
266	Metal-free functionalized carbonized cotton for efficient solar steam generation and wastewater treatment. <i>RSC Advances</i> , 2021, 12, 1043-1050.	1.7	11
267	Flexible Strain Sensors for Wearable Hand Gesture Recognition: From Devices to Systems. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	38
268	Boronâ€doped porous carbon material derived from <sc>ZIF</sc> â€1: Investigation of cotton fabric supercapacitor and Liâ€ion battery performances. <i>International Journal of Energy Research</i> , 2022, 46, 7732-7748.	2.2	16
269	Stretchable, Sensitive Strain Sensors with a Wide Workable Range and Low Detection Limit for Wearable Electronic Skins. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 4562-4570.	4.0	35
270	Cheap, Large-Scale, and High-Performance Graphite-Based Flexible Thermoelectric Materials and Devices with Supernormal Industry Feasibility. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8066-8075.	4.0	16
271	Recent Progress on Smart Fiber and Textile Based Wearable Strain Sensors: Materials, Fabrications and Applications. <i>Advanced Fiber Materials</i> , 2022, 4, 361-389.	7.9	136

#	ARTICLE	IF	CITATIONS
272	Demonstration of durable electronic textiles via mechanically assisted highly adhesive printing of carbon nanotube-polymer composites on commercial fabrics. <i>Journal of Industrial and Engineering Chemistry</i> , 2022, 108, 508-513.	2.9	4
273	Intelligent and Multifunctional Graphene Nanomesh Electronic Skin with High Comfort. <i>Small</i> , 2022, 18, e2104810.	5.2	42
274	Electronic Textiles for Wearable Point-of-Care Systems. <i>Chemical Reviews</i> , 2022, 122, 3259-3291.	23.0	316
275	Cellulose based flexible and wearable sensors for health monitoring. <i>Materials Advances</i> , 2022, 3, 3766-3783.	2.6	15
276	Functionalized Fiber-Based Strain Sensors: Pathway to Next-Generation Wearable Electronics. <i>Nano-Micro Letters</i> , 2022, 14, 61.	14.4	113
277	Smart textiles for personalized healthcare. <i>Nature Electronics</i> , 2022, 5, 142-156.	13.1	307
278	PDMS-Encapsulated MXene@Polyester Fabric Strain Sensor for Multifunctional Sensing Applications. <i>Nanomaterials</i> , 2022, 12, 871.	1.9	11
279	Stress-deconcentrated ultrasensitive strain sensor with hydrogen-bonding-tuned fracture resilience for robust biomechanical monitoring. <i>Science China Materials</i> , 2022, 65, 2289-2297.	3.5	10
280	Recent progress of fiber-based transistors: materials, structures and applications. <i>Frontiers of Optoelectronics</i> , 2022, 15, 1.	1.9	10
281	Melt-Extruded Sensory Fibers for Electronic Textiles. <i>Macromolecular Materials and Engineering</i> , 2022, 307, 2100737.	1.7	0
282	Design of a Superhydrophobic Strain Sensor with a Multilayer Structure for Human Motion Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1874-1884.	4.0	37
283	Sustainable and Conductive Wood-Derived Carbon Framework for Stretchable Strain Sensors. <i>Advanced Sustainable Systems</i> , 2022, 6, .	2.7	7
284	Fabrication of Silver Electrical Circuits on Textile Substrates by Reactive Inkjet Printing. <i>IEEE Sensors Journal</i> , 2022, 22, 11056-11064.	2.4	7
285	An Overview of Hierarchical Design of Textile-Based Sensor in Wearable Electronics. <i>Crystals</i> , 2022, 12, 555.	1.0	6
286	Structure and characterization of carbonized cotton knitted fabric. <i>Textile Research Journal</i> , 2022, 92, 3719-3732.	1.1	6
288	Flexible Cotton Fiber-Based Composite Films with Excellent Bending Stability and Conductivity at Cryogenic Temperature. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21486-21496.	4.0	5
