

# Graphene Electronic Tattoo Sensors

ACS Nano

11, 7634-7641

DOI: [10.1021/acsnano.7b02182](https://doi.org/10.1021/acsnano.7b02182)

Citation Report

#	ARTICLE	IF	CITATIONS
1	A Thin Elastic Membrane Conformed to a Soft and Rough Substrate Subjected to Stretching/Compression. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	1.1	36
2	Buckling-driven self-assembly of self-similar inspired micro/nanofibers for ultra-stretchable electronics. <i>Soft Matter</i> , 2017, 13, 7244-7254.	1.2	25
3	Stretchable bioelectronics—Current and future. <i>MRS Bulletin</i> , 2017, 42, 960-967.	1.7	14
4	ECG Monitoring Garment Using Conductive Carbon Paste for Reduced Motion Artifacts. <i>Polymers</i> , 2017, 9, 439.	2.0	44
5	Wearable tech meets tattoo art in a bid to revolutionize both. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3504-3506.	3.3	11
6	Low-cost, 1/4m-thick, tape-free electronic tattoo sensors with minimized motion and sweat artifacts. <i>Npj Flexible Electronics</i> , 2018, 2, .	5.1	132
7	Graphene-based flexible and wearable electronics. <i>Journal of Semiconductors</i> , 2018, 39, 011007.	2.0	76
8	Ultraconformable Temporary Tattoo Electrodes for Electrophysiology. <i>Advanced Science</i> , 2018, 5, 1700771.	5.6	136
9	Health Media: From Multimedia Signals to Personal Health Insights. <i>IEEE MultiMedia</i> , 2018, 25, 51-60.	1.5	17
10	Electroluminescent Pressure-Sensing Displays. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 13757-13766.	4.0	56
11	Stretchable ultrasonic transducer arrays for three-dimensional imaging on complex surfaces. <i>Science Advances</i> , 2018, 4, eaar3979.	4.7	204
12	Multifunctional Graphene Hair Dye. <i>CheM</i> , 2018, 4, 784-794.	5.8	55
13	Fire Alarm Wallpaper Based on Fire-Resistant Hydroxyapatite Nanowire Inorganic Paper and Graphene Oxide Thermosensitive Sensor. <i>ACS Nano</i> , 2018, 12, 3159-3171.	7.3	155
14	Soft network materials with isotropic negative Poisson's ratios over large strains. <i>Soft Matter</i> , 2018, 14, 693-703.	1.2	107
15	Wearable Chemosensors: A Review of Recent Progress. <i>ChemistryOpen</i> , 2018, 7, 118-130.	0.9	40
16	Recent Advances in Stretchable Supercapacitors Enabled by Low-Dimensional Nanomaterials. <i>Small</i> , 2018, 14, e1803976.	5.2	52
17	Investigation of the Liquid Loading Effect on the Flexible Acoustic Wave Devices for in-Liquid Sensing Applications. , 2018, , .		0
18	A flexible organic reflectance oximeter array. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11015-E11024.	3.3	201

#	ARTICLE	IF	CITATIONS
19	Flexible Laser-Induced Graphene for Nitrogen Sensing in Soil. ACS Applied Materials & Interfaces, 2018, 10, 39124-39133.	4.0	117
20	Assessment of Dry Epidermal Electrodes for Long-Term Electromyography Measurements. Sensors, 2018, 18, 1269.	2.1	34
21	Gas-Permeable, Multifunctional On-Skin Electronics Based on Laser-Induced Porous Graphene and Sugar-Templated Elastomer Sponges. Advanced Materials, 2018, 30, e1804327.	11.1	269
22	Kirigami-Inspired Deformable 3D Structures Conformable to Curved Biological Surface. Advanced Science, 2018, 5, 1801070.	5.6	51
23	Anti-self-collapse design of reservoir in flexible epidermal microfluidic device via pillar supporting. Applied Physics Letters, 2018, 113, .	1.5	8
24	Blending Electronics with the Human Body: A Pathway toward a Cybernetic Future. Advanced Science, 2018, 5, 1700931.	5.6	83
25	Engineering two-dimensional layered nanomaterials for wearable biomedical sensors and power devices. Materials Chemistry Frontiers, 2018, 2, 1944-1986.	3.2	59
26	Graphene & two-dimensional devices for bioelectronics and neuroprosthetics. 2D Materials, 2018, 5, 042004.	2.0	40
27	Perspective: 2D for beyond CMOS. APL Materials, 2018, 6, .	2.2	37
28	Self-Adhesive and Ultra-Conformable, Sub-300 nm Dry Thin-Film Electrodes for Surface Monitoring of Biopotentials. Advanced Functional Materials, 2018, 28, 1803279.	7.8	136
29	Imperceptible electrooculography graphene sensor system for human-robot interface. Npj 2D Materials and Applications, 2018, 2, .	3.9	114
30	Multilayer Graphene Epidermal Electronic Skin. ACS Nano, 2018, 12, 8839-8846.	7.3	257
31	One-Step Laser Patterned Highly Uniform Reduced Graphene Oxide Thin Films for Circuit-Enabled Tattoo and Flexible Humidity Sensor Application. Sensors, 2018, 18, 1857.	2.1	33
32	Flexible Conductive Composite Integrated with Personal Earphone for Wireless, Real-Time Monitoring of Electrophysiological Signs. ACS Applied Materials & Interfaces, 2018, 10, 21184-21190.	4.0	52
33	Graphene and Poly(3,4-ethylene dioxythiophene):Poly(4-styrenesulfonate) on Nonwoven Fabric as a Room Temperature Metal and Its Application as Dry Electrodes for Electrocardiography. ACS Applied Materials & Interfaces, 2019, 11, 32339-32345.	4.0	23
34	Carbon Nanofiber-Based Wearable Patches for Bio-Potential Monitoring. Journal of Medical and Biological Engineering, 2019, 39, 892-900.	1.0	13
35	Ultralow-Cost, Highly Sensitive, and Flexible Pressure Sensors Based on Carbon Black and Airlaid Paper for Wearable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 33370-33379.	4.0	127
36	An Imperceptible Magnetic Skin. Advanced Materials Technologies, 2019, 4, 1900493.	3.0	27

#	ARTICLE	IF	CITATIONS
37	Embroidered electrodes for bioelectrical impedance analysis: impact of surface area and stitch parameters. <i>Measurement Science and Technology</i> , 2019, 30, 115103.	1.4	17
38	Chemical vapour deposition of graphene: layer control, the transfer process, characterisation, and related applications. <i>International Reviews in Physical Chemistry</i> , 2019, 38, 149-199.	0.9	46
39	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. <i>Advanced Materials</i> , 2020, 32, e1902039.	11.1	127
40	Graphene nanoflakes: Foundation for improving solid state electrochemistry based electrochromic devices. <i>Solar Energy Materials and Solar Cells</i> , 2019, 200, 110041.	3.0	15
41	A Wearable Skinlike Ultra-Sensitive Artificial Graphene Throat. <i>ACS Nano</i> , 2019, 13, 8639-8647.	7.3	80
42	Super- and Ultrathin Organic Field-Effect Transistors: from Flexibility to Super- and Ultraflexibility. <i>Advanced Functional Materials</i> , 2019, 29, 1906908.	7.8	35
43	Viscous Corrections for Hypersonic Air Intake Using CFD Simulations. , 2019, , .		0
44	Recent Progress in Wireless Sensors for Wearable Electronics. <i>Sensors</i> , 2019, 19, 4353.	2.1	99
45	Recent Advances in Skin Chemical Sensors. <i>Sensors</i> , 2019, 19, 4376.	2.1	26
46	Liquid-Gated Transistors Based on Reduced Graphene Oxide for Flexible and Wearable Electronics. <i>Advanced Functional Materials</i> , 2019, 29, 1905375.	7.8	37
47	Low-Cost, Efficient, Photolithography-Free Fabrication of Stretchable Electronics Systems on a Vinyl Cutter. , 2019, , .		1
48	Graphene-PEDOT: PSS Humidity Sensors for High Sensitive, Low-Cost, Highly-Reliable, Flexible, and Printed Electronics. <i>Materials</i> , 2019, 12, 3477.	1.3	25
49	Two-Dimensional Materials in Biosensing and Healthcare: From <i>In Vitro</i> Diagnostics to Optogenetics and Beyond. <i>ACS Nano</i> , 2019, 13, 9781-9810.	7.3	259
50	Mosquito bite prevention through graphene barrier layers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 18304-18309.	3.3	14
51	Waterproof, Omnidirectionally Stretchable Electronics with Multilayer Patterns Via Rapid, Photolithography-Free Fabrication. , 2019, , .		1
52	Graphene-based wearable sensors. <i>Nanoscale</i> , 2019, 11, 18923-18945.	2.8	98
53	Bio-Integrated Wearable Systems: A Comprehensive Review. <i>Chemical Reviews</i> , 2019, 119, 5461-5533.	23.0	822
54	Do biomedical engineers dream of graphene sheets?. <i>Biomaterials Science</i> , 2019, 7, 1228-1239.	2.6	10

