A stretchable and biodegradable strain and pressure sen

Nature Electronics

1, 314-321

DOI: 10.1038/s41928-018-0071-7

Citation Report

#	Article	IF	Citations
1	A bio-inspired physically transient/biodegradable synapse for security neuromorphic computing based on memristors. Nanoscale, 2018, 10, 20089-20095.	2.8	82
2	Hybrid Architectures of Heterogeneous Carbon Nanotube Composite Microstructures Enable Multiaxial Strain Perception with High Sensitivity and Ultrabroad Sensing Range. Small, 2018, 14, e1803411.	5.2	51
3	A hierarchically patterned, bioinspired e-skin able to detect the direction of applied pressure for robotics. Science Robotics, 2018, 3, .	9.9	568
4	An Inductively Coupled Biodegradable Capacitive Pressure Sensor. Proceedings (mdpi), 2018, 2, .	0.2	3
5	Materials and Devices for Biodegradable and Soft Biomedical Electronics. Materials, 2018, 11, 2108.	1.3	66
6	Monitoring rehabilitation with transient sensors. Nature Electronics, 2018, 1, 272-273.	13.1	11
7	A taste of bioelectronics. Nature Electronics, 2018, 1, 373-373.	13.1	1
8	Recent progress in flexible pressure sensor arrays: from design to applications. Journal of Materials Chemistry C, 2018, 6, 11878-11892.	2.7	194
9	Biodegradable Frequencyâ€Selective Magnesium Radioâ€Frequency Microresonators for Transient Biomedical Implants. Advanced Functional Materials, 2019, 29, 1903051.	7.8	24
10	Bioâ€Multifunctional Smart Wearable Sensors for Medical Devices. Advanced Intelligent Systems, 2019, 1, 1900040.	3.3	115
11	The Future of Cardiovascular Stents: Bioresorbable and Integrated Biosensor Technology. Advanced Science, 2019, 6, 1900856.	5.6	54
12	An implantable and versatile piezoresistive sensor for the monitoring of humanâ€“machine interface interactions and the dynamical process of nerve repair. Nanoscale, 2019, 11, 21103-21118.	2.8	44
13	Freestanding laser induced graphene paper based liquid sensors. Carbon, 2019, 153, 472-480.	5.4	37
14	Porous Polydimethylsiloxaneâ€“Silver Nanowire Devices for Wearable Pressure Sensors. ACS Applied Nano Materials, 2019, 2, 4869-4878.	2.4	64
15	Futuristic medical implants using bioresorbable materials and devices. Biosensors and Bioelectronics, 2019, 142, 111489.	5.3	58
16	Bioresorbable optical sensor systems for monitoring of intracranial pressure and temperature. Science Advances, 2019, 5, eaaw1899.	4.7	146
17	Flexible oxide neuromorphic transistors with synaptic learning functions. Journal Physics D: Applied Physics, 2019, 52, 405101.	1.3	7
18	Electronic Skin for Closed-Loop Systems. ACS Nano, 2019, 13, 12287-12293.	7.3	103

#	Article	IF	Citations
19	Flexible and Stretchable Selfâ€Powered Multiâ€Sensors Based on the Nâ€Type Thermoelectric Response of Polyurethane/Na_x(Niâ€ett)_n Composites. Advanced Electronic Materials, 2019, 5, 1900582.	2.6	28
20	A Bioresorbable Magnetically Coupled System for Lowâ€Frequency Wireless Power Transfer. Advanced Functional Materials, 2019, 29, 1905451.	7.8	58
21	Photo-thermoelectric effect induced electricity in stretchable graphene-polymer nanocomposites for ultrasensitive strain sensing. Nano Research, 2019, 12, 2982-2987.	5.8	39
22	Multifunctional polyurethanes synthesized from different triarylamine units with electrochromic, photogeneration, memory storage and sensing properties. New Journal of Chemistry, 2019, 43, 1177-1185.	1.4	8
23	Direct Patterning of Carbon Nanotube via Stamp Contact Printing Process for Stretchable and Sensitive Sensing Devices. Nano-Micro Letters, 2019, 11, 92.	14.4	56
24	Mechanically transformative electronics, sensors, and implantable devices. Science Advances, 2019, 5, eaay0418.	4.7	129
25	A Wireless Parylene-Based Cardiovascular Pressure Sensor with Mxene Film. , 2019, , .		3
26	Numerical investigation of stent designs for wireless access to integrated sensors. Current Directions in Biomedical Engineering, 2019, 5, 497-499.	0.2	3
27	Emerging Technologies of Flexible Pressure Sensors: Materials, Modeling, Devices, and Manufacturing. Advanced Functional Materials, 2019, 29, 1808509.	7.8	316
28	Advanced electronic skin devices for healthcare applications. Journal of Materials Chemistry B, 2019, 7, 173-197.	2.9	193
29	Ionogel-based, highly stretchable, transparent, durable triboelectric nanogenerators for energy harvesting and motion sensing over a wide temperature range. Nano Energy, 2019, 63, 103847.	8.2	188
30	Cellular Carbon-Film-Based Flexible Sensor and Waterproof Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 26288-26297.	4.0	28
31	Investigation of Lowâ€Current Direct Stimulation for Rehabilitation Treatment Related to Muscle Function Loss Using Selfâ€Powered TENG System. Advanced Science, 2019, 6, 1900149.	5.6	97
32	Disposable Sensors in Diagnostics, Food, and Environmental Monitoring. Advanced Materials, 2019, 31, e1806739.	11.1	540
33	Polymer Chemistries Underpinning Materials for Skin-Inspired Electronics. Macromolecules, 2019, 52, 3965-3974.	2.2	67
34	Graphene-based stretchable/wearable self-powered touch sensor. Nano Energy, 2019, 62, 259-267.	8.2	132
35	Multifunctional sensing platform with pulsed-laser-deposited silver nanoporous structures. Sensors and Actuators A: Physical, 2019, 293, 136-144.	2.0	6
36	Physical and Chemical Sensing With Electronic Skin. Proceedings of the IEEE, 2019, 107, 2155-2167.	16.4	56

#	Article	IF	Citations
37	Stretchable, self-healing, transient macromolecular elastomeric gel for wearable electronics. Microsystems and Nanoengineering, 2019, 5, 9.	3.4	35
38	Bioresorbable Electronic Implants: History, Materials, Fabrication, Devices, and Clinical Applications. Advanced Healthcare Materials, 2019, 8, e1801660.	3.9	86
39	Polymer-based flexible bioelectronics. Science Bulletin, 2019, 64, 634-640.	4.3	50
40	Biomimetic, recyclable, highly stretchable and self-healing conductors enabled by dual reversible bonds. Chemical Engineering Journal, 2019, 371, 203-212.	6.6	53
41	A tactile sensing textile with bending-independent pressure perception and spatial acuity. Carbon, 2019, 149, 63-70.	5.4	30
42	Simultaneous electrophysiological recording and self-powered biosignal monitoring using epidermal, nanotexturized, triboelectronic devices. Nanotechnology, 2019, 30, 274003.	1.3	9
43	A Path Beyond Metal and Silicon:Polymer/Nanomaterial Composites for Stretchable Strain Sensors. Advanced Functional Materials, 2019, 29, 1806306.	7.8	147
44	Wearable and Implantable Electronics: Moving toward Precision Therapy. ACS Nano, 2019, 13, 12280-12286.	7.3	150
45	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	5.8	249
46	Flexible High-sensitive Pressure Sensor Based on Ionogels and Its Application In Monitoring The Human Motions. , 2019, , .		2
47	Polyglycerol Hyperbranched Polyesters: Synthesis, Properties and Pharmaceutical and Biomedical Applications. International Journal of Molecular Sciences, 2019, 20, 6210.	1.8	57
48	Three-dimensionally printed pressure sensor arrays from hysteresis-less stretchable piezoresistive composites. RSC Advances, 2019, 9, 39993-40002.	1.7	7
49	A stretchable, conformable, and biocompatible graphene strain sensor based on a structured hydrogel for clinical application. Journal of Materials Chemistry A, 2019, 7, 27099-27109.	5.2	61
50	Heterogeneous Strain Distribution of Elastomer Substrates To Enhance the Sensitivity of Stretchable Strain Sensors. Accounts of Chemical Research, 2019, 52, 82-90.	7.6	52
51	Biodegradable and flexible arterial-pulse sensor for the wireless monitoring of blood flow. Nature Biomedical Engineering, 2019, 3, 47-57.	11.6	580
52	High-performance stretchable conductive nanocomposites: materials, processes, and device applications. Chemical Society Reviews, 2019, 48, 1566-1595.	18.7	400
53	Rational Design of Capacitive Pressure Sensors Based on Pyramidal Microstructures for Specialized Monitoring of Biosignals. Advanced Functional Materials, 2020, 30, 1903100.	7.8	265
54	Rubbery Electronics Fully Made of Stretchable Elastomeric Electronic Materials. Advanced Materials, 2020, 32, e1902417.	11.1	95

