Fully integrated wearable sensor arrays for multiplexed

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#	Article	IF	Citations
5	Population neuroscience. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2016, 138, 17-37.	1.0	13
6	A Galvanic Coupling Method for Assessing Hydration Rates. Electronics (Switzerland), 2016, 5, 39.	1.8	9
7	A Novel Field-Circuit FEM Modeling and Channel Gain Estimation for Galvanic Coupling Real IBC Measurements. Sensors, 2016, 16, 471.	2.1	24
8	Wideband Fully-Programmable Dual-Mode CMOS Analogue Front-End for Electrical Impedance Spectroscopy. Sensors, 2016, 16, 1159.	2.1	20
9	Conducting Polymers and Their Applications in Diabetes Management. Sensors, 2016, 16, 1787.	2.1	25
10	Animal-Free Chemical Safety Assessment. Frontiers in Pharmacology, 2016, 7, 218.	1.6	9
11	Design, Assembly, and Fabrication of Two-Dimensional Nanomaterials into Functional Biomimetic Device Systems. , 0, , .		1
12	Wearable sweat sensor paves way for real-time analysis of body chemistry. Nature, 2016, , .	13.7	1
13	Flexible Transparent Electronic Gas Sensors. Small, 2016, 12, 3748-3756.	5.2	234
14	Evidence of double layer/capacitive charging in carbon nanomaterial-based solid contact polymeric ion-selective electrodes. Chemical Communications, 2016, 52, 9703-9706.	2.2	33
15	Comprehensive and Quantitative Profiling of the Human Sweat Submetabolome Using High-Performance Chemical Isotope Labeling LCâ€“MS. Analytical Chemistry, 2016, 88, 7378-7386.	3.2	41
16	A Wearable Electrochemical Platform for Noninvasive Simultaneous Monitoring of Ca²⁺ and pH. ACS Nano, 2016, 10, 7216-7224.	7.3	480
17	Sensing a revolution. Molecular Systems Biology, 2016, 12, 867.	3.2	8
18	A wearable fabric-based RFID skin temperature monitoring patch. , 2016, , .		23
19	A CMOS ISFET array for wearable thermoelectrically powered perspiration analysis. , 2016, , .		1
20	Smart e-Patch for drugs monitoring in schizophrenia. , 2016, , .		18
21	All-soft sensing platform based on liquid metal for liquid- and gas-phase VOC detection. , 2016, , .		4
22	Flexible Ion Sensors for Bodily Fluids. Procedia Engineering, 2016, 168, 93-96.	1.2	7

#	Article	IF	Citations
23	Wearable microfluidic biomarker sensor for human performance assessment. , 2016, , .		5
24	Flexible and Disposable Sensing Platforms Based on Newspaper. ACS Applied Materials & Interfaces, 2016, 8, 34978-34984.	4.0	46
25	Textile-based wearable sensors using metal-nanowire embedded conductive fibers. , 2016, , .		2
26	High performance, flexible CMOS circuits and sensors toward wearable healthcare applications. , 2016, , .		10
27	Wearable sweat biosensors. , 2016, , .		20
28	A review of wearable technology: Moving beyond the hype: From need through sensor implementation. , 2016, , .		20
29	Integration of biochemical sensors into wearable biomaterial platforms. Proceedings of SPIE, 2016, , .	0.8	0
30	A nanofiber based artificial electronic skin with high pressure sensitivity and 3D conformability. Nanoscale, 2016, 8, 12105-12112.	2.8	141
31	Wearable Chemical Sensors: Present Challenges and Future Prospects. ACS Sensors, 2016, 1, 464-482.	4.0	596
32	Voltammetric Mechanism of Multiion Detection with Thin Ionophore-Based Polymeric Membrane. Analytical Chemistry, 2016, 88, 5827-5834.	3.2	32
33	Smart biosensors for multiplexed and fully integrated point-of-care diagnostics. Lab on A Chip, 2016, 16, 1957-1961.	3.1	68
34	Wearable Microsensor Array for Multiplexed Heavy Metal Monitoring of Body Fluids. ACS Sensors, 2016, 1, 866-874.	4.0	297
35	Inkjet-printed Ag electrodes on paper for high sensitivity impedance measurements. RSC Advances, 2016, 6, 84547-84552.	1.7	9
36	A three-dimensionally stretchable high performance supercapacitor. Journal of Materials Chemistry A, 2016, 4, 14968-14973.	5.2	52
37	Assistive technology using integrated flexible sensor and virtual alarm unit for blood leakage detection during dialysis therapy. Healthcare Technology Letters, 2016, 3, 290-296.	1.9	9
38	Energy Harvesters for Wearable and Stretchable Electronics: From Flexibility to Stretchability. Advanced Materials, 2016, 28, 9881-9919.	11.1	407
39	Mechanical Force-Triggered Drug Delivery. Chemical Reviews, 2016, 116, 12536-12563.	23.0	247
40	Point-of-use electroanalytical platform based on homemade potentiostat and smartphone for multivariate data processing. Electrochimica Acta, 2016, 219, 170-177.	2.6	41