#	ARTICLE	IF	CITATIONS
55	Robust epidermal tattoo electrode platform for skin physiology monitoring. <i>Analytical Methods</i> , 2019, 11, 1460-1468.	1.3	13
56	Ultra-Adaptable and Wearable Photonic Skin Based on a Shape-Memory, Responsive Cellulose Derivative. <i>Advanced Functional Materials</i> , 2019, 29, 1902720.	7.8	89
57	Silver fractal dendrites for highly sensitive and transparent polymer thermistors. <i>Nanoscale</i> , 2019, 11, 15464-15471.	2.8	17
58	Radiolucent implantable electrocardiographic monitoring device based on graphene. <i>Carbon</i> , 2019, 152, 946-953.	5.4	9
59	A Chest-Laminated Ultrathin and Stretchable E-Tattoo for the Measurement of Electrocardiogram, Seismocardiogram, and Cardiac Time Intervals. <i>Advanced Science</i> , 2019, 6, 1900290.	5.6	137
60	Graphene-Based Sensors for Human Health Monitoring. <i>Frontiers in Chemistry</i> , 2019, 7, 399.	1.8	218
61	Intercalation of Layered Materials from Bulk to 2D. <i>Advanced Materials</i> , 2019, 31, e1808213.	11.1	120
62	A Megatrend Challenging Analytical Chemistry: Biosensor and Chemosensor Concepts Ready for the Internet of Things. <i>Chemical Reviews</i> , 2019, 119, 7996-8027.	23.0	197
63	Like A Second Skin. , 2019, , .		20
64	Modular and Reconfigurable Wireless E-Tattoos for Personalized Sensing. <i>Advanced Materials Technologies</i> , 2019, 4, 1900117.	3.0	86
65	Laser Transfer, Printing, and Assembly Techniques for Flexible Electronics. <i>Advanced Electronic Materials</i> , 2019, 5, 1800900.	2.6	91
66	Oral administration of graphene oxide nano-sheets induces oxidative stress, genotoxicity, and behavioral teratogenicity in <i>Drosophila melanogaster</i> . <i>Environmental Science and Pollution Research</i> , 2019, 26, 19560-19574.	2.7	37
67	Graphene-based stretchable/wearable self-powered touch sensor. <i>Nano Energy</i> , 2019, 62, 259-267.	8.2	132
68	Nanofiber-Reinforced Silver Nanowires Network as a Robust, Ultrathin, and Conformable Epidermal Electrode for Ambulatory Monitoring of Physiological Signals. <i>Small</i> , 2019, 15, e1900755.	5.2	62
69	Materials and Design Strategies of Stretchable Electrodes for Electronic Skin and its Applications. <i>Proceedings of the IEEE</i> , 2019, 107, 2185-2197.	16.4	55
70	Transferring Electronic Devices with Hydrogenated Graphene. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801974.	1.9	6
71	Recent Developments in Printing Flexible and Wearable Sensing Electronics for Healthcare Applications. <i>Sensors</i> , 2019, 19, 1230.	2.1	151
72	Binder-Free Graphene/Silver Nanowire Gel-Like Composite with Tunable Properties and Multifunctional Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 15028-15037.	4.0	11

#	ARTICLE	IF	CITATIONS
73	Recent progresses in graphene based bio-functional nanostructures for advanced biological and cellular interfaces. <i>Nano Today</i> , 2019, 26, 57-97.	6.2	58
74	Self-Healable Multifunctional Electronic Tattoos Based on Silk and Graphene. <i>Advanced Functional Materials</i> , 2019, 29, 1808695.	7.8	236
75	Matrix-Independent Highly Conductive Composites for Electrodes and Interconnects in Stretchable Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 8567-8575.	4.0	89
76	Tuning Surface Morphology of Polymer Films Through Bilayered Structures, Mechanical Forces, and External Stimuli. , 2019, , 291-314.		1
77	Wearable and Implantable Devices for Cardiovascular Healthcare: from Monitoring to Therapy Based on Flexible and Stretchable Electronics. <i>Advanced Functional Materials</i> , 2019, 29, 1808247.	7.8	345
78	“Cut-and-paste” method for the rapid prototyping of soft electronics. <i>Science China Technological Sciences</i> , 2019, 62, 199-208.	2.0	5
79	Wrinkled Polymer Surfaces. , 2019, , .		11
80	All MoS <sub>2</sub> -Based Large Area, Skin-Attachable Active-Matrix Tactile Sensor. <i>ACS Nano</i> , 2019, 13, 3023-3030.	7.3	171
81	Wearable graphene sensors use ambient light to monitor health. <i>Nature</i> , 2019, 576, 220-221.	13.7	30
82	Soft dry electroophthalmogram electrodes for human machine interaction. <i>Biomedical Microdevices</i> , 2019, 21, 103.	1.4	7
83	Electrical Characterization of Graphene-based e-Tattoos for Bio-Impedance-based Physiological Sensing. , 2019, , .		17
84	Screen Printed Temporary Tattoos for Skin-Mounted Electronics. , 2019, , .		3
85	Stretchable conductive nanocomposite based on alginate hydrogel and silver nanowires for wearable electronics. <i>APL Materials</i> , 2019, 7, .	2.2	97
86	Wearable and Implantable Soft Bioelectronics Using Two-Dimensional Materials. <i>Accounts of Chemical Research</i> , 2019, 52, 73-81.	7.6	143
87	Wet Transfer of Inkjet Printed Graphene for Microsupercapacitors on Arbitrary Substrates. <i>ACS Applied Energy Materials</i> , 2019, 2, 158-163.	2.5	24
88	Irregular Hexagonal Cellular Substrate for Stretchable Electronics. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2019, 86, .	1.1	39
89	Non-Invasive Flexible and Stretchable Wearable Sensors With Nano-Based Enhancement for Chronic Disease Care. <i>IEEE Reviews in Biomedical Engineering</i> , 2019, 12, 34-71.	13.1	52
90	A Stretchable Strain-Insensitive Temperature Sensor Based on Free-Standing Elastomeric Composite Fibers for On-Body Monitoring of Skin Temperature. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2317-2327.	4.0	125

#	ARTICLE	IF	CITATIONS
91	All-2D Material Inkjet-Printed Capacitors: Toward Fully Printed Integrated Circuits. ACS Nano, 2019, 13, 54-60.	7.3	95
92	A Generic Soft Encapsulation Strategy for Stretchable Electronics. Advanced Functional Materials, 2019, 29, 1806630.	7.8	83
93	A High-Performances Flexible Temperature Sensor Composed of Polyethyleneimine/Reduced Graphene Oxide Bilayer for Real-Time Monitoring. Advanced Materials Technologies, 2019, 4, 1800594.	3.0	102
94	Molecule-Graphene Hybrid Materials with Tunable Mechanoresponse: Highly Sensitive Pressure Sensors for Health Monitoring. Advanced Materials, 2019, 31, e1804600.	11.1	159
95	Advanced Carbon for Flexible and Wearable Electronics. Advanced Materials, 2019, 31, e1801072.	11.1	779
96	Enhancing the adhesion of graphene to polymer substrates by controlled defect formation. Nanotechnology, 2019, 30, 015704.	1.3	12
97	Multifunctional and high-performance electronic skin based on silver nanowires bridging graphene. Carbon, 2020, 156, 253-260.	5.4	67
98	Transparent and flexible electrode composed of a graphene multilayer interlayer-doped with MoO <sub>3</sub> . Organic Electronics, 2020, 77, 105437.	1.4	7
99	Theoretical and experimental studies of laser lift-off of nonwrinkled ultrathin polyimide film for flexible electronics. Applied Surface Science, 2020, 499, 143910.	3.1	35
100	Stretchability of PMMA-supported CVD graphene and of its electrical contacts. 2D Materials, 2020, 7, 014003.	2.0	17
101	Laser-driven programmable non-contact transfer printing of objects onto arbitrary receivers via an active elastomeric microstructured stamp. National Science Review, 2020, 7, 296-304.	4.6	81
102	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
103	Wearable Electronics Based on 2D Materials for Human Physiological Information Detection. Small, 2020, 16, e1901124.	5.2	97
104	Kirigami-inspired strain-insensitive sensors based on atomically-thin materials. Materials Today, 2020, 34, 58-65.	8.3	65
105	Disruptive, Soft, Wearable Sensors. Advanced Materials, 2020, 32, e1904664.	11.1	272
106	Nanomaterial-Enabled Flexible and Stretchable Sensing Systems: Processing, Integration, and Applications. Advanced Materials, 2020, 32, e1902343.	11.1	198
107	Animal models in chronic wound healing research. , 2020, , 197-224.		2
108	Graphene-based wearable piezoresistive physical sensors. Materials Today, 2020, 36, 158-179.	8.3	262