289	Deep Learning Enabled Neck Motion Detection Using a Triboelectric Nanogenerator. <i>ACS Nano</i> , 2022, 16, 9359-9367.	7.3	39
290	Intelligent Nanomaterials for Wearable and Stretchable Strain Sensor Applications: The Science behind Diverse Mechanisms, Fabrication Methods, and Real-Time Healthcare. <i>Polymers</i> , 2022, 14, 2219.	2.0	5

#	ARTICLE	IF	CITATIONS
291	A waterproof and breathable Cotton/rGO/CNT composite for constructing a layer-by-layer structured multifunctional flexible sensor. Nano Research, 2022, 15, 9341-9351.	5.8	26
292	Fibre-based wearable electronic technology for personal protective clothing. , 2022, , 511-547.		2
293	Printable and Wearable Graphene-Based Strain Sensor With High Sensitivity for Human Motion Monitoring. IEEE Sensors Journal, 2022, 22, 13937-13944.	2.4	7
294	Investigating Mechanical Behaviours of PDMS Films under Cyclic Loading. Polymers, 2022, 14, 2373.	2.0	12
295	Stretchable, conductive and porous MXene-based multilevel structured fibers for sensitive strain sensing and gas sensing. Journal of Materials Chemistry A, 2022, 10, 15634-15646.	5.2	19
296	Improving Comprehensive Performance of Strain Flexible Sensors by Electron Irradiation and Temperature Synergy. Journal of Materials Chemistry C, 0, , .	2.7	2
297	Biodegradable Polyurethane Fiber-Based Strain Sensor with a Broad Sensing Range and High Sensitivity for Human Motion Monitoring. ACS Sustainable Chemistry and Engineering, 2022, 10, 8788-8798.	3.2	35
298	Carbon Nanotube Coated Fibrous Tubes for Highly Stretchable Strain Sensors Having High Linearity. Nanomaterials, 2022, 12, 2458.	1.9	6
299	Cotton fabrics with antibacterial and antiviral properties produced by a simple pad-dry-cure process using diphenolic acid. Applied Surface Science, 2022, 600, 154152.	3.1	25
300	¹ CoFe/C Nanosheets on Hollow Carbon Fibers as Composite Fabrics for Electromagnetic Interference Shielding. ACS Applied Nano Materials, 2022, 5, 11665-11678.	2.4	7
301	Photonic vitrimer-based electronics with self-healing and ultrastable visual-digital outputs for wireless strain sensing. Chemical Engineering Journal, 2022, 450, 138285.	6.6	16
303	Electronic Fibers/Textiles for Health Monitoring: Fabrication and Application. Advanced Materials Technologies, 2023, 8, .	3.0	25
304	Functional Fiber Materials to Smart Fiber Devices. Chemical Reviews, 2023, 123, 613-662.	23.0	69
305	Double-Layered Conductive Network Design of Flexible Strain Sensors for High Sensitivity and Wide Working Range. ACS Applied Materials & Interfaces, 2022, 14, 36611-36621.	4.0	26
306	Ramie Fabric Treated with Carboxymethylcellulose and Laser Engraved for Strain and Humidity Sensing. Micromachines, 2022, 13, 1309.	1.4	9
307	Indoor microplastics and bacteria in the atmospheric fallout in urban homes. Science of the Total Environment, 2022, 852, 158233.	3.9	16
308	Lignin-silver triggered multifunctional conductive hydrogels for skinlike sensor applications. International Journal of Biological Macromolecules, 2022, 221, 1282-1293.	3.6	16
309	Vanadium Dioxide Nanosheets Supported on Carbonized Cotton Fabric as Bifunctional Textiles for Flexible Pressure Sensors and Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 41577-41587.	4.0	7

#	ARTICLE	IF	CITATIONS
310	A large-scale spraying-spinning process for multifunctional electronic yarns. <i>SmartMat</i> , 2023, 4, .	6.4	11
311	An ultrasensitive and stretchable strain sensor based on a microcrack structure for motion monitoring. <i>Microsystems and Nanoengineering</i> , 2022, 8, .	3.4	20