#	Article	IF	Citations
41	An all-solution-processed tactile memory flexible device integrated with a NiO ReRAM. Journal of Materials Chemistry C, 2016, 4, 9261-9265.	2.7	15
42	Editorsâ€™ Digest â€“ Basic Science a Wearable Sweat Analyzer for Continuous Electrolyte Monitoring. Peritoneal Dialysis International, 2016, 36, 470-471.	1.1	2
43	Highly Stretchable, Strain Sensing Hydrogel Optical Fibers. Advanced Materials, 2016, 28, 10244-10249.	11.1	327
44	Mechanically Reinforced Skinâ€Electronics with Networked Nanocomposite Elastomer. Advanced Materials, 2016, 28, 10257-10265.	11.1	108
45	Functional nanostructures for enzyme based biosensors: properties, fabrication and applications. Journal of Materials Chemistry B, 2016, 4, 7178-7203.	2.9	54
46	Nanoparticleâ€“Nanofibrous Membranes as Scaffolds for Flexible Sweat Sensors. ACS Sensors, 2016, 1, 1060-1069.	4.0	28
47	Stretchable lithium-air batteries for wearable electronics. Journal of Materials Chemistry A, 2016, 4, 13419-13424.	5.2	82
48	The Zero Heat Flux Method and Sweat Loss Modeling in Sports: Attempts of Next Generation Sports Information Systems. Procedia Engineering, 2016, 147, 643-648.	1.2	0
49	Skin Hydration Sensor for Customizable Electronic Textiles. MRS Advances, 2016, 1, 2671-2676.	0.5	10
50	High-Performance Strain Sensors with Fish-Scale-Like Graphene-Sensing Layers for Full-Range Detection of Human Motions. ACS Nano, 2016, 10, 7901-7906.	7.3	500
51	Nanomaterialâ€Based Soft Electronics for Healthcare Applications. ChemNanoMat, 2016, 2, 1006-1017.	1.5	65
52	Wearable Thermocells Based on Gel Electrolytes for the Utilization of Body Heat. Angewandte Chemie, 2016, 128, 12229-12232.	1.6	44
53	Wearable Thermocells Based on Gel Electrolytes for the Utilization of Body Heat. Angewandte Chemie - International Edition, 2016, 55, 12050-12053.	7.2	210
54	Polyurethane/Cotton/Carbon Nanotubes Core-Spun Yarn as High Reliability Stretchable Strain Sensor for Human Motion Detection. ACS Applied Materials & Interfaces, 2016, 8, 24837-24843.	4.0	251
55	Printed multifunctional flexible device with an integrated motion sensor for health care monitoring. Science Advances, 2016, 2, e1601473.	4.7	273
56	A soft, wearable microfluidic device for the capture, storage, and colorimetric sensing of sweat. Science Translational Medicine, 2016, 8, 366ra165.	5.8	933
57	Generalized Compact Modeling of Nanoparticle-Based Amperometric Glucose Biosensors. IEEE Transactions on Electron Devices, 2016, 63, 4924-4932.	1.6	10
58	Fusing Sensor Paradigms to Acquire Chemical Information: An Integrative Role for Smart Biopolymeric Hydrogels. Advanced Healthcare Materials, 2016, 5, 2595-2616.	3.9	16

#	Article	IF	Citations
59	Design, Modeling, and Fabrication of Chemical Vapor Deposition Grown MoS₂ Circuits with E-Mode FETs for Large-Area Electronics. Nano Letters, 2016, 16, 6349-6356.	4.5	142
60	Emergence of microfluidic wearable technologies. Lab on A Chip, 2016, 16, 4082-4090.	3.1	89
61	Deterministic Integration of Outâ€ofâ€Plane Sensor Arrays for Flexible Electronic Applications. Small, 2016, 12, 5141-5145.	5.2	17
62	Noninvasive Alcohol Monitoring Using a Wearable Tattoo-Based Iontophoretic-Biosensing System. ACS Sensors, 2016, 1, 1011-1019.	4.0	460
63	A wearable chemicalâ€“electrophysiological hybrid biosensing system for real-time health and fitness monitoring. Nature Communications, 2016, 7, 11650.	5.8	639
64	Flexible, Grapheneâ€Coated Biocomposite for Highly Sensitive, Realâ€Time Molecular Detection. Advanced Functional Materials, 2016, 26, 8623-8630.	7.8	116
65	Wearable Potentiometric Chloride Sweat Sensor: The Critical Role of the Salt Bridge. Analytical Chemistry, 2016, 88, 12241-12247.	3.2	68
66	Highly Sensitive and Quick Detection of Acute Myocardial Infarction Biomarkers Using In₂O₃ Nanoribbon Biosensors Fabricated Using Shadow Masks. ACS Nano, 2016, 10, 10117-10125.	7.3	69
67	A respiration-detective graphene oxide/lithium battery. Journal of Materials Chemistry A, 2016, 4, 19154-19159.	5.2	24
68	A new oil/membrane approach for integrated sweat sampling and sensing: sample volumes reduced from Î¼L's to nL's and reduction of analyte contamination from skin. Lab on A Chip, 2016, 16, 4415-4423.	3.1	33
69	Flexible Hybrid Electronics: Direct Interfacing of Soft and Hard Electronics for Wearable Health Monitoring. Advanced Functional Materials, 2016, 26, 8764-8775.	7.8	236
70	Textile Organic Electrochemical Transistors as a Platform for Wearable Biosensors. Scientific Reports, 2016, 6, 33637.	1.6	141
71	Highly Sensitive Pressure Sensor Based on Bioinspired Porous Structure for Realâ€Time Tactile Sensing. Advanced Electronic Materials, 2016, 2, 1600356.	2.6	264
72	Stretchable biofuel cells as wearable textile-based self-powered sensors. Journal of Materials Chemistry A, 2016, 4, 18342-18353.	5.2	258
73	Sustainably powering wearable electronics solely by biomechanical energy. Nature Communications, 2016, 7, 12744.	5.8	483
74	Ultrathin, transferred layers of thermally grown silicon dioxide as biofluid barriers for biointegrated flexible electronic systems. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11682-11687.	3.3	175
75	All-printed magnetically self-healing electrochemical devices. Science Advances, 2016, 2, e1601465.	4.7	101
76	A Detailed Protocol for Perspiration Monitoring Using a Novel, Small, Wireless Device. Journal of Visualized Experiments, 2016, , .	0.2	0