#	Article	IF	Citations
55	Mimicking Human and Biological Skins for Multifunctional Skin Electronics. Advanced Functional Materials, 2020, 30, 1904523.	7.8	247
56	Advanced Soft Materials, Sensor Integrations, and Applications of Wearable Flexible Hybrid Electronics in Healthcare, Energy, and Environment. Advanced Materials, 2020, 32, e1901924.	11.1	575
57	Highly conductive, washable and super-hydrophobic wearable carbon nanotubes e-textile for vacuum pressure sensors. Sensors and Actuators A: Physical, 2020, 303, 111710.	2.0	28
58	Materials Strategies and Device Architectures of Emerging Power Supply Devices for Implantable Bioelectronics. Small, 2020, 16, e1902827.	5.2	86
59	Customization of Conductive Elastomer Based on PVA/PEI for Stretchable Sensors. Small, 2020, 16, e1904758.	5.2	107
60	Transfer Printing of Electronic Functions on Arbitrary Complex Surfaces. ACS Nano, 2020, 14, 12-20.	7.3	47
61	A wearable, waterproof, and highly sensitive strain sensor based on three-dimensional graphene/carbon black/Ni sponge for wirelessly monitoring human motions. Journal of Materials Chemistry C, 2020, 8, 2074-2085.	2.7	67
62	A fiber-shaped light-emitting pressure sensor for visualized dynamic monitoring. Journal of Materials Chemistry C, 2020, 8, 935-942.	2.7	16
63	Reviews of wearable healthcare systems: Materials, devices and system integration. Materials Science and Engineering Reports, 2020, 140, 100523.	14.8	215
64	Biodegradable nanofiber-based piezoelectric transducer. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 214-220.	3.3	139
65	Merkel's Disks Bioinspired Selfâ€Powered Flexible Magnetoelectric Sensors Toward the Robotic Arm's Tactile Perceptual Functioning and Smart Learning. Advanced Intelligent Systems, 2020, 2, 1900140.	3.3	24
66	Bio-photocapacitive tactile sensors as a touch-to-audio braille reader and solar capacitor. Materials Horizons, 2020, 7, 866-876.	6.4	37
67	Emerging intraoral biosensors. Journal of Materials Chemistry B, 2020, 8, 3341-3356.	2.9	11
68	Physical sensors for skinâ€inspired electronics. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 184-211.	8.5	159
69	Design of biodegradable, implantable devices towards clinical translation. Nature Reviews Materials, 2020, 5, 61-81.	23.3	440
70	A three-electrode multi-module sensor for accurate bodily-kinesthetic monitoring. Nano Energy, 2020, 68, 104316.	8.2	21
71	Emerging Soft Conductors for Bioelectronic Interfaces. Advanced Functional Materials, 2020, 30, 1907184.	7.8	70
72	Ultra-Low Power Wearable Infant Sleep Position Sensor. Sensors, 2020, 20, 61.	2.1	8

#	Article	IF	Citations
73	Advances in Physicochemically Stimuli-Responsive Materials for On-Demand Transient Electronic Systems. Matter, 2020, 3, 1031-1052.	5.0	49
74	Nearâ€“hysteresis-free soft tactile electronic skins for wearables and reliable machine learning. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25352-25359.	3.3	104
75	Effect of yarn interlacement pattern on the surface electrical conductivity of intrinsically conductive fabrics. Synthetic Metals, 2020, 268, 116512.	2.1	6
76	Stretchable respiration sensors: Advanced designs and multifunctional platforms for wearable physiological monitoring. Biosensors and Bioelectronics, 2020, 166, 112460.	5.3	129
77	Flexible Pressure Sensors for Biomedical Applications: From Ex Vivo to In Vivo. Advanced Materials Interfaces, 2020, 7, 2000743.	1.9	57
78	A Singleâ€Mode, Selfâ€Adapting, and Selfâ€Powered Mechanoreceptor Based on a Potentiometricâ€“Triboelectric Hybridized Sensing Mechanism for Resolving Complex Stimuli. Advanced Materials, 2020, 32, e2005970.	11.1	41
79	Miniaturized Piezo Force Sensor for a Medical Catheter and Implantable Device. ACS Applied Electronic Materials, 2020, 2, 2669-2677.	2.0	23
80	Microengineering Pressure Sensor Active Layers for Improved Performance. Advanced Functional Materials, 2020, 30, 2003491.	7.8	290
81	A potentiometric mechanotransduction mechanism for novel electronic skins. Science Advances, 2020, 6, eaba1062.	4.7	68
82	A Biodegradable Implant Antenna Detecting Post-Surgical Infection. , 2020, , .		3
83	Devising Materials Manufacturing Toward Labâ€toâ€Fab Translation of Flexible Electronics. Advanced Materials, 2020, 32, e2001903.	11.1	60
84	Recent Advances in Flexible Fieldâ€Effect Transistors toward Wearable Sensors. Advanced Intelligent Systems, 2020, 2, 2000113.	3.3	46
85	A Review of Bioresorbable Implantable Medical Devices: Materials, Fabrication, and Implementation. Advanced Healthcare Materials, 2020, 9, e2000790.	3.9	72
86	Blood Pressure Sensors: Materials, Fabrication Methods, Performance Evaluations and Future Perspectives. Sensors, 2020, 20, 4484.	2.1	27
87	Highly Sensitive P(VDF-TrFE)/BTO Nanofiber-Based Pressure Sensor with Dense Stress Concentration Microstructures. ACS Applied Polymer Materials, 2020, 2, 4399-4404.	2.0	22
88	Enhanced Performance of a Soft Strain Sensor by Combining Microcracks with Wrinkled Structures. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000400.	1.2	6
89	Highly stretchable, self-adhesive, biocompatible, conductive hydrogels as fully polymeric strain sensors. Journal of Materials Chemistry A, 2020, 8, 20474-20485.	5.2	147
90	Rapid prototyping of soft bioelectronic implants for use as neuromuscular interfaces. Nature Biomedical Engineering, 2020, 4, 1010-1022.	11.6	78