312	Degradable Bioinspired Hypersensitive Strain Sensor with High Mechanical Strength Using a Basalt Fiber as a Reinforced Layer. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 42723-42733.	4.0	7
313	Smart Electronic Textile-Based Wearable Supercapacitors. <i>Advanced Science</i> , 2022, 9, .	5.6	59
314	Wrinkled, cracked and bridged carbon networks for highly sensitive and stretchable strain sensors. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 163, 107221.	3.8	7
315	High Sensitivity, Wide Range Pressure Sensor Based on Layer-by-Layer Self-Assembled MXene/Carbon Black@Polyurethane Sponge for Human Motion Monitoring and Intelligent Vehicle Control. <i>IEEE Sensors Journal</i> , 2022, 22, 21561-21568.	2.4	5
316	Laser-Patterned Hierarchical Aligned Micro-/Nanowire Network for Highly Sensitive Multidimensional Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 48276-48284.	4.0	12
317	Advanced Fiber Materials for Wearable Electronics. <i>Advanced Fiber Materials</i> , 2023, 5, 12-35.	7.9	81
318	Elastic Fibers/Fabrics for Wearables and Bioelectronics. <i>Advanced Science</i> , 2022, 9, .	5.6	19
319	Multifunctional hybrid hydrogel with transparency, conductivity, and self-adhesion for soft sensors using hemicellulose-decorated polypyrrole as a conductive matrix. <i>International Journal of Biological Macromolecules</i> , 2022, 223, 1-10.	3.6	7
320	Piezoresistive Sensor Containing Lamellar MXene-Plant Fiber Sponge Obtained with Aqueous MXene Ink. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 51361-51372.	4.0	12
321	Flexible, recyclable and sensitive piezoresistive sensors enabled by lignin polyurethane-based conductive foam. <i>Materials Advances</i> , 0, .	2.6	1
322	A low-modulus, adhesive, and highly transparent hydrogel for multi-use flexible wearable sensors. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 659, 130752.	2.3	5
323	Highly stretchable and robust textile-based capacitive mechanical sensor for human motion detection. <i>Applied Surface Science</i> , 2023, 613, 155961.	3.1	12
324	Wearable and Flexible Multifunctional Sensor Based on Laser-Induced Graphene for the Sports Monitoring System. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 54170-54181.	4.0	27
325	Carbonization fabrication of a piezoresistive sensor with improved sensitivity via Ni decoration of carbonized cotton fibers. <i>Science China Technological Sciences</i> , 2022, 65, 3000-3009.	2.0	0
326	Ultra-sensitive and wide applicable strain sensor enabled by carbon nanofibers with dual alignment for human machine interfaces. <i>Nano Research</i> , 2023, 16, 4093-4099.	5.8	9
327	The monitoring of plant physiology and ecology: From materials to flexible devices. <i>Chinese Journal of Analytical Chemistry</i> , 2023, 51, 100211.	0.9	2

#	ARTICLE	IF	CITATIONS
328	The mechanical and electrical properties of flexible strain sensors based on carbonized cotton knitted fabric. <i>Textile Research Journal</i> , 0, , 004051752211435.	1.1	0
329	Fabrication of Highly Efficient Flame-Retardant and Fluorine-Free Superhydrophobic Cotton Fabric by Constructing Multielement-Containing POSS@ZIF-67@PDMS Micro“Nano Hierarchical Coatings. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 56027-56045.	4.0	26
330	Fabrication of flexible and sensitive laser-patterned serpentine-structured graphene“CNT paper for strain sensor applications. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, .	1.1	3