#	Article	IF	Citations
77	Temperature control on a curved surface for implementing to wearable interfaces. , 2016, , .		1
78	Balloonâ€Embedded Sensors Withstanding Extreme Multiaxial Stretching and Global Bending Mechanical Stress: Towards Environmental and Security Monitoring. Advanced Materials Technologies, 2016, 1, 1600061.	3.0	28
79	Nonâ€invasive Analyte Access and Sensing through Eccrine Sweat: Challenges and Outlook circa 2016. Electroanalysis, 2016, 28, 1242-1249.	1.5	223
80	Surface-Enhanced Raman Spectroscopy Biosensing: In Vivo Diagnostics and Multimodal Imaging. Analytical Chemistry, 2016, 88, 6638-6647.	3.2	190
81	Effect of platinum nanoparticle deposition parameters on hydrogen peroxide transduction for applications in wearable electrochemical glucose biosensors. Proceedings of SPIE, 2016, , .	0.8	1
82	Special challenges and opportunities for application of bio-medical sensors. , 2016, , .		0
83	Integrated Flexible, Waterproof, Transparent, and Self-Powered Tactile Sensing Panel. ACS Nano, 2016, 10, 7696-7704.	7.3	83
84	An efficient power harvesting mobile phone-based electrochemical biosensor for point-of-care health monitoring. Sensors and Actuators B: Chemical, 2016, 235, 126-135.	4.0	86
85	â€˜SWEATCHâ€™: A Wearable Platform for Harvesting and Analysing Sweat Sodium Content. Electroanalysis, 2016, 28, 1283-1289.	1.5	117
86	Flexible Substrate-Based Devices for Point-of-Care Diagnostics. Trends in Biotechnology, 2016, 34, 909-921.	4.9	180
87	Bendable CMOS Digital and Analog Circuits Monolithically Integrated with a Temperature Sensor. Advanced Materials Technologies, 2016, 1, 1600058.	3.0	16
88	Technological leap for sweat sensing. Nature, 2016, 529, 475-476.	13.7	88
89	Managing diabetes through the skin. Nature Nanotechnology, 2016, 11, 493-494.	15.6	26
90	Continuous measurement of enzymatic kinetics in droplet flow for point-of-care monitoring. Analyst, The, 2016, 141, 3266-3273.	1.7	41
91	Detection of Antibodies in Blood Plasma Using Bioluminescent Sensor Proteins and a Smartphone. Analytical Chemistry, 2016, 88, 4525-4532.	3.2	121
92	Nanoparticles make salty circuits. Nature Nanotechnology, 2016, 11, 579-580.	15.6	11
93	Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat. Advanced Healthcare Materials, 2017, 6, 1601355.	3.9	209
94	Full Dynamicâ€Range Pressure Sensor Matrix Based on Optical and Electrical Dualâ€Mode Sensing. Advanced Materials, 2017, 29, 1605817.	11.1	176

#	Article	IF	Citations
95	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. Advanced Functional Materials, 2017, 27, 1605476.	7.8	64
96	A digitally adjustable sensor signal conditioning circuit for low frequency operation. Sensors and Actuators A: Physical, 2017, 255, 134-153.	2.0	1
97	Hydrogel-enabled osmotic pumping for microfluidics: towards wearable human-device interfaces. Lab on A Chip, 2017, 17, 710-716.	3.1	50
98	Understanding the Effects of Electrode Formulation on the Mechanical Strength of Composite Electrodes for Flexible Batteries. ACS Applied Materials & Interfaces, 2017, 9, 6390-6400.	4.0	57
99	Detecting circulating antibodies by controlled surface modification with specific target proteins: Application to malaria. Biosensors and Bioelectronics, 2017, 91, 833-841.	5.3	31
100	Self-powered wireless smart patch for healthcare monitoring. Nano Energy, 2017, 32, 479-487.	8.2	90
101	Electronic control of gene expression and cell behaviour in Escherichia coli through redox signalling. Nature Communications, 2017, 8, 14030.	5.8	120
102	Printable stretchable interconnects. Flexible and Printed Electronics, 2017, 2, 013003.	1.5	141
103	Electronic Devices for Humanâ€Machine Interfaces. Advanced Materials Interfaces, 2017, 4, 1600709.	1.9	76
104	Paper: A promising material for human-friendly functional wearable electronics. Materials Science and Engineering Reports, 2017, 112, 1-22.	14.8	128
105	Lactate Detection in Tumor Cell Cultures Using Organic Transistor Circuits. Advanced Materials, 2017, 29, 1605744.	11.1	123
106	Improved transfer process for fabrication of cantilever with precise air-gap formation. Japanese Journal of Applied Physics, 2017, 56, 05EB01.	0.8	3
107	Single Crystal Flexible Electronics Enabled by 3D Spalling. Advanced Materials, 2017, 29, 1606638.	11.1	15
108	Electrolyte-Sensing Transistor Decals Enabled by Ultrathin Microbial Nanocellulose. Scientific Reports, 2017, 7, 40867.	1.6	27
109	Wearable/disposable sweat-based glucose monitoring device with multistage transdermal drug delivery module. Science Advances, 2017, 3, e1601314.	4.7	836
110	Impedance spectroscopy for monosaccharides detection using responsive hydrogel modified paper-based electrodes. Analyst, The, 2017, 142, 1133-1139.	1.7	24
111	Epidermal Inorganic Optoelectronics for Blood Oxygen Measurement. Advanced Healthcare Materials, 2017, 6, 1601013.	3.9	86
112	Ingestible Sensors. ACS Sensors, 2017, 2, 468-483.	4.0	171