#	ARTICLE	IF	CITATIONS
109	Flexible wearable graphene/alginate composite non-woven fabric temperature sensor with high sensitivity and anti-interference. <i>Cellulose</i> , 2020, 27, 2369-2380.	2.4	55
110	Reviews of wearable healthcare systems: Materials, devices and system integration. <i>Materials Science and Engineering Reports</i> , 2020, 140, 100523.	14.8	215
111	Multiscale porous elastomer substrates for multifunctional on-skin electronics with passive-cooling capabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 205-213.	3.3	131
112	Recent innovations in artificial skin. <i>Biomaterials Science</i> , 2020, 8, 776-797.	2.6	38
113	Controlled Fragmentation of Single-Atom-Thick Polycrystalline Graphene. <i>Matter</i> , 2020, 2, 666-679.	5.0	45
114	Muscle-Inspired Self-Healing Hydrogels for Strain and Temperature Sensor. <i>ACS Nano</i> , 2020, 14, 218-228.	7.3	476
115	Substrate-Free Multilayer Graphene Electronic Skin for Intelligent Diagnosis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 49945-49956.	4.0	43
116	Ultrasonically Patterning Silver Nanowire/“Acrylate Composite for Highly Sensitive and Transparent Strain Sensors Based on Parallel Cracks. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 47729-47738.	4.0	41
117	Ultrahigh Sensitivity of Flexible Thermistors Based on 3D Porous Graphene Characterized by Imbedded Microheaters. <i>Advanced Electronic Materials</i> , 2020, 6, 2000451.	2.6	7
118	All-printed nanomembrane wireless bioelectronics using a biocompatible solderable graphene for multimodal human-machine interfaces. <i>Nature Communications</i> , 2020, 11, 3450.	5.8	124
119	Screen-Printed Dry Electrodes: Basic Characterization and Benchmarking. <i>Advanced Engineering Materials</i> , 2020, 22, 2000714.	1.6	8
120	Skin Conformal and Antibacterial PPy/Leather Electrode for ECG Monitoring. <i>Advanced Electronic Materials</i> , 2020, 6, 2000259.	2.6	26
121	A Bioinspired, Durable, and Nondisposable Transparent Graphene Skin Electrode for Electrophysiological Signal Detection. , 2020, 2, 999-1007.		44
122	Temporary tattoo as unconventional substrate for conformable and transferable electronics on skin and beyond. <i>Multifunctional Materials</i> , 2020, 3, 032003.	2.4	25
123	Challenges in Design and Fabrication of Flexible/Stretchable Carbon- and Textile-Based Wearable Sensors for Health Monitoring: A Critical Review. <i>Sensors</i> , 2020, 20, 3927.	2.1	65
124	Highly Conductive Nitrogen-Doped Vertically Oriented Graphene toward Versatile Electrode-Related Applications. <i>ACS Nano</i> , 2020, 14, 15327-15335.	7.3	26
125	A Compliant Ionic Adhesive Electrode with Ultralow Bioelectronic Impedance. <i>Advanced Materials</i> , 2020, 32, e2003723.	11.1	86
126	Freestanding Multi-Gate Amorphous Oxide-Based TFTs on Graphene Oxide Enhanced Electrolyte Membranes. <i>IEEE Electron Device Letters</i> , 2020, 41, 1360-1363.	2.2	7



#	ARTICLE	IF	CITATIONS
127	Ink-Based Additive Nanomanufacturing of Functional Materials for Human-Integrated Smart Wearables. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000117.	3.3	17
128	Printed, Wireless, Soft Bioelectronics and Deep Learning Algorithm for Smart Human-Machine Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 49398-49406.	4.0	45
129	Electrically compensated, tattoo-like electrodes for epidermal electrophysiology at scale. <i>Science Advances</i> , 2020, 6, .	4.7	99
130	Fully organic compliant dry electrodes self-adhesive to skin for long-term motion-robust epidermal biopotential monitoring. <i>Nature Communications</i> , 2020, 11, 4683.	5.8	245
131	Ultrathin, Stretchable, and Breathable Epidermal Electronics Based on a Facile Bubble Blowing Method. <i>Advanced Electronic Materials</i> , 2020, 6, 2000306.	2.6	48
132	Recent Advances in Nanomaterial-Enabled Wearable Sensors: Material Synthesis, Sensor Design, and Personal Health Monitoring. <i>Small</i> , 2020, 16, e2002681.	5.2	133
133	Analogue two-dimensional semiconductor electronics. <i>Nature Electronics</i> , 2020, 3, 486-491.	13.1	74
134	A Pressure-Insensitive Self-Attachable Flexible Strain Sensor with Bioinspired Adhesive and Active CNT Layers. <i>Sensors</i> , 2020, 20, 6965.	2.1	14
135	Feasibility of a Wearable Reflectometric System for Sensing Skin Hydration. <i>Sensors</i> , 2020, 20, 2833.	2.1	28
136	Enhancing the Heat-Dissipation Efficiency in Ultrasonic Transducers via Embedding Vertically Oriented Graphene-Based Porcelain Radiators. <i>Nano Letters</i> , 2020, 20, 5097-5105.	4.5	16
137	Solution-Processed Submicron Free-Standing, Conformal, Transparent, Breathable Epidermal Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 23689-23696.	4.0	35
138	Smart Glove Integrated with Tunable MWNTs/PDMS Fibers Made of a One-Step Extrusion Method for Finger Dexterity, Gesture, and Temperature Recognition. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 23764-23773.	4.0	67
139	Laser-Induced Direct Patterning of Free-standing $\text{Ti}_3\text{C}_2\text{MXene}$ Films for Skin Conformal Tattoo Sensors. <i>ACS Sensors</i> , 2020, 5, 2086-2095.	4.0	62
140	3-D graphene aerogel sphere-based flexible sensors for healthcare applications. <i>Sensors and Actuators A: Physical</i> , 2020, 312, 112144.	2.0	35
141	Cryo-Transferred Ultrathin and Stretchable Epidermal Electrodes. <i>Small</i> , 2020, 16, e2000450.	5.2	33
142	Winding-Locked Carbon Nanotubes/Polymer Nanofibers Helical Yarn for Ultrastretchable Conductor and Strain Sensor. <i>ACS Nano</i> , 2020, 14, 3442-3450.	7.3	164
143	Fermi velocity renormalization in graphene probed by terahertz time-domain spectroscopy. <i>2D Materials</i> , 2020, 7, 035009.	2.0	23
144	AI/ML-Enabled 2-D - $\text{RuS}_2$ Nanomaterial-Based Multifunctional, Low Cost, Wearable Sensor Platform for Non-Invasive Point of Care Diagnostics. <i>IEEE Sensors Journal</i> , 2020, 20, 8437-8444.	2.4	17