#	Article	IF	Citations
91	The Evolution of Flexible Electronics: From Nature, Beyond Nature, and To Nature. Advanced Science, 2020, 7, 2001116.	5.6	185
92	Organic Thin Film Transistors in Mechanical Sensors. Advanced Functional Materials, 2020, 30, 2004700.	7.8	21
93	Deep-Learning-Based Deconvolution of Mechanical Stimuli with Ti₃C₂T_x MXene Electromagnetic Shield Architecture via Dual-Mode Wireless Signal Variation Mechanism. ACS Nano, 2020, 14, 11962-11972.	7.3	25
94	Bioresorbable and Biodegradable Electronics and Photonics. , 2020, , .		0
95	Designing Tunable Capacitive Pressure Sensors Based on Material Properties and Microstructure Geometry. ACS Applied Materials & Interfaces, 2020, 12, 58301-58316.	4.0	65
96	Fabrication of a Sensitive Strain and Pressure Sensor from Gold Nanoparticle-Assembled 3D-Interconnected Graphene Microchannel-Embedded PDMS. ACS Applied Materials & Interfaces, 2020, 12, 51854-51863.	4.0	41
97	Eco-Friendly Supercapacitors Based on Biodegradable Poly(3-Hydroxy-Butyrate) and Ionic Liquids. Nanomaterials, 2020, 10, 2062.	1.9	12
98	A Stretchable Pressure and Strain Sensor Using Conductive Silk Hydrogels. , 2020, , .		1
99	Bodyâ€Integrated, Enzymeâ€Triggered Degradable, Silkâ€Based Mechanical Sensors for Customized Health/Fitness Monitoring and In Situ Treatment. Advanced Science, 2020, 7, 1903802.	5.6	64
100	A Highly Aligned Nanowireâ€Based Strain Sensor for Ultrasensitive Monitoring of Subtle Human Motion. Small, 2020, 16, e2001363.	5.2	72
101	Transparent Nano Thin-Film Transistors for Medical Sensors, OLED and Display Applications . International Journal of Nanomedicine, 2020, Volume 15, 3597-3603.	3.3	5
102	Stretchable electrochemical energy storage devices. Chemical Society Reviews, 2020, 49, 4466-4495.	18.7	209
103	Skin-inspired electronics: emerging semiconductor devices and systems. Journal of Semiconductors, 2020, 41, 041601.	2.0	63
104	Resilient yet entirely degradable gelatin-based biogels for soft robots and electronics. Nature Materials, 2020, 19, 1102-1109.	13.3	278
105	Materials and Orthopedic Applications for Bioresorbable Inductively Coupled Resonance Sensors. ACS Applied Materials & Interfaces, 2020, 12, 31148-31161.	4.0	17
106	Enabling Deformable and Stretchable Batteries. Advanced Energy Materials, 2020, 10, 2001424.	10.2	136
107	Materials and manufacturing strategies for mechanically transformative electronics. Materials Today Advances, 2020, 7, 100089.	2.5	15
108	Matrix-Addressed Flexible Capacitive Pressure Sensor With Suppressed Crosstalk for Artificial Electronic Skin. IEEE Transactions on Electron Devices, 2020, 67, 2940-2944.	1.6	21

#	Article	IF	Citations
109	Multiple Stimuli Responsive and Identifiable Zwitterionic Ionic Conductive Hydrogel for Bionic Electronic Skin. Advanced Electronic Materials, 2020, 6, 2000239.	2.6	116
110	Current view and prospect: Implantable pressure sensors for health and surgical care. Medical Devices & Sensors, 2020, 3, e10068.	2.7	10
111	A wearable freestanding electrochemical sensing system. Science Advances, 2020, 6, eaaz0007.	4.7	87
112	Sign-to-speech translation using machine-learning-assisted stretchable sensor arrays. Nature Electronics, 2020, 3, 571-578.	13.1	513
113	Advances in Materials for Soft Stretchable Conductors and Their Behavior under Mechanical Deformation. Polymers, 2020, 12, 1454.	2.0	11
114	A flexible and physically transient electrochemical sensor for real-time wireless nitric oxide monitoring. Nature Communications, 2020, 11, 3207.	5.8	142
115	3D Assembly of Graphene Nanomaterials for Advanced Electronics. Advanced Intelligent Systems, 2020, 2, 1900151.	3.3	10
116	Wireless implantable and biodegradable sensors for postsurgery monitoring: current status and future perspectives. Nanotechnology, 2020, 31, 252001.	1.3	42
117	Realization of flexible pressure sensor based on conductive polymer composite via using electrical impedance tomography. Smart Materials and Structures, 2020, 29, 055004.	1.8	10
118	Biodegradable and stretchable polymeric materials for transient electronic devices. MRS Bulletin, 2020, 45, 96-102.	1.7	51
119	3D Printing of a Biocompatible Double Network Elastomer with Digital Control of Mechanical Properties. Advanced Functional Materials, 2020, 30, 1910391.	7.8	30
120	Bioresorbable Materials on the Rise: From Electronic Components and Physical Sensors to In Vivo Monitoring Systems. Advanced Science, 2020, 7, 1902872.	5.6	70
121	Interfaceless Strain and Pressureâ€Sensitive Stretchable Capacitor Based on Selfâ€Bonding and Surface Morphology Control of a Reversibly Crosslinkable Silicone Elastomer. Advanced Materials Technologies, 2020, 5, 1900757.	3.0	5
122	Largeâ€Area Fabrication of Highâ€Performance Flexible and Wearable Pressure Sensors. Advanced Electronic Materials, 2020, 6, 1901310.	2.6	53
123	A Behaviorâ€Learned Crossâ€Reactive Sensor Matrix for Intelligent Skin Perception. Advanced Materials, 2020, 32, e2000969.	11.1	61
124	Intracellular microtubules as nano-scaffolding template self-assembles with conductive carbon nanotubes for biomedical device. Materials Science and Engineering C, 2020, 113, 110971.	3.8	6
125	Permeable graphited hemp fabrics-based, wearing-comfortable pressure sensors for monitoring human activities. Chemical Engineering Journal, 2021, 403, 126191.	6.6	47
126	Peptidoglycan-inspired autonomous ultrafast self-healing bio-friendly elastomers for bio-integrated electronics. National Science Review, 2021, 8, nwaa154.	4.6	52

#	Article	IF	Citations
127	Wearable and Biodegradable Sensors for Human Health Monitoring. ACS Applied Bio Materials, 2021, 4, 122-139.	2.3	52
128	Techniques for In Vivo Measurement of Ligament and Tendon Strain: A Review. Annals of Biomedical Engineering, 2021, 49, 7-28.	1.3	19
129	Electrical bioadhesive interface for bioelectronics. Nature Materials, 2021, 20, 229-236.	13.3	361
130	Lowâ€Voltage Operable and Strainâ€Insensitive Stretchable Allâ€Carbon Nanotube Integrated Circuits with Local Strain Suppression Layer. Advanced Electronic Materials, 2021, 7, .	2.6	9
131	Wearable and Biodegradable Sensors for Clinical and Environmental Applications. ACS Applied Electronic Materials, 2021, 3, 68-100.	2.0	46
132	Injectable fiber batteries for all-region power supply in vivo. Journal of Materials Chemistry A, 2021, 9, 1463-1470.	5.2	31
133	Becoming Sustainable, The New Frontier in Soft Robotics. Advanced Materials, 2021, 33, e2004413.	11.1	107
134	Degradable and Fully Recyclable Dynamic Thermoset Elastomer for 3Dâ€Printed Wearable Electronics. Advanced Functional Materials, 2021, 31, 2009799.	7.8	109
135	Biodegradable Materials for Sustainable Health Monitoring Devices. ACS Applied Bio Materials, 2021, 4, 163-194.	2.3	133
136	From wearables to implantablesâ€"clinical drive and technical challenges. , 2021, , 29-84.		8
137	Natural Biopolymer-Based Biocompatible Conductors for Stretchable Bioelectronics. Chemical Reviews, 2021, 121, 2109-2146.	23.0	199
138	Triboelectric Sensors for IoT and Wearable Applications. , 2023, , 235-257.		6
139	High-Mechanical-Resolution Pressure Sensor Based on Melt-Blown Fibers in Integrated Wearable Mask for Respiratory Monitoring. IEEE Transactions on Electron Devices, 2021, 68, 5765-5772.	1.6	3
140	Stretchable OFET Memories: Tuning the Morphology and the Charge-Trapping Ability of Conjugated Block Copolymers through Soft Segment Branching. ACS Applied Materials & Interfaces, 2021, 13, 2932-2943.	4.0	42
141	Smart Health Care for Societies: An Insight into the Implantable and Wearable Devices for Remote Health Monitoring. , 2021, , 89-113.		3
142	Highly Breathable and Stretchable Strain Sensors with Insensitive Response to Pressure and Bending. Advanced Functional Materials, 2021, 31, 2007622.	7.8	96
143	Wearable Biosensors: An Alternative and Practical Approach in Healthcare and Disease Monitoring. Molecules, 2021, 26, 748.	1.7	134
144	Fingerpadâ€Inspired Multimodal Electronic Skin for Material Discrimination and Texture Recognition. Advanced Science, 2021, 8, 2002606.	5.6	73