#	Article	IF	Citations
113	All-printed, planar-type multi-functional wearable flexible patch integrated with acceleration, temperature, and ECG sensors. , 2017, , .		18
114	A self-powered sensor patch for glucose monitoring in sweat. , 2017, , .		14
115	All-soft physical and chemical microsystems based on liquid metal for wearable electronics applications. , 2017, , .		6
116	Highly Sensitive Textile Strain Sensors and Wireless User-Interface Devices Using All-Polymeric Conducting Fibers. ACS Applied Materials & Interfaces, 2017, 9, 10190-10197.	4.0	153
117	Optically Sintered 2D RuO₂ Nanosheets: Temperatureâ€Controlled NO₂ Reaction. Advanced Functional Materials, 2017, 27, 1606026.	7.8	54
118	Passive and wireless near field communication tag sensors for biochemical sensing with smartphone. Sensors and Actuators B: Chemical, 2017, 246, 748-755.	4.0	51
119	Wearable, Flexible, and Multifunctional Healthcare Device with an ISFET Chemical Sensor for Simultaneous Sweat pH and Skin Temperature Monitoring. ACS Sensors, 2017, 2, 443-448.	4.0	295
120	Wearable Flexible and Stretchable Glove Biosensor for On-Site Detection of Organophosphorus Chemical Threats. ACS Sensors, 2017, 2, 553-561.	4.0	260
121	Wearable Medical Sensor-Based System Design: A Survey. IEEE Transactions on Multi-Scale Computing Systems, 2017, 3, 124-138.	2.5	104
122	Recent advances in wearable tactile sensors: Materials, sensing mechanisms, and device performance. Materials Science and Engineering Reports, 2017, 115, 1-37.	14.8	557
123	Integration of ultrathin graphene/polyaniline composite nanosheets with a robust 3D graphene framework for highly flexible all-solid-state supercapacitors with superior energy density and exceptional cycling stability. Journal of Materials Chemistry A, 2017, 5, 5466-5474.	5.2	111
124	Wearable microfluidics: fabric-based digital droplet flowmetry for perspiration analysis. Lab on A Chip, 2017, 17, 926-935.	3.1	40
125	Programmable Nanoâ€“Bio Interfaces for Functional Biointegrated Devices. Advanced Materials, 2017, 29, 1605529.	11.1	118
126	Ultrathin and Wearable Microtubular Epidermal Sensor for Realâ€Time Physiological Pulse Monitoring. Advanced Materials Technologies, 2017, 2, 1700016.	3.0	68
128	A high performance self-healing strain sensor with synergetic networks of poly(É›-caprolactone) microspheres, graphene and silver nanowires. Composites Science and Technology, 2017, 146, 110-118.	3.8	67
129	Design and application of â€˜J-shapedâ€™ stressâ€“strain behavior in stretchable electronics: a review. Lab on A Chip, 2017, 17, 1689-1704.	3.1	140
130	Autonomous sweat extraction and analysis applied to cystic fibrosis and glucose monitoring using a fully integrated wearable platform. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4625-4630.	3.3	573
131	Transparent Flexible Multifunctional Nanostructured Architectures for Non-optical Readout, Proximity, and Pressure Sensing. ACS Applied Materials & Interfaces, 2017, 9, 15015-15021.	4.0	58

#	Article	IF	Citations
132	Human-centered automation for resilient nuclear power plant outage control. Automation in Construction, 2017, 82, 179-192.	4.8	28
133	A wearable potentiometric sensor with integrated salt bridge for sweat chloride measurement. Sensors and Actuators B: Chemical, 2017, 250, 673-678.	4.0	60
134	Ultrasensitive and ultraflexible e-skins with dual functionalities for wearable electronics. Nano Energy, 2017, 38, 28-35.	8.2	194
135	Fabrication of Agâ€“Cu₂O/Reduced Graphene Oxide Nanocomposites as Surface-Enhanced Raman Scattering Substrates for in Situ Monitoring of Peroxidase-Like Catalytic Reaction and Biosensing. ACS Applied Materials & Interfaces, 2017, 9, 19074-19081.	4.0	115
136	Innovative Nanosensor for Disease Diagnosis. Accounts of Chemical Research, 2017, 50, 1587-1596.	7.6	202
137	Promises and Challenges in Continuous Tracking Utilizing Amino Acids in Skin Secretions for Active Multiâ€Factor Biometric Authentication for Cybersecurity. ChemPhysChem, 2017, 18, 1714-1720.	1.0	7
138	A flexible, ultra-sensitive chemical sensor with 3D biomimetic templating for diabetes-related acetone detection. Journal of Materials Chemistry B, 2017, 5, 4019-4024.	2.9	76
139	Visualization Recording and Storage of Pressure Distribution through a Smart Matrix Based on the Piezotronic Effect. Advanced Materials, 2017, 29, 1701253.	11.1	59
140	Top-down fabrication meets bottom-up synthesis for nanoelectronic barcoding of microparticles. Lab on A Chip, 2017, 17, 1939-1947.	3.1	28
141	Eyeglasses based wireless electrolyte and metabolite sensor platform. Lab on A Chip, 2017, 17, 1834-1842.	3.1	211
142	Ultrafine Graphene Nanomesh with Large On/Off Ratio for Highâ€Performance Flexible Biosensors. Advanced Functional Materials, 2017, 27, 1604096.	7.8	111
143	Quantitative self-powered electrochromic biosensors. Chemical Science, 2017, 8, 1995-2002.	3.7	58
144	A flexible transparent colorimetric wrist strap sensor. Nanoscale, 2017, 9, 869-874.	2.8	104
145	Soft, skin-mounted microfluidic systems for measuring secretory fluidic pressures generated at the surface of the skin by eccrine sweat glands. Lab on A Chip, 2017, 17, 2572-2580.	3.1	117
146	Wearable Sensing Systems with Mechanically Soft Assemblies of Nanoscale Materials. Advanced Materials Technologies, 2017, 2, 1700053.	3.0	89
147	Polylactic acid nano- and microchamber arrays for encapsulation of small hydrophilic molecules featuring drug release via high intensity focused ultrasound. Nanoscale, 2017, 9, 7063-7070.	2.8	59
148	Wearable Flexible Sensors: A Review. IEEE Sensors Journal, 2017, 17, 3949-3960.	2.4	379
149	Bioinspired Composite Microfibers for Skin Adhesion and Signal Amplification of Wearable Sensors. Advanced Materials, 2017, 29, 1701353.	11.1	208