#	ARTICLE	IF	CITATIONS
145	Electric Spark Induced Instantaneous and Selective Reduction of Graphene Oxide on Textile for Wearable Electronics. ACS Applied Materials & Interfaces, 2020, 12, 15527-15537.	4.0	12
146	Reviewâ€”The Development of Wearable Polymer-Based Sensors: Perspectives. Journal of the Electrochemical Society, 2020, 167, 037566.	1.3	76
147	Study of Partially Transient Organic Epidermal Sensors. Materials, 2020, 13, 1112.	1.3	5
148	Direct writing of 3D conjugated polymer micro/nanostructures for organic electronics and bioelectronics. Polymer Chemistry, 2020, 11, 4530-4541.	1.9	14
149	Prospects and challenges in low-dimensional materials and devices for Internet of things. , 2020, , 291-327.		3
150	Dry Electrodes for Human Bioelectrical Signal Monitoring. Sensors, 2020, 20, 3651.	2.1	105
151	Stable and Biocompatible Carbon Nanotube Ink Mediated by Silk Protein for Printed Electronics. Advanced Materials, 2020, 32, e2000165.	11.1	184
152	Graphene electronic tattoo sensors for point-of-care personal health monitoring and humanâ€”machine interfaces. , 2020, , 59-86.		5
153	Flexibility of Fluorinated Graphene-Based Materials. Materials, 2020, 13, 1032.	1.3	7
154	Ethanol-Precursor-Mediated Growth and Thermochromic Applications of Highly Conductive Vertically Oriented Graphene on Soda-Lime Glass. ACS Applied Materials & Interfaces, 2020, 12, 11972-11978.	4.0	17
155	Epidermal electrodes with enhanced breathability and high sensing performance. Materials Today Physics, 2020, 12, 100191.	2.9	19
156	Nanobiomaterial Engineering. , 2020, , .		46
157	State of the Art in Alcohol Sensing with 2D Materials. Nano-Micro Letters, 2020, 12, 33.	14.4	41
158	Eco-designed Conformable Inorganic Electronics to Improve the End of Life of Smart Objects: Sensor Processing and Applications. ACS Applied Electronic Materials, 2020, 2, 563-570.	2.0	1
159	Nonintrusive Monitoring of Mental Fatigue Status Using Epidermal Electronic Systems and Machine-Learning Algorithms. ACS Sensors, 2020, 5, 1305-1313.	4.0	36
160	Hybrid Energy Storage Device: Combination of Zinc-Ion Supercapacitor and Zincâ€”Air Battery in Mild Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 7239-7248.	4.0	88
161	Innovative Technologies for Cultural Heritage. Tattoo Sensors and AI: The New Life of Cultural Assets. Sensors, 2020, 20, 1909.	2.1	9
162	On-skin graphene electrodes for large area electrophysiological monitoring and human-machine interfaces. Carbon, 2020, 164, 164-170.	5.4	60

#	ARTICLE	IF	CITATIONS
163	Conducting polymer tattoo electrodes in clinical electro- and magneto-encephalography. Npj Flexible Electronics, 2020, 4, .	5.1	69
164	Fully Untethered Battery-free Biomonitoring Electronic Tattoo with Wireless Energy Harvesting. Scientific Reports, 2020, 10, 5539.	1.6	64
165	Automated Assembly of Wafer-Scale 2D TMD Heterostructures of Arbitrary Layer Orientation and Stacking Sequence Using Water Dissoluble Salt Substrates. Nano Letters, 2020, 20, 3925-3934.	4.5	25
166	Reviewâ€”Current Trends in Disposable Graphene-Based Printed Electrode for Electrochemical Biosensors. Journal of the Electrochemical Society, 2020, 167, 067523.	1.3	16
167	Wearable Sensing and Telehealth Technology with Potential Applications in the Coronavirus Pandemic. IEEE Reviews in Biomedical Engineering, 2021, 14, 48-70.	13.1	174
168	Ultraconformable organic devices. , 2021, , 437-478.		3
169	Transparent Soft Actuators/Sensors and Camouflage Skins for Imperceptible Soft Robotics. Advanced Materials, 2021, 33, e2002397.	11.1	131
170	Flexible, Air Dryable, and Fiber Modified Aerogel-Based Wet Electrode for Electrophysiological Monitoring. IEEE Transactions on Biomedical Engineering, 2021, 68, 1820-1827.	2.5	10
171	Black Phosphorus@Laserâ€”Engraved Graphene Heterostructureâ€”Based Temperatureâ€”Strain Hybridized Sensor for Electronicâ€”Skin Applications. Advanced Functional Materials, 2021, 31, 2007661.	7.8	107
172	Materials, Devices, and Systems of Onâ€”Skin Electrodes for Electrophysiological Monitoring and Humanâ€”Machine Interfaces. Advanced Science, 2021, 8, 2001938.	5.6	168
173	Flexible temperature sensors made of aligned electrospun carbon nanofiber films with outstanding sensitivity and selectivity towards temperature. Materials Horizons, 2021, 8, 1488-1498.	6.4	61
174	A highly conductive self-assembled multilayer graphene nanosheet film for electronic tattoos in the applications of human electrophysiology and strain sensing. Nanoscale, 2021, 13, 10798-10806.	2.8	14
175	Selfâ€”Calibrated, Sensitive, and Flexible Temperature Sensor Based on 3D Chemically Modified Graphene Hydrogel. Advanced Electronic Materials, 2021, 7, 2001084.	2.6	24
176	Functionalized Elastomers for Intrinsically Soft and Biointegrated Electronics. Advanced Healthcare Materials, 2021, 10, e2002105.	3.9	36
177	Well-rounded devices: the fabrication of electronics on curved surfaces â€” a review. Materials Horizons, 2021, 8, 1926-1958.	6.4	39
178	Semi-disposable Self-adhesive Sensor System for Wearable Electrocardiogram Detection. IEEE Journal of the Electron Devices Society, 2021, , 1-1.	1.2	1
179	A Novel Brain-Computer Interface Flexible Electrode Material with Magnetorheological property. Materials Advances, 0, , .	2.6	0
180	Nanobiosensors: Usability of Imprinted Nanopolymers. , 2021, , 163-202.		5

#	ARTICLE	IF	CITATIONS
181	Multipurpose and Reusable Ultrathin Electronic Tattoos Based on PtSe <sub>2</sub> and PtTe <sub>2</sub> . ACS Nano, 2021, 15, 2800-2811.	7.3	46
182	Wearable Biosensors: An Alternative and Practical Approach in Healthcare and Disease Monitoring. Molecules, 2021, 26, 748.	1.7	134
183	Recycled Iontronic from Discarded Chewed Gum for Personalized Healthcare Monitoring and Intelligent Information Encryption. ACS Applied Materials & Interfaces, 2021, 13, 6731-6738.	4.0	29
184	Textile Chemical Sensors Based on Conductive Polymers for the Analysis of Sweat. Polymers, 2021, 13, 894.	2.0	43
185	Wearable sensors: At the frontier of personalised health monitoring, smart prosthetics and assistive technologies. Biosensors and Bioelectronics, 2021, 176, 112946.	5.3	100
186	Reduced Graphene Oxide Tattoo as Wearable Proximity Sensor. Advanced Electronic Materials, 2021, 7, 2001214.	2.6	22
187	Localized Surface Plasmon Enhanced Laser Reduction of Graphene Oxide for Wearable Strain Sensor. Advanced Materials Technologies, 2021, 6, 2001191.	3.0	16
188	Comparison of silver-plated nylon (Ag/PA66) e-textile and Ag/AgCl electrodes for bioelectrical impedance analysis (BIA). Biomedical Physics and Engineering Express, 2021, 7, 035011.	0.6	4
189	A Flexible Electroencephalography Electronic Skin Based on Graphene. , 2021, , .		4
190	Advances in Wearable Chemosensors. Chemosensors, 2021, 9, 99.	1.8	6
191	Advances in healthcare wearable devices. Npj Flexible Electronics, 2021, 5, .	5.1	236
192	Biointerfaced sensors for biodiagnostics. View, 2021, 2, 20200172.	2.7	24
193	A Novel Wearable Flexible Dry Electrode Based on Cowhide for ECG Measurement. Biosensors, 2021, 11, 101.	2.3	18
194	Fabrication, characterization and applications of graphene electronic tattoos. Nature Protocols, 2021, 16, 2395-2417.	5.5	59
196	Straintronics of 2D inorganic materials for electronic and optical applications. Physics-Uspekhi, 2022, 65, 567-596.	0.8	6
197	2D Materials for Skin-Mountable Electronic Devices. Advanced Materials, 2021, 33, e2005858.	11.1	51
198	Applications of Bioinspired Reversible Dry and Wet Adhesives: A Review. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	11
199	A Review of Deep Learning-Based Contactless Heart Rate Measurement Methods. Sensors, 2021, 21, 3719.	2.1	55