#	Article	IF	Citations
145	In vitro analysis of a physiological strain sensor formulated from a PEDOT:PSS functionalized carbon nanotube-poly(glycerol sebacate urethane) composite. Materials Science and Engineering C, 2021, 121, 111857.	3.8	17
146	From Diagnosis to Treatment: Recent Advances in Patient-Friendly Biosensors and Implantable Devices. ACS Nano, 2021, 15, 1960-2004.	7.3	171
147	Laser-induced porous graphene on Polyimide/PDMS composites and its kirigami-inspired strain sensor. Theoretical and Applied Mechanics Letters, 2021, 11, 100240.	1.3	20
148	A wireless passive pressure sensor using microstructured ferromagnetic films with tunable effective permeability. Journal of Micromechanics and Microengineering, 2021, 31, 045017.	1.5	5
149	Effect of Platinum-Catalysed Silicone Elastomer Encapsulation on the Performance of Embedded Stretchable Capacitive Multimodal Sensor. IEEE Sensors Journal, 2021, 21, 6248-6257.	2.4	2
150	Highly sensitive and flexible capacitive elastomeric sensors for compressive strain measurements. Materials Today Communications, 2021, 26, 102023.	0.9	12
151	Reduced Graphene Oxide Tattoo as Wearable Proximity Sensor. Advanced Electronic Materials, 2021, 7, 2001214.	2.6	22
152	MXenes for memristive and tactile sensory systems. Applied Physics Reviews, 2021, 8, .	5.5	25
153	Stretchable and self-healing polyvinyl alcohol/cellulose nanofiber nanocomposite hydrogels for strain sensors with high sensitivity and linearity. Composites Communications, 2021, 24, 100677.	3.3	46
154	Seamless Monolithic Design for Foam Based, Flexible, Parallel Plate Capacitive Sensors. Advanced Materials Technologies, 2021, 6, 2001168.	3.0	26
155	Highly stretchable and sensitive strain sensor based on polypyrrole coated bacterial cellulose fibrous network for human motion detection. Composites Part B: Engineering, 2021, 211, 108665.	5.9	51
156	A Self-Powered Portable Flexible Sensor of Monitoring Speed Skating Techniques. Biosensors, 2021, 11, 108.	2.3	18
157	Stretchable and suturable fibre sensors for wireless monitoring of connective tissue strain. Nature Electronics, 2021, 4, 291-301.	13.1	106
158	Recent developments of emerging inorganic, metal and carbon-based nanomaterials for pressure sensors and their healthcare monitoring applications. Nano Research, 2021, 14, 3096-3111.	5.8	37
159	Wearable human-machine interface based on the self-healing strain sensors array for control interface of unmanned aerial vehicle. Sensors and Actuators A: Physical, 2021, 321, 112583.	2.0	21
160	A polyurethane integrating self-healing, anti-aging and controlled degradation for durable and eco-friendly E-skin. Chemical Engineering Journal, 2021, 410, 128363.	6.6	59
161	One-Way Continuous Deposition of Monolayer MXene Nanosheets for the Formation of Two Confronting Transparent Electrodes in Flexible Capacitive Photodetector. ACS Applied Materials & Interfaces, 2021, 13, 25400-25409.	4.0	11
162	Application of a subâ€“0.1-mm ³ implantable mote for in vivo real-time wireless temperature sensing. Science Advances, 2021, 7, .	4.7	59

#	Article	IF	Citations
163	Integrating Emerging Polymer Chemistries for the Advancement of Recyclable, Biodegradable, and Biocompatible Electronics. Advanced Science, 2021, 8, e2101233.	5.6	73
164	Ultrasensitive and Wearable Carbon Hybrid Fiber Devices as Robust Intelligent Sensors. ACS Applied Materials & Interfaces, 2021, 13, 23905-23914.	4.0	29
165	A Portable and Flexible Self-Powered Multifunctional Sensor for Real-Time Monitoring in Swimming. Biosensors, 2021, 11, 147.	2.3	22
166	Flexible Polydopamine Bioelectronics. Advanced Functional Materials, 2021, 31, 2103391.	7.8	102
167	Electronic Drugs: Spatial and Temporal Medical Treatment of Human Diseases. Advanced Materials, 2021, 33, e2005930.	11.1	14
168	A Flexible Two-Sensor System for Temperature and Bending Angle Monitoring. Materials, 2021, 14, 2962.	1.3	7
169	Highly Sensitive Capacitive Pressure Sensor Based on a Micropyramid Array for Health and Motion Monitoring. Advanced Electronic Materials, 2021, 7, 2100174.	2.6	89
170	Stretchable Capacitive Pressure Sensing Sleeve Deployable onto Catheter Balloons towards Continuous Intra-Abdominal Pressure Monitoring. Biosensors, 2021, 11, 156.	2.3	21
171	A Multiscale Communications System Based on Engineered Bacteria. IEEE Communications Magazine, 2021, 59, 62-67.	4.9	6
172	Recent Progress on Bioresorbable Passive Electronic Devices and Systems. Micromachines, 2021, 12, 600.	1.4	8
173	Wearable, Implantable, and Interventional Medical Devices Based on Smart Electronic Skins. Advanced Materials Technologies, 2021, 6, 2100107.	3.0	81
174	Abrasion Resistant/Waterproof Stretchable Triboelectric Yarns Based on Fermat Spirals. Advanced Materials, 2021, 33, e2100782.	11.1	68
175	Advanced Flexible Skin-Like Pressure and Strain Sensors for Human Health Monitoring. Micromachines, 2021, 12, 695.	1.4	53
176	Sensation and Perception of a Bioinspired Flexible Smart Sensor System. ACS Nano, 2021, 15, 9238-9243.	7.3	17
177	Active-Sensing Epidermal Stretchable Bioelectronic Patch for Noninvasive, Conformal, and Wireless Tendon Monitoring. Research, 2021, 2021, 9783432.	2.8	6
178	Bio-inspired flexible electronics for smart E-skin. Acta Biomaterialia, 2022, 139, 280-295.	4.1	48
179	Stretchable, Self-Healing, and Skin-Mounted Active Sensor for Multipoint Muscle Function Assessment. ACS Nano, 2021, 15, 10130-10140.	7.3	75
180	Enabling the Unconstrained Epidermal Pulse Wave Monitoring via Fingerâ€Touching. Advanced Functional Materials, 2021, 31, 2102378.	7.8	29