#	Article	IF	Citations
150	A Planar, Multisensing Wearable Health Monitoring Device Integrated with Acceleration, Temperature, and Electrocardiogram Sensors. Advanced Materials Technologies, 2017, 2, 1700057.	3.0	35
151	Stability of Enzymatic Biosensors for Wearable Applications. IEEE Reviews in Biomedical Engineering, 2017, 10, 174-186.	13.1	28
152	A Stretchable Electrochemical Sensor for Inducing and Monitoring Cell Mechanotransduction in Real Time. Angewandte Chemie - International Edition, 2017, 56, 9454-9458.	7.2	69
153	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	5.8	325
154	A Stretchable Electrochemical Sensor for Inducing and Monitoring Cell Mechanotransduction in Real Time. Angewandte Chemie, 2017, 129, 9582-9586.	1.6	7
155	Biocompatible carbon nanotube fibers for implantable supercapacitors. Carbon, 2017, 122, 162-167.	5.4	105
156	Calligraphy-inspired brush written foldable supercapacitors. Nano Energy, 2017, 38, 428-437.	8.2	26
157	Photopatternable PEDOT:PSS/PEG hybrid thin film with moisture stability and sensitivity. Microsystems and Nanoengineering, 2017, 3, 17004.	3.4	50
158	A glucose-activatable trimodal glucometer self-assembled from glucose oxidase and MnO₂nanosheets for diabetes monitoring. Journal of Materials Chemistry B, 2017, 5, 5336-5344.	2.9	22
159	Screen-printing Bi ₂ S ₃ nanowires on silk fabrics for a flexible optical switch. Flexible and Printed Electronics, 2017, 2, 025001.	1.5	0
160	Highly Sensitive, Durable, and Multifunctional Sensor Inspired by a Spider. ACS Applied Materials & Interfaces, 2017, 9, 19955-19962.	4.0	89
161	Intrinsically Stretchable Electrochromic Display by a Composite Film of Poly(3,4-ethylenedioxythiophene) and Polyurethane. ACS Applied Materials & Interfaces, 2017, 9, 19513-19518.	4.0	78
162	A self-powered flexible vision electronic-skin for image recognition based on a pixel-addressable matrix of piezophototronic ZnO nanowire arrays. Journal of Materials Chemistry C, 2017, 5, 6005-6013.	2.7	30
163	All flexible electrospun papers based self-charging power system. Nano Energy, 2017, 38, 210-217.	8.2	97
164	Flexible Lactate and Glucose Sensors Using Electrolyte-Gated Carbon Nanotube Field Effect Transistor for Non-Invasive Real-Time Monitoring. IEEE Sensors Journal, 2017, 17, 4315-4321.	2.4	23
165	Portable impedance measurement device for sweat based glucose detection. , 2017, , .		6
166	Multianalyte Physiological Microanalytical Devices. Annual Review of Analytical Chemistry, 2017, 10, 93-111.	2.8	3
167	Challenges and opportunities in wearable technology for biochemical analysis in sweat. Current Opinion in Electrochemistry, 2017, 3, 46-50.	2.5	49

#	Article	IF	Citations
168	Sensitivity-Enhanced Wearable Active Voiceprint Sensor Based on Cellular Polypropylene Piezoelectret. ACS Applied Materials & Interfaces, 2017, 9, 23716-23722.	4.0	48
169	Well-defined porous membranes for robust omniphobic surfaces via microfluidic emulsion templating. Nature Communications, 2017, 8, 15823.	5.8	143
170	All-soft, battery-free, and wireless chemical sensing platform based on liquid metal for liquid- and gas-phase VOC detection. Lab on A Chip, 2017, 17, 2323-2329.	3.1	40
171	Fully additive manufacturing of a polymer cantilever with a conductive layer. , 2017, , .		0
172	Assembly of Heterogeneous Materials for Biology and Electronics: From Bio-Inspiration to Bio-Integration. Journal of Electronic Packaging, Transactions of the ASME, 2017, 139, .	1.2	12
173	Stretchable Capacitive Sensors of Torsion, Strain, and Touch Using Double Helix Liquid Metal Fibers. Advanced Functional Materials, 2017, 27, 1605630.	7.8	257
174	Pre-Polarized Hydrophobic Conducting Polymer Solid-Contact Ion-Selective Electrodes with Improved Potential Reproducibility. Analytical Chemistry, 2017, 89, 2598-2605.	3.2	68
175	Stretchable Lightâ€Emitting Diodes with Organometalâ€Halideâ€Perovskiteâ€“Polymer Composite Emitters. Advanced Materials, 2017, 29, 1607053.	11.1	147
176	Flexible Piezoelectric-Induced Pressure Sensors for Static Measurements Based on Nanowires/Graphene Heterostructures. ACS Nano, 2017, 11, 4507-4513.	7.3	435
177	Advanced Materials for Health Monitoring with Skinâ€Based Wearable Devices. Advanced Healthcare Materials, 2017, 6, 1700024.	3.9	221
178	Recent progress in flexible and wearable bio-electronics based on nanomaterials. Nano Research, 2017, 10, 1560-1583.	5.8	96
179	Fully printable, strain-engineered electronic wrap for customizable soft electronics. Scientific Reports, 2017, 7, 45328.	1.6	56
180	Materials, Devices and Systems of Soft Bioelectronics for Precision Therapy. Advanced Healthcare Materials, 2017, 6, 1700017.	3.9	45
181	Microtopographyâ€Guided Conductive Patterns of Liquidâ€Driven Graphene Nanoplatelet Networks for Stretchable and Skinâ€Conformal Sensor Array. Advanced Materials, 2017, 29, 1606453.	11.1	101
182	Improving self-assembly quality of colloidal crystal guided by statistical design of experiments. Chinese Physics B, 2017, 26, 038105.	0.7	3
183	A piezo-resistive graphene strain sensor with a hollow cylindrical geometry. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 219, 20-27.	1.7	36
184	Epitaxial lift-off of electrodeposited single-crystal gold foils for flexible electronics. Science, 2017, 355, 1203-1206.	6.0	104
185	Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. Small, 2017, 13, 1602790.	5.2	690