#	ARTICLE	IF	CITATIONS
200	Multi-level microstructures for flexible electronic devices. , 2021, , .		0
202	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100646.	3.9	62
203	Differential cardiopulmonary monitoring system for artifact-canceled physiological tracking of athletes, workers, and COVID-19 patients. <i>Science Advances</i> , 2021, 7, .	4.7	55
204	Roll-to-roll graphene films for non-disposable electrocardiogram electrodes. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 364003.	1.3	8
205	A bio-adhesive ion-conducting organohydrogel as a high-performance non-invasive interface for bioelectronics. <i>Chemical Engineering Journal</i> , 2022, 427, 130886.	6.6	29
206	Bionic Ultra-sensitive Self-Powered Electromechanical Sensor for Muscle-Triggered Communication Application. <i>Advanced Science</i> , 2021, 8, e2101020.	5.6	41
207	Nano- and Microscale Optical and Electrical Biointerfaces and Their Relevance to Energy Research. <i>Small</i> , 2021, 17, e2100165.	5.2	7
208	A mini-review of graphene based materials for electrodes in electrocardiogram (ECG) sensing. , 2021, , .		1
209	Noninvasive Estimation of Hydration Status in Athletes Using Wearable Sensors and a Data-Driven Approach Based on Orthostatic Changes. <i>Sensors</i> , 2021, 21, 4469.	2.1	3
210	Opportunities and challenges for flexible and printable electrodes in electroencephalography. , 2021, , .		2
211	High-Performance Flexible Pressure Sensor Based on Controllable Hierarchical Microstructures by Laser Scribing for Wearable Electronics. <i>Advanced Materials Technologies</i> , 2021, 6, 2100122.	3.0	42
212	Capacitive Coupling of Conducting Polymer Tattoo Electrodes with the Skin. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100352.	1.9	8
213	Bending characteristics of radio frequency microelectromechanical system low-pass filter based on flexible substrate. <i>Electronics Letters</i> , 2021, 57, 860-862.	0.5	4
214	Ionic Network Based on Dynamic Ionic Liquids for Electronic Tattoo Application. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 33557-33565.	4.0	26
215	Self-reconfigurable high-weight-per-volume-gelatin films for all-solution-processed on-skin electronics with ultra-conformal contact. <i>Biosensors and Bioelectronics</i> , 2021, 184, 113231.	5.3	16
216	Biosensor Encapsulation via Photoinitiated Chemical Vapor Deposition (piCVD). <i>Journal of the Electrochemical Society</i> , 2021, 168, 077518.	1.3	3
217	Simple and cost-effective microfabrication of flexible and stretchable electronics for wearable multi-functional electrophysiological monitoring. <i>Scientific Reports</i> , 2021, 11, 14823.	1.6	12
218	Stable epidermal electronic device with strain isolation induced by in situ Joule heating. <i>Microsystems and Nanoengineering</i> , 2021, 7, 56.	3.4	6

#	ARTICLE	IF	CITATIONS
219	Polymer/inorganic nanohybrids: An attractive materials for analysis and sensing. TrAC - Trends in Analytical Chemistry, 2021, 140, 116273.	5.8	10
220	Research Progress of Transparent Electrode Materials with Sandwich Structure. Materials, 2021, 14, 4097.	1.3	6
221	System-Engineered Miniaturized Robots: From Structure to Intelligence. Advanced Intelligent Systems, 2021, 3, 2000284.	3.3	18
222	Ultra-conformal skin electrodes with synergistically enhanced conductivity for long-time and low-motion artifact epidermal electrophysiology. Nature Communications, 2021, 12, 4880.	5.8	116
223	A Roadmap for Disruptive Applications and Heterogeneous Integration Using Two-Dimensional Materials: State-of-the-Art and Technological Challenges. Nano Letters, 2021, 21, 6359-6381.	4.5	35
224	Wearable sensors and devices for real-time cardiovascular disease monitoring. Cell Reports Physical Science, 2021, 2, 100541.	2.8	51
225	Development of Low-Cost, Kirigami-inspired, Stretchable on Skin Strain Sensors using Tattoo Paper. , 2021, , .		0
226	Application of intrinsically conducting polymers in flexible electronics. SmartMat, 2021, 2, 263-285.	6.4	87
227	Designing New-Generation Piezoelectric Transducers by Embedding Superior Graphene-Based Thermal Regulators. Advanced Materials, 2021, 33, e2103141.	11.1	9
228	A non-printed integrated-circuit textile for wireless theranostics. Nature Communications, 2021, 12, 4876.	5.8	76
229	Review of Wearable Devices and Data Collection Considerations for Connected Health. Sensors, 2021, 21, 5589.	2.1	124
230	Transferred Laser-Scribed Graphene-Based Durable and Permeable Strain Sensor. Advanced Materials Interfaces, 2021, 8, 2100625.	1.9	5
231	Tattoo Inks for Optical Biosensing in Interstitial Fluid. Advanced Healthcare Materials, 2021, 10, e2101238.	3.9	9
232	Pressure-Based Immunoassays with Versatile Electronic Sensors for Carcinoembryonic Antigen Detection. ACS Applied Materials & Interfaces, 2021, 13, 46440-46450.	4.0	34
233	Robust, self-adhesive, reinforced polymeric nanofilms enabling gas-permeable dry electrodes for long-term application. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	57
234	Surface bioelectric dry Electrodes: A review. Measurement: Journal of the International Measurement Confederation, 2021, 183, 109774.	2.5	39
235	Wearable triboelectric nanogenerators with the reduced loss of triboelectric charges by using a hole transport layer of bar-printed single-wall carbon nanotube random networks. Energy, 2021, 233, 121196.	4.5	12
236	High performance dual strain-temperature sensor based on alginate nanofibril/graphene oxide/polyacrylamide nanocomposite hydrogel. Composites Communications, 2021, 27, 100837.	3.3	25

#	ARTICLE	IF	CITATIONS
237	Carbon Nanomaterials for the Development of Biosensors for Microbe Detection and Diagnosis. RSC Nanoscience and Nanotechnology, 2021, , 293-330.	0.2	1
238	Highly Sensitive Strain Sensors Based on Moleculesâ€“Gold Nanoparticles Networks for Highâ€“Resolution Human Pulse Analysis. Small, 2021, 17, e2007593.	5.2	47
239	A Systematic Review of Bio-Cyber Interface Technologies and Security Issues for Internet of Bio-Nano Things. IEEE Access, 2021, 9, 93529-93566.	2.6	20
240	Flexible Nano Smart sensors. , 2021, , 199-230.		1
241	Interactions Between 2D Materials and Living Matter: A Review on Graphene and Hexagonal Boron Nitride Coatings. Frontiers in Bioengineering and Biotechnology, 2021, 9, 612669.	2.0	21
242	Information and Communication Theoretical Understanding and Treatment of Spinal Cord Injuries: State-of-The-Art and Research Challenges. IEEE Reviews in Biomedical Engineering, 2023, 16, 332-347.	13.1	9
243	Biocompatible, Transparent, and High-Areal-Coverage Kirigami PEDOT:PSS Electrodes for Electrooculography-Derived Humanâ€“Machine Interactions. ACS Sensors, 2021, 6, 967-975.	4.0	36
244	Micro-nano hybrid-structured conductive film with ultrawide range pressure-sensitivity and bioelectrical acquirability for ubiquitous wearable applications. Applied Materials Today, 2020, 20, 100651.	2.3	8
245	Growing Contributions of Nano in 2020. ACS Nano, 2020, 14, 16163-16164.	7.3	1
246	The development of a pressure sensor using a technique for patterning silver nanowires on 3-dimensional curved PDMS membranes. Journal of Micromechanics and Microengineering, 2020, 30, 095013.	1.5	5
247	Design and applications of graphene-based flexible and wearable physical sensing devices. 2D Materials, 2021, 8, 022001.	2.0	16
248	Toward 2D materials for flexible electronics: opportunities and outlook. Oxford Open Materials Science, 2020, 1, .	0.5	22
249	Hybridization-induced dual-band tunable graphene metamaterials for sensing. Optical Materials Express, 2019, 9, 35.	1.6	20
250	Soft wearable sensors for monitoring symptoms of COVID-19 and other respiratory diseases: a review. Progress in Biomedical Engineering, 2022, 4, 012001.	2.8	12
251	Electronic tattoos: the most multifunctional but imperceptible wearables. , 2019, , .		3
252	Permeable Conductors for Wearable and Onâ€“Skin Electronics. Small Structures, 2022, 3, 2100135.	6.9	46
253	Future Prospected of Engineered Nanobiomaterials in Human Health Care. , 2020, , 275-294.		0
254	Scalably Nanomanufactured Atomically Thin Materialsâ€“Based Wearable Health Sensors. Small Structures, 2022, 3, 2100120.	6.9	16