#	Article	IF	Citations
181	A review on emerging biodegradable polymers for environmentally benign transient electronic skins. Journal of Materials Science, 2021, 56, 16765-16789.	1.7	49
182	Antiâ€Sandwich Structured Photoâ€Electronic Wound Dressing for Highly Efficient Bacterial Infection Therapy. Small, 2021, 17, e2101858.	5.2	22
183	Polymer Network Editing of Elastomers for Robust Underwater Adhesion and Tough Bonding to Diverse Surfaces. ACS Applied Materials & Interfaces, 2021, 13, 36527-36537.	4.0	11
184	Physically transient electronic materials and devices. Materials Science and Engineering Reports, 2021, 145, 100624.	14.8	46
185	A ball-in-ball type self-powered magnetoelectric inertial sensor for 3D multi-angle motion monitoring of humanoid robots. Nano Energy, 2021, 85, 106016.	8.2	17
186	SnO2 confining growth in layered graphene fibers toward superb volumetric lithium storage and flexibility. Applied Surface Science, 2021, 555, 149719.	3.1	3
187	Recent Advances in Flexible Organic Synaptic Transistors. Advanced Electronic Materials, 2021, 7, 2100336.	2.6	43
188	Flexible strain sensors: from devices to array integration. Flexible and Printed Electronics, 2021, 6, 043002.	1.5	4
189	Triggerâ€Detachable Hydrogel Adhesives for Bioelectronic Interfaces. Advanced Functional Materials, 2021, 31, 2106446.	7.8	63
190	Ionogel-based flexible stress and strain sensors. International Journal of Smart and Nano Materials, 2021, 12, 307-336.	2.0	17
191	Biodegradable Implantable Sensors: Materials Design, Fabrication, and Applications. Advanced Functional Materials, 2021, 31, 2104149.	7.8	53
192	Flexible GO/Nb₂CT _x hybrid films for high-performance piezoresistive sensors. Journal Physics D: Applied Physics, 2021, 54, 424007.	1.3	4
193	Stretchable and Highly Permeable Nanofibrous Sensors for Detecting Complex Human Body Motion. Advanced Materials, 2021, 33, e2102488.	11.1	35
194	Food-Based Highly Sensitive Capacitive Humidity Sensors by Inkjet Printing for Human Body Monitoring. ACS Applied Electronic Materials, 2021, 3, 4081-4090.	2.0	11
195	Passive Electronic Skin with Highly Sensitive Tactile Sensory Capabilities. ACS Applied Electronic Materials, 0, , .	2.0	0
196	Antennifying Orthopedic Bone-Plate Fixtures for the Wireless Monitoring of Local Deep Infections. IEEE Sensors Journal, 2021, 21, 21012-21021.	2.4	16
197	Temperature Compensated Wide-Range Micro Pressure Sensor with Polyimide Anticorrosive Coating for Harsh Environment Applications. Applied Sciences (Switzerland), 2021, 11, 9012.	1.3	4
198	Modular Synthesis of Fully Degradable Imine-Based Semiconducting p-Type and n-Type Polymers. Chemistry of Materials, 2021, 33, 7465-7474.	3.2	21

#	Article	IF	Citations
199	60Ânm Pixel-size pressure piezo-memory system as ultrahigh-resolution neuromorphic tactile sensor for in-chip computing. Nano Energy, 2021, 87, 106190.	8.2	21
200	Post-surgical wireless monitoring of arterial health progression. IScience, 2021, 24, 103079.	1.9	9
201	AI enabled sign language recognition and VR space bidirectional communication using triboelectric smart glove. Nature Communications, 2021, 12, 5378.	5.8	208
202	Ultrareproducible Capacitive Soft Pressure Sensor Using a Selfâ€Integrated Fibrous Network of Urethane Equipped with Dielsâ€“Alder Adducts. Advanced Engineering Materials, 2022, 24, 2100903.	1.6	6
203	Facile preparation of superhydrophobic conductive textiles and the application of real-time sensor of joint motion sensor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 628, 127257.	2.3	11
204	Flexible and biodegradable electronic implants for diagnosis and treatment of brain diseases. Current Opinion in Biotechnology, 2021, 72, 13-21.	3.3	16
205	Highly Sensitive Strain Sensors Based on Moleculesâ€“Gold Nanoparticles Networks for Highâ€Resolution Human Pulse Analysis. Small, 2021, 17, e2007593.	5.2	47
206	Materials, Devices, and Applications for Wearable and Implantable Electronics. ACS Applied Electronic Materials, 2021, 3, 485-503.	2.0	37
207	Interface Engineering of Flexible Piezoresistive Sensors via Nearâ€Field Electrospinning Processed Spacer Layers. Small Methods, 2021, 5, e2000842.	4.6	29
208	Wireless Monitoring of Small Strains in Intelligent Robots via a Joule Heating Effect in Stretchable Grapheneâ€“Polymer Nanocomposites. Advanced Functional Materials, 2020, 30, 1910809.	7.8	68
209	Advances in Bioresorbable Electronics and Uses in Biomedical Sensing. , 2020, , 29-72.		6
211	Biocompatible and Biodegradable Functional Polysaccharides for Flexible Humidity Sensors. Research, 2020, 2020, 8716847.	2.8	46
212	Wearable Printed Temperature Sensors: Short Review on Latest Advances for Biomedical Applications. IEEE Reviews in Biomedical Engineering, 2023, 16, 152-170.	13.1	9
213	Wirelessly operated bioelectronic sutures for the monitoring of deep surgical wounds. Nature Biomedical Engineering, 2021, 5, 1217-1227.	11.6	47
214	Direct stamping multifunctional tactile sensor for pressure and temperature sensing. Nano Research, 2022, 15, 3614-3620.	5.8	17
215	Cellulose melt processing assisted by small biomass molecule to fabricate recyclable ionogels for versatile stretchable triboelectric nanogenerators. Nano Energy, 2021, 90, 106619.	8.2	39
216	Development of modified and multifunctional poly(glycerol sebacate) (PGS)-based biomaterials for biomedical applications. European Polymer Journal, 2021, 161, 110830.	2.6	27
218	Design of automatic measurement system for pre-tightening parameters of multi-axis wrist force pressure sensor. Thermal Science, 2020, 24, 1521-1528.	0.5	1

#	Article	IF	Citations
220	Stretchable Transparent Electrode via Wettability Self-Assembly in Mechanically Induced Self-Cracking. ACS Applied Materials & Interfaces, 2021, 13, 52880-52891.	4.0	8
221	Flexible Pressure Sensor with Micro-Structure Arrays Based on PDMS and PEDOT:PSS/PUD&CNTs Composite Film with 3D Printing. Materials, 2021, 14, 6499.	1.3	14
222	An ossifying landscape: materials and growth factor strategies for osteogenic signalling and bone regeneration. Current Opinion in Biotechnology, 2022, 73, 355-363.	3.3	6
223	Three-Dimensional Multistack-Printed, Self-Powered Flexible Pressure Sensor Arrays: Piezoelectric Composites with Chemically Anchored Heterogeneous Interfaces. ACS Omega, 2020, 5, 1956-1965.	1.6	13
224	Highly Improved Performance in Ag-Doped BSA Films by Inserting the ZrOâ„‚ Layer for Nonvolatile Resistive Switching Memory. IEEE Transactions on Electron Devices, 2021, 68, 510-515.	1.6	6
225	Recent advances of flexible sensors for biomedical applications. Progress in Natural Science: Materials International, 2021, 31, 872-882.	1.8	42
226	Highly Stretchable Starch Hydrogel Wearable Patch for Electrooculographic Signal Detection and Humanâ€“Machine Interaction. Small Structures, 2021, 2, 2100105.	6.9	16
227	A bioinspired three-dimensional integrated e-skin for multiple mechanical stimuli recognition. Nano Energy, 2022, 92, 106777.	8.2	25
228	A stretchable and strain-unperturbed pressure sensor for motion interferenceâ€“free tactile monitoring on skins. Science Advances, 2021, 7, eabi4563.	4.7	136
229	Flexible smart sensing skin for â€œFly-by-Feelâ€•morphing aircraft. Science China Technological Sciences, 2022, 65, 1-29.	2.0	28
230	Recent Progress in Materials Chemistry to Advance Flexible Bioelectronics in Medicine. Advanced Materials, 2022, 34, e2106787.	11.1	44
231	Biologically Safe, Degradable Self-Destruction System for On-Demand, Programmable Transient Electronics. ACS Nano, 2021, 15, 19310-19320.	7.3	20
233	Recent progress in biodegradable and bioresorbable materials: From passive implants to active electronics. Applied Materials Today, 2021, 25, 101257.	2.3	24
234	Evolving Flexible Sensors, Wearable and Implantable Technologies Towards BodyNET for Advanced Healthcare and Reinforced Life Quality. IEEE Open Journal of Circuits and Systems, 2021, 2, 702-720.	1.4	34
235	Flexible capacitive pressure sensors for wearable electronics. Journal of Materials Chemistry C, 2022, 10, 1594-1605.	2.7	82
236	Recent Advances in Zwitterionic Hydrogels: Preparation, Property, and Biomedical Application. Gels, 2022, 8, 46.	2.1	45
237	3D reactive printing of polyaniline hybrid hydrogel microlattices with large stretchability and high fatigue resistance for wearable pressure sensors. Composites Science and Technology, 2022, 220, 109263.	3.8	24
238	Copper wire based electrical contacts for direct interfacing of stretchable sensors. , 2020, , .		2