#	Article	IF	Citations
186	High-Î° organometallic lanthanide complex as gate dielectric layer for low-voltage, high-performance organic thin-film transistors. Thin Solid Films, 2017, 626, 209-213.	0.8	4
187	The quest for miniaturized soft bioelectronic devices. Nature Biomedical Engineering, 2017, 1, .	11.6	103
188	Optimizing ultrathin Ag films for high performance oxide-metal-oxide flexible transparent electrodes through surface energy modulation and template-stripping procedures. Scientific Reports, 2017, 7, 44576.	1.6	59
189	All rGO-on-PVDF-nanofibers based self-powered electronic skins. Nano Energy, 2017, 35, 121-127.	8.2	132
190	Advanced Materials for Printed Wearable Electrochemical Devices: A Review. Advanced Electronic Materials, 2017, 3, 1600260.	2.6	358
191	Wrinkled nitrile rubber films for stretchable and ultra-sensitive respiration sensors. Extreme Mechanics Letters, 2017, 11, 128-136.	2.0	36
192	Tribotronic Tuning Diode for Active Analog Signal Modulation. ACS Nano, 2017, 11, 882-888.	7.3	30
193	Soft Elastomers with Ionic Liquidâ€Filled Cavities as Strain Isolating Substrates for Wearable Electronics. Small, 2017, 13, 1602954.	5.2	82
194	Conductive Polymer-Coated Carbon Nanotubes To Construct Stretchable and Transparent Electrochemical Sensors. Analytical Chemistry, 2017, 89, 2032-2038.	3.2	84
195	Recent advances in wearable sensors for animal health management. Sensing and Bio-Sensing Research, 2017, 12, 15-29.	2.2	276
196	Digital microelectromechanical sensor with an engineered polydimethylsiloxane (PDMS) bridge structure. Nanoscale, 2017, 9, 1257-1262.	2.8	12
197	Designing Thin, Ultrastretchable Electronics with Stacked Circuits and Elastomeric Encapsulation Materials. Advanced Functional Materials, 2017, 27, 1604545.	7.8	42
198	Social aspects in additive manufacturing of pharmaceutical products. Expert Opinion on Drug Delivery, 2017, 14, 927-936.	2.4	33
199	An Audio Jack-Based Electrochemical Impedance Spectroscopy Sensor for Point-of-Care Diagnostics. IEEE Sensors Journal, 2017, 17, 589-597.	2.4	20
200	Tracking U.S. Professional Athletes: The Ethics of Biometric Technologies. American Journal of Bioethics, 2017, 17, 45-60.	0.5	34
201	Point-of-Care Diagnostics: Recent Developments in a Connected Age. Analytical Chemistry, 2017, 89, 102-123.	3.2	386
202	Sourceâ€Gated Transistors Based on Solution Processed Silicon Nanowires for Low Power Applications. Advanced Electronic Materials, 2017, 3, 1600256.	2.6	16
203	Flexible and biocompatible high-performance solid-state micro-battery for implantable orthodontic system. Npj Flexible Electronics, 2017, 1, .	5.1	65