#	ARTICLE	IF	CITATIONS
255	Research Progress of Microtransfer Printing Technology for Flexible Electronic Integrated Manufacturing. <i>Micromachines</i> , 2021, 12, 1358.	1.4	9
257	Integrated dry poly(3,4-ethylenedioxythiophene):polystyrene sulfonate electrodes on finished textiles for continuous and simultaneous monitoring of electrocardiogram, electromyogram and electrodermal activity. <i>Flexible and Printed Electronics</i> , 2020, 5, 035009.	1.5	6
258	From the perspective of material science: a review of flexible electrodes for brain-computer interface. <i>Materials Research Express</i> , 2020, 7, 102001.	0.8	13
259	Biomimetic integration of tough polymer elastomer with conductive hydrogel for highly stretchable, flexible electronic. <i>Nano Energy</i> , 2022, 92, 106735.	8.2	43
260	Graphene-enabled wearable sensors for healthcare monitoring. <i>Biosensors and Bioelectronics</i> , 2022, 197, 113777.	5.3	82
261	High-Adhesive Flexible Electrodes and Their Manufacture: A Review. <i>Micromachines</i> , 2021, 12, 1505.	1.4	10
262	Multifunctional Graphene Sensor Ensemble as a Smart Biomonitoring Fashion Accessory. <i>ACS Sensors</i> , 2021, 6, 4325-4337.	4.0	16
263	Low-Cost, Large-Area, Multifunctional Stretchable E-Tattoos Inspired by Dough Figurines for Wearable Human-Machine Interfaces. <i>Advanced Materials Technologies</i> , 2022, 7, 2100907.	3.0	12
264	Robust Tattoo Electrode Prepared by Paper-Assisted Water Transfer Printing for Wearable Health Monitoring. <i>IEEE Sensors Journal</i> , 2022, 22, 3817-3827.	2.4	9
265	Eddy current measurement of chemiresistive sensing transients in monolayer graphene. <i>Applied Materials Today</i> , 2022, 26, 101291.	2.3	2
266	Boron and nitrogen co-doped vertical graphene electrodes for scalp electroencephalogram recording. <i>Carbon</i> , 2022, 189, 71-80.	5.4	12
267	Gel-Free Wearable Electroencephalography (EEG) with Soft Graphene Textiles. , 2021, , .		11
268	Wearable Sensing Systems for Monitoring Mental Health. <i>Sensors</i> , 2022, 22, 994.	2.1	16
269	Functional graphene paper from smart building to sensor application. <i>Biosensors and Bioelectronics</i> , 2022, 203, 114031.	5.3	6
270	Surface Electromyography as a Natural Human-Machine Interface: A Review. <i>IEEE Sensors Journal</i> , 2022, 22, 9198-9214.	2.4	29
271	Signatures of Bright-to-Dark Exciton Conversion in Corrugated Mos2 Monolayers. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
272	Graphene and Its Immense Contribution in Defense and Security: A Review. <i>Analytical Chemistry Letters</i> , 2022, 12, 1-12.	0.4	10
273	MXene wearables: properties, fabrication strategies, sensing mechanism and applications. <i>Materials Advances</i> , 2022, 3, 3784-3808.	2.6	29



#	ARTICLE	IF	CITATIONS
274	Nanomaterials for soft wearable electronics. , 2022, , .		2
275	Graphene for Nanobiosensors and Nanobiochips. <i>Advances in Experimental Medicine and Biology</i> , 2022, 1351, 203-232.	0.8	1
276	Functionalized and environment-friendly carbon materials for flexible and wearable electronic devices. , 2022, , .		0
277	Multi-material Additive Fabrication of a Carbon Nanotube-Based Flexible Tactile Sensor. <i>International Journal of Precision Engineering and Manufacturing</i> , 2022, 23, 453-458.	1.1	11
278	Fully printed and multifunctional graphene-based wearable e-textiles for personalized healthcare applications. <i>IScience</i> , 2022, 25, 103945.	1.9	40
279	Flexible Miniaturized Sensor Technologies for Long-Term Physiological Monitoring. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	35
280	A Three-Dimensional-Printed Recyclable, Flexible, and Wearable Device for Visualized UV, Temperature, and Sweat pH Sensing. <i>ACS Omega</i> , 2022, 7, 9834-9845.	1.6	10
281	Breathable, Self-Adhesive Dry Electrodes for Stable Electrophysiological Signal Monitoring During Exercise. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 12812-12823.	4.0	16
282	Parylene C-Based, Breathable Tattoo Electrodes for High-Quality Bio-Potential Measurements. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 820217.	2.0	10
283	Ultra-robust stretchable electrode for e-skin: In situ assembly using a nanofiber scaffold and liquid metal to mimic water-net interaction. <i>Informa Mater</i> , 2022, 4, .	8.5	47
284	Challenges and limitation of wearable sensors used in firefighters' protective clothing. <i>Journal of Fire Sciences</i> , 2022, 40, 214-245.	0.9	6
285	Air-Permeable Waterproofing Electrocardiogram Patch to Monitor Full-Day Activities for Multiple Days. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102703.	3.9	12
286	Strategies for body-conformable electronics. <i>Matter</i> , 2022, 5, 1104-1136.	5.0	90
287	Green syntheses of graphene and its applications in internet of things (IoT) a status review. <i>Nanotechnology</i> , 2022, 33, 322003.	1.3	7
288	Determining layer number of micro-mechanical exfoliated and CVD grown ultrathin graphenes by the methods of Raman intensity ratio. <i>Optik</i> , 2022, 258, 168902.	1.4	1
289	Substrate-free, ultra-conformable PEDOT: PSS E-tattoo achieved by energy regulation on skin. <i>Biosensors and Bioelectronics</i> , 2022, 206, 114118.	5.3	18
290	Development of Transferable, Wearable and Flexible Electrodes. , 2021, , .		0
291	Physical and Chemical Sensors on the Basis of Laser-Induced Graphene: Mechanisms, Applications, and Perspectives. <i>ACS Nano</i> , 2021, 15, 18708-18741.	7.3	70

#	ARTICLE	IF	CITATIONS
292	Non-invasive on-skin sensors for brain machine interfaces with epitaxial graphene. Journal of Neural Engineering, 2021, 18, 066035.	1.8	12
293	Facile Fabrication of Multilayer Stretchable Electronics via a Two-mode Mechanical Cutting Process. ACS Nano, 2022, 16, 1533-1546.	7.3	5
294	Skin bioelectronics towards long-term, continuous health monitoring. Chemical Society Reviews, 2022, 51, 3759-3793.	18.7	85
295	Nano-tattoos as a novel approach for glucose monitoring and diabetes management. , 2022, , 97-110.		0
296	α-β-γ-δ-ε-ζ-η-θ-ι-κ-λ-μ-ν-ξ-ο-π-ρ-σ-τ-υ-φ-χ-ψ-ω. Scientia Sinica Chimica, 2022, , .	0.2	1
297	A novel chemiluminescence biosensor based on dual aptamers bound nanoparticles with multi-site signal amplification for sensitive detection of carcinoembryonic antigen. Microchemical Journal, 2022, 179, 107482.	2.3	9
298	Advances in Soft and Dry Electrodes for Wearable Health Monitoring Devices. Micromachines, 2022, 13, 629.	1.4	34
299	Degradable Silk-Based Subcutaneous Oxygen Sensors. Advanced Functional Materials, 2022, 32, .	7.8	11
300	Electronic Tattoos. , 2022, , .		1
301	Sensing materials for wearable sensors. , 2022, , .		0
302	Key Wearable Device Technologies Parameters for Innovative Healthcare Delivery in 5G Network: A Review. IEEE Access, 2022, 10, 49956-49974.	2.6	19
303	Stretchable, sensitive, flexible strain sensor incorporated with patterned liquid metal on hydrogel for human motion monitoring and human-machine interaction. Journal of Materials Chemistry C, 2022, 10, 8206-8217.	2.7	28
304	Graphene-Based Flexible Electrode for Electrocardiogram Signal Monitoring. Applied Sciences (Switzerland), 2022, 12, 4526.	1.3	12
305	The era of nano-bionic: 2D materials for wearable and implantable body sensors. Advanced Drug Delivery Reviews, 2022, 186, 114315.	6.6	18
306	Preparation and application of graphene-based wearable sensors. Nano Research, 2022, 15, 9850-9865.	5.8	20
307	Rapid and efficient testing of the toxicity of graphene-related materials in primary human lung cells. Scientific Reports, 2022, 12, 7664.	1.6	11
308	The marriage of biochemistry and nanotechnology for non-invasive real-time health monitoring. Materials Science and Engineering Reports, 2022, 149, 100681.	14.8	7
309	Ultrasoft Porous 3D Conductive Dry Electrodes for Electrophysiological Sensing and Myoelectric Control. Advanced Materials Technologies, 2022, 7, .	3.0	13