#	Article	IF	Citations
239	Recent Advances in Wearable Optical Sensor Automation Powered by Battery versus Skin-like Battery-Free Devices for Personal Healthcareâ€"A Review. Nanomaterials, 2022, 12, 334.	1.9	32
241	An intelligent nanomesh-reinforced graphene pressure sensor with an ultra large linear range. Journal of Materials Chemistry A, 2022, 10, 4858-4869.	5.2	14
242	Flexible sensitive hydrogel sensor with self-powered capability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 639, 128381.	2.3	10
243	Sweatâ€Permeable, Biodegradable, Transparent and Selfâ€powered Chitosanâ€Based Electronic Skin with Ultrathin Elastic Gold Nanofibers. Advanced Functional Materials, 2022, 32, .	7.8	80
244	Ti₃C₂T_x MXene-Based Flexible Piezoresistive Physical Sensors. ACS Nano, 2022, 16, 1734-1758.	7.3	177
245	Stretchable Thermoelectrics: Strategies, Performances, and Applications. Advanced Functional Materials, 2022, 32, .	7.8	40
246	Hydrogel tapes for fault-tolerant strong wet adhesion. Nature Communications, 2021, 12, 7156.	5.8	122
247	Biodegradable and Flexible Capacitive Pressure Sensor for Electronic Skins. SSRN Electronic Journal, 0, , .	0.4	0
248	Flexible Intelligent Array Patch Based on Synergy of Polyurethane and Nanofiber for Sensitive Monitor and Smart Treatment. SSRN Electronic Journal, 0, , .	0.4	0
249	Flexible Tensile Strain-Pressure Sensor with an Off-Axis Deformation-Insensitivity. SSRN Electronic Journal, 0, , .	0.4	0
250	Biodegradable and Flexible Capacitive Pressure Sensor for Electronic Skins. SSRN Electronic Journal, 0, , .	0.4	0
251	Flexible Electronics and Devices as Humanâ€"Machine Interfaces for Medical Robotics. Advanced Materials, 2022, 34, e2107902.	11.1	211
252	Recent Advances in Electronic Skins with Multiple-Stimuli-Responsive and Self-Healing Abilities. Materials, 2022, 15, 1661.	1.3	8
253	A Soft Sponge Sensor for Multimodal Sensing and Distinguishing of Pressure, Strain, and Temperature. ACS Applied Materials & Interfaces, 2022, 14, 9570-9578.	4.0	35
254	Implantable biosensors for musculoskeletal health. Connective Tissue Research, 2022, 63, 228-242.	1.1	2
255	Wearable multimode sensor with a seamless integrated structure for recognition of different joint motion states with the assistance of a deep learning algorithm. Microsystems and Nanoengineering, 2022, 8, 24.	3.4	26
256	Functionalized Fiber-Based Strain Sensors: Pathway to Next-Generation Wearable Electronics. Nano-Micro Letters, 2022, 14, 61.	14.4	113
257	Biodegradable Elastomers and Gels for Elastic Electronics. Advanced Science, 2022, 9, e2105146.	5.6	45

#	Article	IF	Citations
258	Revolution in Flexible Wearable Electronics for Temperature and Pressure Monitoringâ€"A Review. Electronics (Switzerland), 2022, 11, 716.	1.8	29
259	Wearable multifunctional soft sensor and contactless 3D scanner using supersonically sprayed silver nanowires, carbon nanotubes, zinc oxide, and PEDOT:PSS. NPG Asia Materials, 2022, 14, .	3.8	14
260	Rational design of high-performance wearable tactile sensors utilizing bioinspired structures/functions, natural biopolymers, and biomimetic strategies. Materials Science and Engineering Reports, 2022, 148, 100672.	14.8	30
261	An Ultra-Low-Cost RCL-Meter. Sensors, 2022, 22, 2227.	2.1	0
262	Pushing detectability and sensitivity for subtle force to new limits with shrinkable nanochannel structured aerogel. Nature Communications, 2022, 13, 1119.	5.8	79
263	Force-Sensitive Interface Engineering in Flexible Pressure Sensors: A Review. Sensors, 2022, 22, 2652.	2.1	14
264	Ultralight Iontronic Triboelectric Mechanoreceptor with High Specific Outputs for Epidermal Electronics. Nano-Micro Letters, 2022, 14, 86.	14.4	27
265	Soft Capacitive Pressure Sensors: Trends, Challenges, and Perspectives. ACS Nano, 2022, 16, 3442-3448.	7.3	78
266	Multilayer flexible electronics: Manufacturing approaches and applications. Materials Today Physics, 2022, 23, 100647.	2.9	23
267	High-Performance Carbon Nanotube-Based Transient Complementary Electronics. ACS Applied Materials & Interfaces, 2022, 14, 12515-12522.	4.0	6
268	Cross-Linksâ€"Entanglements Integrated Networks Contributing to Highly Resilient, Soft, and Self-Adhesive Elastomers with Low Hysteresis for Green Wearable Electronics. ACS Applied Materials & Interfaces, 2022, 14, 16631-16640.	4.0	14
269	Skin-inspired electrochemical tactility and luminescence. Electrochimica Acta, 2022, 415, 140259.	2.6	5
270	Additive manufactured self-powered mechanoelectric sensor as the artificial nucleus pulposus for monitoring tissue rehabilitation after discectomy. Nano Energy, 2022, 96, 107113.	8.2	11
271	Printable Strain Sensors with Viscosity-Adjustable Ionic Liquids for Motion Monitoring. , 2021, 2021, 6806-6809.		0
272	Bio-Compatible Sensor for Middle Ear Pressure Monitoring on a Bio-Degradable Substrate. Frontiers in Electronics, 2021, 2, .	2.0	0
273	Contact-Resistance-Free Stretchable Strain Sensors with High Repeatability and Linearity. ACS Nano, 2022, 16, 541-553.	7.3	43
274	Resorbable elastomers for implantable medical devices: highlights and applications. Polymer International, 2022, 71, 552-561.	1.6	9
275	Micro and nano materials and processing techniques for printed biodegradable electronics. Materials Today Nano, 2022, 18, 100201.	2.3	11