#	Article	IF	Citations
204	Recent Progress of Selfâ€Powered Sensing Systems for Wearable Electronics. Small, 2017, 13, 1701791.	5.2	223
205	Soft Electrochemical Probes for Mapping the Distribution of Biomarkers and Injected Nanomaterials in Animal and Human Tissues. Angewandte Chemie - International Edition, 2017, 56, 16498-16502.	7.2	35
206	Self-Organized Frameworks on Textiles (SOFT): Conductive Fabrics for Simultaneous Sensing, Capture, and Filtration of Gases. Journal of the American Chemical Society, 2017, 139, 16759-16767.	6.6	231
207	High-energy, flexible micro-supercapacitors by one-step laser fabrication of a self-generated nanoporous metal/oxide electrode. Journal of Materials Chemistry A, 2017, 5, 24585-24593.	5.2	71
208	Utilization of self-powered electrochemical systems: Metallic nanoparticle synthesis and lactate detection. Nano Energy, 2017, 42, 241-248.	8.2	100
209	A skin-attachable, stretchable integrated system based on liquid GaInSn for wireless human motion monitoring with multi-site sensing capabilities. NPG Asia Materials, 2017, 9, e443-e443.	3.8	223
210	Reviving Vibration Energy Harvesting and Self-Powered Sensing by a Triboelectric Nanogenerator. Joule, 2017, 1, 480-521.	11.7	748
211	Polymer/carbon nanotube composite materials for flexible thermoelectric power generator. Composites Science and Technology, 2017, 153, 71-83.	3.8	92
212	Ultracompact On-Chip Multiplexed Sensor Array Based on Dense Integration of Flexible 1-D Photonic Crystal Nanobeam Cavity With Large Free Spectral Range and High Q-Factor. IEEE Photonics Journal, 2017, 9, 1-12.	1.0	6
213	Wearable Ring-Based Sensing Platform for Detecting Chemical Threats. ACS Sensors, 2017, 2, 1531-1538.	4.0	89
214	Inorganic semiconducting materials for flexible and stretchable electronics. Npj Flexible Electronics, 2017, 1, .	5.1	144
215	A Thermally Powered ISFET Array for On-Body pH Measurement. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1324-1334.	2.7	40
216	Paper/Carbon Nanotube-Based Wearable Pressure Sensor for Physiological Signal Acquisition and Soft Robotic Skin. ACS Applied Materials & Interfaces, 2017, 9, 37921-37928.	4.0	230
217	Improved response time of flexible microelectromechanical sensors employing eco-friendly nanomaterials. Nanoscale, 2017, 9, 16915-16921.	2.8	13
218	Epidermal Tattoo Patch for Ultrasoundâ€Based Transdermal Microballistic Delivery. Advanced Materials Technologies, 2017, 2, 1700210.	3.0	21
219	Portable biosensor for monitoring cortisol in low-volume perspired human sweat. Scientific Reports, 2017, 7, 13312.	1.6	164
220	Transparent and Flexible Triboelectric Sensing Array for Touch Security Applications. ACS Nano, 2017, 11, 8364-8369.	7.3	90
221	Scalable Manufacturing of Solderable and Stretchable Physiologic Sensing Systems. Advanced Materials, 2017, 29, 1701312.	11.1	49

#	Article	IF	Citations
222	High-Definition Medicine. Cell, 2017, 170, 828-843.	13.5	168
223	Wearable Electrocardiogram Monitor Using Carbon Nanotube Electronics and Color-Tunable Organic Light-Emitting Diodes. ACS Nano, 2017, 11, 10032-10041.	7.3	197
224	Human-interactive multi-functional electronic wallpaper integrated with sensors and memory. Materials Horizons, 2017, 4, 1079-1084.	6.4	11
225	Fabrication of newspaper-based potentiometric platforms for flexible and disposable ion sensors. Journal of Colloid and Interface Science, 2017, 508, 167-173.	5.0	21
226	Eye motion triggered self-powered mechnosensational communication system using triboelectric nanogenerator. Science Advances, 2017, 3, e1700694.	4.7	491
227	Freeâ€Standing and Ecoâ€Friendly Polyaniline Thin Films for Multifunctional Sensing of Physical and Chemical Stimuli. Advanced Functional Materials, 2017, 27, 1703147.	7.8	46
228	Thermomechanical Analysis of Epidermal Electronic Devices Integrated With Human Skin. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	1.1	28
229	A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors. ACS Nano, 2017, 11, 9490-9499.	7.3	419
230	The dermal abyss. , 2017, , .		31
231	Decoration of Nanofibrous Paper Chemiresistors with Dendronized Nanoparticles toward Structurally Tunable Negativeâ€Going Response Characteristics to Human Breathing and Sweating. Advanced Materials Interfaces, 2017, 4, 1700380.	1.9	15
232	Towards Addressing the Body Electrolyte Environment via Sweat Analysis:Pilocarpine Iontophoresis Supports Assessment of Plasma Potassium Concentration. Scientific Reports, 2017, 7, 11801.	1.6	27
233	Flexible quasi-solid-state planar micro-supercapacitor based on cellular graphene films. Materials Horizons, 2017, 4, 1145-1150.	6.4	222
234	Hydrogen peroxide sensor based on electrodeposited Prussian blue film. Journal of Applied Electrochemistry, 2017, 47, 1261-1271.	1.5	18
235	Stretchable conductive elastomer for wireless wearable communication applications. Scientific Reports, 2017, 7, 10958.	1.6	35
236	Buckling-driven self-assembly of self-similar inspired micro/nanofibers for ultra-stretchable electronics. Soft Matter, 2017, 13, 7244-7254.	1.2	25
237	Electronic Textile by Dyeing Method for Multiresolution Physical Kineses Monitoring. Advanced Electronic Materials, 2017, 3, 1700253.	2.6	69
238	Cross-buckled structures for stretchable and compressible thin film silicon solar cells. Scientific Reports, 2017, 7, 7575.	1.6	6
239	Noninvasive Body Fat Burn Monitoring from Exhaled Acetone with Si-doped WO₃-sensing Nanoparticles. Analytical Chemistry, 2017, 89, 10578-10584.	3.2	92