#	ARTICLE	IF	CITATIONS
310	Materials and design strategies for stretchable electroluminescent devices. <i>Nanoscale Horizons</i> , 2022, 7, 801-821.	4.1	22
311	é†áŸç”µâçš®è,ç”ç©¶è¿â±•. <i>Scientia Sinica Chimica</i> , 2022, , .	0.2	0
312	Wearable EEG electronics for a Brainâ€“AI Closed-Loop System to enhance autonomous machine decision-making. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	29
313	Siloxeneâ€“Functionalized Laserâ€“Induced Graphene via Cî£¿Oî£¿Si Bonding for Highâ€“Performance Heavy Metal Sensing Patch Applications. <i>Small</i> , 2022, 18, .	5.2	9
314	Tissue Adhesive, Conductive, and Injectable Cellulose Hydrogel Ink for On-Skin Direct Writing of Electronics. <i>Gels</i> , 2022, 8, 336.	2.1	16
315	Advanced wearable biosensors for the detection of body fluids and exhaled breath by graphene. <i>Mikrochimica Acta</i> , 2022, 189, .	2.5	35
316	Innovation in Cardiovascular Bioelectronics. , 2022, , 587-602.		0
317	Recent advances in skin-like wearable sensors: sensor design, health monitoring, and intelligent auxiliary. <i>Sensors &amp; Diagnostics</i> , 2022, 1, 686-708.	1.9	15
319	A Personalized Electronic Tattoo for Healthcare Realized by Onâ€“theâ€“Spot Assembly of an Intrinsically Conductive and Durable Liquidâ€“Metal Composite. <i>Advanced Materials</i> , 2022, 34, .	11.1	45
320	Continuous cuffless monitoring of arterial blood pressure via graphene bioimpedance tattoos. <i>Nature Nanotechnology</i> , 2022, 17, 864-870.	15.6	79
321	Advances in Flexible Optoelectronics Based on Chemical Vapor Depositionâ€“Grown Graphene. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	19
322	A ternary heterogeneous hydrogel with strength elements for resilient, self-healing, and recyclable epidermal electronics. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	11
323	Inkjet and Extrusion Printed Silver Biomedical Tattoo Electrodes. , 2022, , .		1
324	A universal theoretical model for hybrid structure sensor with proximity and large-range contact force sensing. <i>Sensors and Actuators A: Physical</i> , 2022, 343, 113676.	2.0	5
325	Research on Throat Speech Signal Detection Based on a Flexible Graphene Piezoresistive Sensor. <i>ACS Applied Electronic Materials</i> , 2022, 4, 3549-3559.	2.0	6
326	Skin Electronics from Biocompatible In Situ Welding Enabled By Intrinsically Sticky Conductors. <i>Advanced Science</i> , 2022, 9, .	5.6	36
327	Blended Polymer Dry Electrodes for Reliable Electrocardiogram and Electromyogram Measurements and Their Eco-Friendly Disposal Led by Degradability in Hot Water. <i>Polymers</i> , 2022, 14, 2586.	2.0	4
328	Kirigami Engineering of Suspended Graphene Transducers. <i>Nano Letters</i> , 2022, 22, 5301-5306.	4.5	5

#	ARTICLE	IF	CITATIONS
330	Model-based Fusion of Surface Electromyography with Kinematic and Kinetic Measurements for Monitoring of Muscle Fatigue. International Journal of Prognostics and Health Management, 2022, 13, .	0.6	0
331	Graphene electronic tattoos 2.0 with enhanced performance, breathability and robustness. Npj 2D Materials and Applications, 2022, 6, .	3.9	14
332	Serpentineâ€inspired Strain Sensor with Predictable Cracks for Remote Bioâ€Mechanical Signal Monitoring. Macromolecular Rapid Communications, 2022, 43, .	2.0	5
333	Signatures of bright-to-dark exciton conversion in corrugated MoS2 monolayers. Applied Surface Science, 2022, 600, 154078.	3.1	4
334	Natural gum-based electronic ink with water-proofing self-healing and easy-cleaning properties for directly on-skin electronics. Biosensors and Bioelectronics, 2022, 214, 114547.	5.3	7
335	Mechanical analysis of adhesion between wearable electronics and human skin based on crack theory of bi-material interface. International Journal of Solids and Structures, 2022, 254-255, 111850.	1.3	2
336	Superhydrophobic, Oleophobic, Self-Cleaning Flexible Wearable Temperature Sensing Device. , 0, , .		1
337	End-to-end design of wearable sensors. Nature Reviews Materials, 2022, 7, 887-907.	23.3	311
338	Thin-Film Electrodes Based on Two-Dimensional Nanomaterials for Neural Interfaces. ACS Applied Nano Materials, 2022, 5, 10137-10150.	2.4	11
339	Metaplastic and energy-efficient biocompatible graphene artificial synaptic transistors for enhanced accuracy neuromorphic computing. Nature Communications, 2022, 13, .	5.8	39
340	Multiâ€Electrode Printed Bioelectronic Patches for Longâ€Term Electrophysiological Monitoring. Advanced Functional Materials, 2022, 32, .	7.8	21
341	Strenuous exercise-tolerance stretchable dry electrodes for continuous multi-channel electrophysiological monitoring. Npj Flexible Electronics, 2022, 6, .	5.1	15
342	Topological Gradients for Metal Film-Based Strain Sensors. Nano Letters, 2022, 22, 6637-6646.	4.5	16
343	From Materials to Devices: Graphene toward Practical Applications. Small Methods, 2022, 6, .	4.6	16
344	Breathable Electronic Skins for Daily Physiological Signal Monitoring. Nano-Micro Letters, 2022, 14, .	14.4	54
345	Stretchable and Self-Adhesive PEDOT:PSS Blend with High Sweat Tolerance as Conformal Biopotential Dry Electrodes. ACS Applied Materials & Interfaces, 2022, 14, 39159-39171.	4.0	34
346	A fully soft, self-powered vibration sensor by laser direct writing. Nano Energy, 2022, 103, 107803.	8.2	20
347	Recent advances in soft electronic materials for intrinsically stretchable optoelectronic systems. Opto-Electronic Advances, 2022, 5, 210131-210131.	6.4	14

#	ARTICLE	IF	CITATIONS
348	Graphene-Based Wearable Sensors. , 2022, , 1-15.		0
349	A Fully Soft, Self-Powered Vibration Sensor by Laser Direct Writing. SSRN Electronic Journal, 0, , .	0.4	0
350	Effect of fabric structure on the performance of screen-printed ultra-high frequency radio frequency identification tag antenna for wireless radio frequency energy harvesting. Journal of Industrial Textiles, 2022, 52, 152808372211096.	1.1	2
351	Textile-Based Wearable Sensor for Skin Hydration Monitoring. Sensors, 2022, 22, 6985.	2.1	6
352	Review of Advances in the Measurement of Skin Hydration Based on Sensing of Optical and Electrical Tissue Properties. Sensors, 2022, 22, 7151.	2.1	9
353	Flexible Hybrid Electronics Nanofiber Electrodes with Excellent Stretchability and Highly Stable Electrical Conductivity for Smart Clothing. ACS Applied Materials & Interfaces, 2022, 14, 42441-42453.	4.0	27
354	Low-Cost Self-Calibration Data Glove Based on Space-Division Multiplexed Flexible Optical Fiber Sensor. Polymers, 2022, 14, 3935.	2.0	4
355	A perspective on electroencephalography sensors for brain-computer interfaces. Progress in Biomedical Engineering, 2022, 4, 043002.	2.8	4
356	An All-in-One, Bioderived, Air-Permeable, and Sweat-Stable MXene Epidermal Electrode for Muscle Theranostics. ACS Nano, 2022, 16, 17168-17178.	7.3	28
357	Direct Freeform Laser Fabrication of 3D Conformable Electronics. Advanced Functional Materials, 2023, 33, .	7.8	23
358	Engineering the Comfort&of&Wear for Next Generation Wearables. Advanced Electronic Materials, 2023, 9, .	2.6	14
359	A biomimetic laminated strategy enabled strain-interference free and durable flexible thermistor electronics. Nature Communications, 2022, 13, .	5.8	34
360	All&Liquid Reconfigurable Electronics Using Jammed MXene Interfaces. Advanced Materials, 2023, 35, .	11.1	6
361	Graphene e-tattoos for unobstructive ambulatory electrodermal activity sensing on the palm enabled by heterogeneous serpentine ribbons. Nature Communications, 2022, 13, .	5.8	29
362	An Elastic and Damage-Tolerant Dry Epidermal Patch with Robust Skin Adhesion for Bioelectronic Interfacing. ACS Nano, 2022, 16, 18608-18620.	7.3	14
363	3D-Printed Soft Wearable Electronics: Techniques, Materials, and Applications. , 2023, , 1-49.		0
364	2D Materials towards sensing technology: From fundamentals to applications. Sensing and Bio-Sensing Research, 2022, 38, 100540.	2.2	27
365	Flexible and stretchable transparent conductive graphene-based electrodes for emerging wearable electronics. Carbon, 2023, 202, 495-527.	5.4	54