#	Article	IF	Citations
276	Transient, Implantable, Ultrathin Biofuel Cells Enabled by Laser-Induced Graphene and Gold Nanoparticles Composite. Nano Letters, 2022, 22, 3447-3456.	4.5	19
277	Giant Magnetoelastic Effect Enabled Stretchable Sensor for Self-Powered Biomonitoring. ACS Nano, 2022, 16, 6013-6022.	7.3	59
278	Flexible intelligent array patch based on synergy of polyurethane and nanofiber for sensitive monitor and smart treatment. Chemical Engineering Journal, 2022, 443, 136378.	6.6	11
279	High-performance fully-stretchable solid-state lithium-ion battery with a nanowire-network configuration and crosslinked hydrogel. Journal of Materials Chemistry A, 2022, 10, 11562-11573.	5.2	6
280	Advances in perception-functionalized organic field-effect transistors. Scientia Sinica Chimica, 2022, 52, 1896-1912.	0.2	2
281	Fully implantable wireless batteryless vascular electronics with printed soft sensors for multiplex sensing of hemodynamics. Science Advances, 2022, 8, eabm1175.	4.7	41
282	Biodegradable and flexible capacitive pressure sensor for electronic skins. Organic Electronics, 2022, 106, 106539.	1.4	9
283	Biocompatible liquid metal coated stretchable electrospinning film for strain sensors monitoring system. Science China Materials, 2022, 65, 2235-2243.	3.5	14
284	Nanomaterials and printing techniques for 2D and 3D soft electronics. Nano Futures, 0, , .	1.0	1
285	Micro/nanoarrays and their applications in flexible sensors: A review. Materials Today Nano, 2022, 19, 100224.	2.3	9
286	Current state and future prospects of sensors for evaluating polymer biodegradability and sensors made from biodegradable polymers: A review. Analytica Chimica Acta, 2022, 1217, 339989.	2.6	18
287	Three-Dimensional Printable, Highly Conductive Ionic Elastomers for High-Sensitivity Iontronics. ACS Applied Materials & Interfaces, 2022, 14, 26068-26076.	4.0	27
288	Gecko-Inspired Slant Hierarchical Microstructure-Based Ultrasensitive Iontronic Pressure Sensor for Intelligent Interaction. Research, 2022, 2022, .	2.8	14
289	Selfâ€Powered Stretchable Sensor Arrays Exhibiting Magnetoelasticity for Realâ€Time Humanâ€“Machine Interaction. Advanced Materials, 2023, 35, .	11.1	17
290	Advances in Biodegradable Electronic Skin: Material Progress and Recent Applications in Sensing, Robotics, and Humanâ€“Machine Interfaces. Advanced Materials, 2023, 35, .	11.1	82
291	Ultraâ€High Gauge Factor Strain Sensor with Wideâ€Range Stretchability. Advanced Intelligent Systems, 2022, 4, .	3.3	13
293	Sensitivity Analysis of ZnO NWs Based Soft Capacitive Pressure Sensors using Finite Element Modeling. , 2022, , .		1
294	Enhancement of strength and toughness of bio-nanocomposites with good transparency and heat resistance by reactive processing. IScience, 2022, 25, 104560.	1.9	0

#	Article	IF	Citations
295	Ultrastretchable Organogel/Silicone Fiber-Helical Sensors for Self-Powered Implantable Ligament Strain Monitoring. ACS Nano, 2022, 16, 10958-10967.	7.3	33
296	3D Printability Assessment of Poly(octamethylene maleate (anhydride) citrate) and Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 5457-5470.	2.0	7
297	Muscle fibers inspired electrospun nanostructures reinforced conductive fibers for smart wearable optoelectronics and energy generators. Nano Energy, 2022, 101, 107592.	8.2	44
298	Biodegradable sensors are ready to transform autonomous ecological monitoring. Nature Ecology and Evolution, 2022, 6, 1245-1247.	3.4	13
299	Piezoionic strain sensors enabled by force-voltage coupling from ionogels. Chemical Physics Letters, 2022, 803, 139872.	1.2	3
300	Fully implantable batteryless soft platforms with printed nanomaterial-based arterial stiffness sensors for wireless continuous monitoring of restenosis in real time. Nano Today, 2022, 46, 101557.	6.2	10
301	Ecoresorbable and bioresorbable microelectromechanical systems. Nature Electronics, 2022, 5, 526-538.	13.1	28
302	Biodegradable germanium electronics for integrated biosensing of physiological signals. Npj Flexible Electronics, 2022, 6, .	5.1	11
303	Modelling and in vivo evaluation of tendon forces and strain in dynamic rehabilitation exercises: a scoping review. BMJ Open, 2022, 12, e057605.	0.8	3
304	Digitized Construction of Iontronic Pressure Sensor with Self-Defined Configuration and Widely Regulated Performance. Sensors, 2022, 22, 6136.	2.1	7
305	Functional Fiber Materials to Smart Fiber Devices. Chemical Reviews, 2023, 123, 613-662.	23.0	69
306	Additively Manufactured Flexible Electronics with Ultrabroad Range and High Sensitivity for Multiple Physiological Signalsâ€™ Detection. Research, 2022, 2022, .	2.8	8
307	Making electronics that donâ€™t last. Nature Electronics, 2022, 5, 479-479.	13.1	2
308	Ultralowâ€Noise Singleâ€Frequency Fiber Laser and Application in Highâ€Resolution Fiberâ€Optic Dynamic Strain Sensing. Advanced Photonics Research, 2022, 3, .	1.7	3
309	Mechanically Active Materials and Devices for Bioâ€Interfaced Pressure Sensorsâ€”A Review. Advanced Materials, 0, , .	11.1	14
310	Viscoelastic Metal-in-Water Emulsion Gel via Hostâ€“Guest Bridging for Printed and Strain-Activated Stretchable Electrodes. ACS Nano, 2022, 16, 12677-12685.	7.3	10
311	Piezo-pyrophototronics-based self-powered transparent mechanoreceptor. Sensors and Actuators A: Physical, 2022, 345, 113801.	2.0	3
312	Ultrasound-driven in vivo electrical stimulation based on biodegradable piezoelectric nanogenerators for enhancing and monitoring the nerve tissue repair. Nano Energy, 2022, 102, 107707.	8.2	45

#	Article	IF	Citations
313	Bulk Erosion Degradation Mechanism for Poly(1,8-octanediol-co-citrate) Elastomer: An In Vivo and In Vitro Investigation. Biomacromolecules, 2022, 23, 4268-4281.	2.6	10
314	Biodegradable bioelectronics for biomedical applications. Journal of Materials Chemistry B, 2022, 10, 8575-8595.	2.9	6
315	Elastic Tactile Sensor Skin on Double-Curved Surfaces for Robots and Wearables. IEEE Access, 2022, 10, 91103-91118.	2.6	3
316	Towards Resorbable Elastomeric Circuit Boards for Implantable Medical Devices. , 2022, , .		0
317	Ultraâ€Thin Flexible Encapsulating Materials for Soft Bioâ€Integrated Electronics. Advanced Science, 2022, 9, .	5.6	37
318	Flexible unimodal strain sensors for human motion detection and differentiation. Npj Flexible Electronics, 2022, 6, .	5.1	9
319	Smart Sensing Multifunctionalities Based on Barium Strontium Titanate Thin Films. Sensors, 2022, 22, 7183.	2.1	1
321	In situ diagnosis and simultaneous treatment of cardiac diseases using a single-device platform. Science Advances, 2022, 8, .	4.7	13
322	Lowâ€Temperature Plasma Sintering of Inkjetâ€Printed Metal Salt Decomposition Inks on Flexible Substrates. Advanced Engineering Materials, 2023, 25, .	1.6	2
323	Vertically Integrated Electronics: New Opportunities from Emerging Materials and Devices. Nano-Micro Letters, 2022, 14, .	14.4	8
324	Opportunities for biocompatible and safe zinc-based batteries. Energy and Environmental Science, 2022, 15, 4911-4927.	15.6	39
325	Facile construction of electrochemical and self-powered wearable pressure sensors based on metallic corrosion effects. Nano Energy, 2022, 104, 107954.	8.2	21
326	Merkel cell-like artificial mechanoreceptor with high sensitivity and high resolution over a wide linear range. Cell Reports Physical Science, 2022, 3, 101101.	2.8	3
327	Dual sensing signal decoupling based on tellurium anisotropy for VR interaction and neuro-reflex system application. Nature Communications, 2022, 13, .	5.8	63
328	Heterogeneous Strain Distribution Based Programmable Gated Microchannel for Ultrasensitive and Stable Strain Sensing. Advanced Materials, 2023, 35, .	11.1	9
329	Micro-/Nano-Structured Biodegradable Pressure Sensors for Biomedical Applications. Biosensors, 2022, 12, 952.	2.3	8
330	Hermetic and Bioresorbable Packaging Materials for MEMS Implantable Pressure Sensors: A Review. IEEE Sensors Journal, 2022, 22, 23633-23648.	2.4	3
331	High-performance self-powered integrated system of pressure sensor and supercapacitor based on Cu@Cu2O/graphitic carbon layered porous structure. Journal of Colloid and Interface Science, 2023, 632, 140-150.	5.0	4