331	Utilizing Multilayer Design of Organic-Inorganic Hybrids to Enhance Wearable Strain Sensor in Humid Environment. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2023, 41, 1037-1050.	2.0	5
332	Carbon“Based Flexible Devices for Comprehensive Health Monitoring. <i>Small Methods</i> , 2023, 7, .	4.6	25
333	Silicone-enhanced polyvinyl alcohol hydrogels for high performance wearable strain sensors. <i>Materials and Design</i> , 2023, 229, 111911.	3.3	12
334	Carbonized biomass cattail for flexible pressure sensor. <i>Materials Today Communications</i> , 2023, 35, 105561.	0.9	1
335	Resonant printing flexible piezoresistive pressure sensor with spherical microstructures. <i>Smart Materials and Structures</i> , 2023, 32, 035020.	1.8	9
336	A Review of Flexible Strain Sensors Based on Natural Fiber Materials. <i>Advanced Materials Technologies</i> , 2023, 8, .	3.0	13
337	Highly Aligned Cellulose/Polypyrrole Composite Nanofibers via Electrospinning and In Situ Polymerization for Anisotropic Flexible Strain Sensor. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 9820-9829.	4.0	25
338	A Multi-model, Large-range Flexible Strain Sensor Based on Carbonized Silk Hobotai for Human Health Monitoring. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2023, 41, 1238-1249.	2.0	4
339	Graphitized and flexible porous textile updated from waste cotton for wearable electromagnetic interference shielding. <i>Carbon</i> , 2023, 207, 144-153.	5.4	16
340	MXene Fiber-based Wearable Textiles in Sensing and Energy Storage Applications. <i>Fibers and Polymers</i> , 2023, 24, 1167-1182.	1.1	4
341	Smart Wearable Systems for Health Monitoring. <i>Sensors</i> , 2023, 23, 2479.	2.1	17
342	Progress in physiological textile sensors for biomedical applications. , 2023, , 333-372.		0
343	Multifunctional Flexible Pressure Sensor Based on a Cellulose Fiber-Derived Hierarchical Carbon Aerogel. <i>ACS Applied Electronic Materials</i> , 2023, 5, 1581-1591.	2.0	6
344	Hierarchical Biobased Macroporous/Mesoporous Carbon: Fabrication, Characterization and Electrochemical/Ion Exchange Properties. <i>Materials</i> , 2023, 16, 2101.	1.3	0
345	Cross-Talk Signal Free Recyclable Thermoplastic Polyurethane/Graphene-Based Strain and Pressure Sensor for Monitoring Human Motions. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 17279-17292.	4.0	14

#	ARTICLE	IF	CITATIONS
346	Perspective on Biomass-Based Cotton-Derived Nanocarbon for Multifunctional Energy Storage and Harvesting Applications. ACS Applied Electronic Materials, 2023, 5, 1970-1991.	2.0	3
347	Fiber Crossbars: An Emerging Architecture of Smart Electronic Textiles. Advanced Materials, 2023, 35, .	11.1	5
348	Recent application progress and key challenges of biomass-derived carbons in resistive strain/pressure sensor. Science China Materials, 2023, 66, 1702-1718.	3.5	5
351	Advanced Technology in Apparel Manufacturing. Textile Science and Clothing Technology, 2023, , 177-231.	0.4	1
359	PEDOT:PSS materials for optoelectronics, thermoelectrics, and flexible and stretchable electronics. Journal of Materials Chemistry A, 2023, 11, 18561-18591.	5.2	7
360	Fully Inkjet-Printed Soft Wearable Strain Sensors Based on Metal/Polymer Composite Sensing Films. , 2023, , .		0
366	Fabrication Techniques and Sensing Mechanisms of Textile-Based Strain Sensors: From Spatial 1D and 2D Perspectives. Advanced Fiber Materials, 0, , .	7.9	0
367	Fabrication and Properties of Dielectric-Elastomer-Based Nanocomposites. Nanostructure Science and Technology, 2024, , 213-241.	0.1	0
380	Scalable Fabrication of Nano-yarn-based Strain Sensor for Motion Sensing. , 2023, , .		0