#	ARTICLE	IF	CITATIONS
366	Smart electronics based on 2D materials for wireless healthcare monitoring. Applied Physics Reviews, 2022, 9, .	5.5	7
367	Advanced thermal sensing techniques for characterizing the physical properties of skin. Applied Physics Reviews, 2022, 9, .	5.5	7
368	Curvilinear soft electronics by micromolding of metal nanowires in capillaries. Science Advances, 2022, 8, .	4.7	13
369	Advances in Materials, Sensors, and Integrated Systems for Monitoring Eye Movements. Biosensors, 2022, 12, 1039.	2.3	4
370	Stretchable skin hydration sensor based on hygroscopic and ion conductive polymer composites. Chemical Engineering Journal, 2023, 455, 140957.	6.6	5
371	Applications of electrospinning in human health: From detection, protection, regulation to reconstruction. Nano Today, 2023, 48, 101723.	6.2	46
372	Low-Modulus, Low-Motion-Artifact Sensor for Biological Signal Recording. , 2022, , .		0
373	Printable Graphene-Sustainable Elastomer-Based Cross Talk Free Sensor for Point of Care Diagnostics. ACS Applied Materials & Interfaces, 2022, 14, 57265-57280.	4.0	9
374	Three-in-One Portable Electronic Sensory System Based on Low-Impedance Laser-Induced Graphene On-Skin Electrode Sensors for Electrophysiological Signal Monitoring. Advanced Materials Interfaces, 2023, 10, .	1.9	9
375	Graphene and Two-Dimensional Materials-Based Flexible Electronics for Wearable Biomedical Sensors. Electronics (Switzerland), 2023, 12, 45.	1.8	3
376	Self-sensing polymer composite containing a continuous and periodic graphene monolayer. Cell Reports Physical Science, 2022, 3, 101160.	2.8	2
377	Design and measurement of cost-balanced and electronic-efficient embroidered textile electrodes. Journal of the Textile Institute, 2024, 115, 41-47.	1.0	0
378	The Feature, Performance, and Prospect of Advanced Electrodes for Electroencephalogram. Biosensors, 2023, 13, 101.	2.3	14
379	Functional Two-Dimensional Materials for Bioelectronic Neural Interfacing. Journal of Functional Biomaterials, 2023, 14, 35.	1.8	4
380	Toward a new generation of permeable skin electronics. Nanoscale, 2023, 15, 3051-3078.	2.8	16
381	Multifunctional fiber derived from wet spinning combined with UV photopolymerization for human motion and temperature detection. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	23
382	Flexible temperature sensors based on two-dimensional materials for wearable devices. Journal Physics D: Applied Physics, 2023, 56, 063001.	1.3	6
383	Electromyogram-Based Lip-Reading via Unobtrusive Dry Electrodes and Machine Learning Methods. Small, 2023, 19, .	5.2	4

#	ARTICLE	IF	CITATIONS
384	Smart biomaterials for skin tissue engineering and health monitoring. , 2023, , 211-258.		0
385	Wearable chemical sensors based on 2D materials for healthcare applications. <i>Nanoscale</i> , 2023, 15, 3079-3105.	2.8	7
386	Electronic tattoos based on large-area Mo <sub>2</sub> C grown by chemical vapor deposition for electrophysiology. <i>Nano Research</i> , 2023, 16, 4100-4106.	5.8	5
387	Integrated Sensing Devices for Brain-Computer Interfaces. , 2023, , 241-258.		0
388	Carbon-based electrochemical biosensors as diagnostic platforms for connected decentralized healthcare. <i>Sensors &amp; Diagnostics</i> , 2023, 2, 529-558.	1.9	5
389	Gas-permeable and stretchable on-skin electronics based on a gradient porous elastomer and self-assembled silver nanowires. <i>Chemical Engineering Journal</i> , 2023, 463, 142350.	6.6	3
390	A review: Recent advancements in sensor technology for non-invasive neonatal health monitoring. <i>Biosensors and Bioelectronics: X</i> , 2023, 14, 100332.	0.9	2
391	Skin-interfaced electronics: A promising and intelligent paradigm for personalized healthcare. <i>Biomaterials</i> , 2023, 296, 122075.	5.7	12
392	Nitrogenâ€Doped Multilayer Graphene Microtubes for Highâ€Density Recording of Occipital EEG Signals. <i>Advanced Materials Technologies</i> , 0, , 2201734.	3.0	0
393	Self-Powered Biosensors for Monitoring Human Physiological Changes. <i>Biosensors</i> , 2023, 13, 236.	2.3	6
394	Bioâ€Inspired ionic skins for smart medicine. , 2023, 2, .		3
395	Stretchable, breathable, and washable epidermal electrodes based on microfoam reinforced ultrathin conductive nanocomposites. <i>Nano Research</i> , 2023, 16, 10412-10419.	5.8	2
396	Emerging Trends in 2D Flexible Electronics. <i>Advanced Materials Technologies</i> , 2023, 8, .	3.0	7
397	Advanced Bionic Attachment Equipment Inspired by the Attachment Performance of Aquatic Organisms: A Review. <i>Biomimetics</i> , 2023, 8, 85.	1.5	5
398	Lanternâ€Inspired Onâ€Skin Helical Interconnects for Epidermal Electronic Sensors. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	5
399	Technology Roadmap for Flexible Sensors. <i>ACS Nano</i> , 2023, 17, 5211-5295.	7.3	238
400	Assessment of genotoxicity induced by subchronic exposure to graphene in HaCaT human skin cell line. <i>Nanotoxicology</i> , 2023, 17, 42-61.	1.6	2
401	Ultraflexible tattoo electrodes for epidermal and inÂvivo electrophysiological recording. <i>Cell Reports Physical Science</i> , 2023, 4, 101335.	2.8	4

#	ARTICLE	IF	CITATIONS
402	Soft Electronics for Health Monitoring Assisted by Machine Learning. Nano-Micro Letters, 2023, 15, .	14.4	23
403	Conductive Elastic Composite Electrode and Its Application in Electrocardiogram Monitoring Clothing. ACS Applied Electronic Materials, 2023, 5, 2026-2036.	2.0	2
404	Advances in graphene-based flexible and wearable strain sensors. Chemical Engineering Journal, 2023, 464, 142576.	6.6	52
405	Graphene Biointerface for Cardiac Arrhythmia Diagnosis and Treatment. Advanced Materials, 2023, 35, .	11.1	7
406	Continuous cuffless blood pressure monitoring with a wearable ring bioimpedance device. Npj Digital Medicine, 2023, 6, .	5.7	13
407	Green ecofriendly electrochemical sensing platform for the sensitive determination of doxycycline. Heliyon, 2023, 9, e15223.	1.4	3
408	Micro-fabrication Based Epidermal E-tattoo with Conformability and Sensitivity as Human-Machine Interface. Journal of Physics: Conference Series, 2023, 2463, 012019.	0.3	0
409	Conformability of flexible sheets on spherical surfaces. Science Advances, 2023, 9, .	4.7	12
410	Recent Progress on Transparent Microelectrode-Based Soft Bioelectronic Devices for Neuroscience and Cardiac Research. ACS Applied Bio Materials, 2023, 6, 1701-1719.	2.3	1
413	A Study on Graphene-Based Sensor Devices. Advanced Structured Materials, 2023, , 69-82.	0.3	1
420	Soft Conductive Interfacing for Bioelectrical Uses: Adhesion Mechanisms and Structural Approaches. Macromolecules, 2023, 56, 4431-4446.	2.2	3
431	Wearable bioelectronics fabricated in situ on skins. Npj Flexible Electronics, 2023, 7, .	5.1	4
434	Graphene-Based Wearable Sensors. , 2023, , 473-487.		0
438	Recent advances in flexible noninvasive electrodes for surface electromyography acquisition. Npj Flexible Electronics, 2023, 7, .	5.1	5
445	Ag/ AgCl-Covered Flexible Microneedle Array Dry Electrode for Electrocardiography Recording. , 2023, , .		0
461	A Preliminary Usability Study of Integrated Electronic Tattoo Surface Electromyography (sEMG) Sensors. , 2023, , .		0
463	A review of nanomaterials for biosensing applications. Journal of Materials Chemistry B, 2024, 12, 1168-1193.	2.9	1
468	Soft, wearable devices to monitor electrophysiological signals and gaseous biomarkers. , 2024, , 321-392.		0



#	ARTICLE	IF	CITATIONS
469	Recent progress in self-healable energy harvesting and storage devices – a future direction for reliable and safe electronics. <i>Materials Horizons</i> , 2024, 11, 1395-1413.	6.4	0