#	Article	IF	Citations
332	Stretchable photodetectors based on 2D materials: materials synthesis, fabrications and applications. FlatChem, 2022, 36, 100452.	2.8	10
333	Rational design of AIE-active biodegradable polycarbonates for high-performance WLED and selective detection of nitroaromatic explosives. Chinese Chemical Letters, 2023, 34, 108008.	4.8	1
334	Intelligent wearable devices based on nanomaterials and nanostructures for healthcare. Nanoscale, 2023, 15, 405-433.	2.8	16
335	Ultrahigh sensitive, sensing-actuating integrated, and multi-functional intelligent skin based on electromechanical-hydraulic coupling. Chemical Engineering Journal, 2023, 454, 140548.	6.6	7
336	Recent advances in biodegradable electronics- from fundament to the next-generation multi-functional, medical and environmental device. Sustainable Materials and Technologies, 2023, 35, e00530.	1.7	5
337	Toward Sustainable Wearable Electronic Textiles. ACS Nano, 2022, 16, 19755-19788.	7.3	42
338	Scalable and Degradable Dextrin-Based Elastomers for Wearable Touch Sensing. ACS Applied Materials & Interfaces, 2023, 15, 4398-4407.	4.0	6
339	The Flexible and Wearable Pressure Sensing Microsystems for Medical Diagnostics. , 2023, , 229-262.		0
340	Highly Sensitive, Stretchable, and Robust Strain Sensor Based on Crack Propagation and Opening. ACS Applied Materials & Interfaces, 2023, 15, 1798-1807.	4.0	14
341	Recent advancements in digital health management using multi-modal signal monitoring. Mathematical Biosciences and Engineering, 2023, 20, 5194-5222.	1.0	1
342	A Transient Pseudoâ€Capacitor Using a Bioderived Ionic Liquid with Na Ions. Small, 2023, 19, .	5.2	5
343	Pathway of transient electronics towards connected biomedical applications. Nanoscale, 2023, 15, 4236-4249.	2.8	6
344	Investigated a PLL surface-modified Nylon 11 electrospun as a highly tribo-positive frictional layer to enhance output performance of triboelectric nanogenerators and self-powered wearable sensors. Nano Energy, 2023, 108, 108178.	8.2	27
345	Stretchable Transistorâ€Structured Artificial Synapses for Neuromorphic Electronics. Small, 2023, 19, .	5.2	14
346	Characterization of highly linear stretchable sensor made of Gr-PEDOT:PSS/MnO2 nanowires/Ecoflex composite. Composite Structures, 2023, 311, 116824.	3.1	4
347	Electron transport engineering of carbon hybrid network towards physiological signal monitoring and efficient heat management. Chemical Engineering Journal, 2023, 465, 142734.	6.6	3
348	Biodegradable materials as sensitive coatings for humidity sensing in S-band microwave frequencies. Micro and Nano Engineering, 2023, 19, 100185.	1.4	2
349	One-Step Patterned Contact-Resistance-Free Stretchable Strain Sensors With High Linearity and Repeatability for Body-Motion Detection. Journal of Applied Mechanics, Transactions ASME, 2023, 90, .	1.1	1

#	Article	IF	Citations
350	Decoupling Transmission and Transduction for Improved Durability of Highly Stretchable, Soft Strain Sensing: Applications in Human Health Monitoring. Sensors, 2023, 23, 1955.	2.1	2
351	Pressure Sensors Combining Porous Electrodes and Electrospun Nanofiber-Based Ionic Membranes. ACS Applied Nano Materials, 2023, 6, 3560-3571.	2.4	9
352	Disposable Pressure Sensors. , 2023, , 71-84.		0
353	Flexible and Wearable Strain/Pressure Sensors. , 2023, , 180-198.		0
354	Highly stretchable ionotronic pressure sensors with broad response range enabled by microstructured ionogel electrodes. Journal of Materials Chemistry A, 2023, 11, 7201-7212.	5.2	10
355	Technology Roadmap for Flexible Sensors. ACS Nano, 2023, 17, 5211-5295.	7.3	238
356	Sensing-triggered stiffness-tunable smart adhesives. Science Advances, 2023, 9, .	4.7	6
357	Highly Sensitive Artificial Skin Perception Enabled by a Bio-inspired Interface. ACS Sensors, 2023, 8, 1624-1629.	4.0	5
358	Recent Advances in Biodegradable Green Electronic Materials and Sensor Applications. Advanced Materials, 2023, 35, .	11.1	11
359	Zinc hybrid sintering for printed transient sensors and wireless electronics. Npj Flexible Electronics, 2023, 7, .	5.1	7
360	Flexible sensors for mechatronic engineering education. Sensors International, 2023, 4, 100236.	4.9	4
361	Cross-Talk Signal Free Recyclable Thermoplastic Polyurethane/Graphene-Based Strain and Pressure Sensor for Monitoring Human Motions. ACS Applied Materials & Interfaces, 2023, 15, 17279-17292.	4.0	14
362	Advances in Ultrathin Soft Sensors, Integrated Materials, and Manufacturing Technologies for Enhanced Monitoring of Human Physiological Signals. Advanced Electronic Materials, 2023, 9, .	2.6	6
363	Naturally sourced hydrogels: emerging fundamental materials for next-generation healthcare sensing. Chemical Society Reviews, 2023, 52, 2992-3034.	18.7	41
364	A Stretchable Strain Sensor System for Wireless Measurement of Musculoskeletal Soft Tissue Strains. Advanced Materials Technologies, 2023, 8, .	3.0	0
365	Batteryâ€Free, Wireless, Cuffâ€Type, Multimodal Physical Sensor for Continuous Temperature and Strain Monitoring of Nerve. Small, 2023, 19, .	5.2	6
366	Microstructured Anisotropic Elastomer Composite-Based Vertical Interconnect Access (VIA) for Multilayered Stretchable Electronics. ACS Applied Electronic Materials, 0, , .	2.0	0
370	Recent progress in flexible micro-pressure sensors for wearable health monitoring. Nanoscale Advances, 2023, 5, 3131-3145.	2.2	12

#	Article	IF	Citations
373	Biodegradable sensor platforms. , 2023, , 775-801.		0
376	Design of Elastomer-Based Piezoresistive Sensors: Materials, Structural Aspects, and Prospects. ACS Applied Electronic Materials, 2023, 5, 2912-2932.	2.0	3
398	Au-Based Biocompatible Capacitive Strain Sensor. , 2023, , .		0
413	Smartphone Interface and Wearable Biosensors for on-Site Diagnosis. , 2023, , 297-321.		0
420	Recent advances in smart wearable sensors as electronic skin. Journal of Materials Chemistry B, 2023, 11, 10332-10354.	2.9	0
443	Ultra-Flexible Organic Electronics. , 2024, , 185-219.		0
444	Processing techniques for bioresorbable-based composites for medical device applications. , 2024, , 41-62.		0