#	Article	IF	Citations
240	Lab-on-Skin: A Review of Flexible and Stretchable Electronics for Wearable Health Monitoring. ACS Nano, 2017, 11, 9614-9635.	7.3	1,245
241	Where to wear it. , 2017, , .		137
242	Wearable Sweatband Sensor Platform Based on Gold Nanodendrite Array as Efficient Solid Contact of Ion-Selective Electrode. Analytical Chemistry, 2017, 89, 10224-10231.	3.2	132
243	Non-invasive Blood Glucose Monitoring and Data Analytics. , 2017, , .		10
244	Flexible thermoelectric power generation system based on rigid inorganic bulk materials. Applied Energy, 2017, 206, 649-656.	5.1	87
245	Hybrid 3D Printing of Soft Electronics. Advanced Materials, 2017, 29, 1703817.	11.1	501
246	Conducting Polymer Based Visualâ€Aided Smart Thermosensors on Arbitrary Substrates. Advanced Functional Materials, 2017, 27, 1702706.	7.8	23
247	New insights and perspectives into biological materials for flexible electronics. Chemical Society Reviews, 2017, 46, 6764-6815.	18.7	322
248	Integrating Flexible Sensor and Virtual Self-Organizing DC Grid Model With Cloud Computing for Blood Leakage Detection During Hemodialysis. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 784-793.	2.7	7
249	Mobile Health. , 2017, , .		18
250	3D Printed â€œEarableâ€•Smart Devices for Real-Time Detection of Core Body Temperature. ACS Sensors, 2017, 2, 990-997.	4.0	105
251	Carbon nanomaterials for flexible lithium ion batteries. Carbon, 2017, 124, 79-88.	5.4	64
252	Self-Collapse Lithography. Nano Letters, 2017, 17, 5035-5042.	4.5	19
253	Capacitor Mismatch Calibration Technique to Improve the SFDR of 14-Bit SAR ADC. , 2017, , .		6
254	Ionic transport properties in AgCl under high pressures. Applied Physics Letters, 2017, 111, .	1.5	16
255	Selfâ€Powered Realâ€Time Arterial Pulse Monitoring Using Ultrathin Epidermal Piezoelectric Sensors. Advanced Materials, 2017, 29, 1702308.	11.1	495
256	Integrated sudomotor axon reflex sweat stimulation for continuous sweat analyte analysis with individuals at rest. Lab on A Chip, 2017, 17, 2550-2560.	3.1	67
257	Recent developments in microfluidic paper-, cloth-, and thread-based electrochemical devices for analytical chemistry. Reviews in Analytical Chemistry, 2017, 36, .	1.5	26

#	Article	IF	Citations
258	Wearable Optical Sensors. , 2017, , 313-342.		6
259	An Overview of the Development of Flexible Sensors. Advanced Materials, 2017, 29, 1700375.	11.1	483
260	Single wearable sensing energy device based on photoelectric biofuel cells for simultaneous analysis of perspiration and illuminance. Nanoscale, 2017, 9, 11846-11850.	2.8	35
261	Attachable Pulse Sensors Integrated with Inorganic Optoelectronic Devices for Monitoring Heart Rates at Various Body Locations. ACS Applied Materials & Interfaces, 2017, 9, 25700-25705.	4.0	36
262	Investigating Limiting Factors in Stretchable All-Carbon Transistors for Reliable Stretchable Electronics. ACS Nano, 2017, 11, 7925-7937.	7.3	52
263	Graphene as a flexible electrode: review of fabrication approaches. Journal of Materials Chemistry A, 2017, 5, 17777-17803.	5.2	113
264	Passive and Space-Discriminative Ionic Sensors Based on Durable Nanocomposite Electrodes toward Sign Language Recognition. ACS Nano, 2017, 11, 8590-8599.	7.3	73
265	Wearable, healthcare sensor sheets. , 2017, , .		1
266	Potentiometric sensor for non invasive lactate determination in human sweat. Analytica Chimica Acta, 2017, 989, 80-87.	2.6	52
267	A Single Dropletâ€Printed Doubleâ€Side Universal Soft Electronic Platform for Highly Integrated Stretchable Hybrid Electronics. Advanced Functional Materials, 2017, 27, 1701912.	7.8	42
268	Experimental and Theoretical Studies of Serpentine Interconnects on Ultrathin Elastomers for Stretchable Electronics. Advanced Functional Materials, 2017, 27, 1702589.	7.8	111
269	Wearable nanosensor systems and their applications in healthcare. , 2017, , .		1
270	A Self-Powered Wearable Noninvasive Electronic-Skin for Perspiration Analysis Based on Piezo-Biosensing Unit Matrix of Enzyme/ZnO Nanoarrays. ACS Applied Materials & Interfaces, 2017, 9, 29526-29537.	4.0	119
271	Multi-functional Flexible Aqueous Sodium-Ion Batteries with High Safety. CheM, 2017, 3, 348-362.	5.8	194
272	Cheap, Flexible, and Thermal-Sensitive Paper Sensor through Writing with Ionic Liquids Containing Pencil Leads. ACS Applied Materials & Interfaces, 2017, 9, 29140-29146.	4.0	19
273	Flexible integrated chemical and physical sensors toward a wearable healthcare patch. , 2017, , .		2
274	Potentials of additive manufacturing with smart materials for chemical biomarkers in wearable applications. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 335-347.	2.7	18
275	Nanoparticle Based Printed Sensors on Paper for Detecting Chemical Species. , 2017, , .		6

#	Article	IF	Citations
276	Stretchable bioelectronicsâ€"Current and future. MRS Bulletin, 2017, 42, 960-967.	1.7	14
279	Epidermal Microfluidic Electrochemical Detection System: Enhanced Sweat Sampling and Metabolite Detection. ACS Sensors, 2017, 2, 1860-1868.	4.0	325
280	Batteryâ€Free, Humanâ€Motionâ€Powered Lightâ€Emitting Fabric: Mechanoluminescent Textile. Advanced Sustainable Systems, 2017, 1, 1700126.	2.7	61
281	Boron Doped ZIFâ€67@Graphene Derived Carbon Electrocatalyst for Highly Efficient Enzymeâ€Free Hydrogen Peroxide Biosensor. Advanced Materials Technologies, 2017, 2, 1700224.	3.0	22
282	Fabrication of prebent MoS2 biosensors on flexible substrates. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	0.6	7
283	Human eye-inspired soft optoelectronic device using high-density MoS2-graphene curved image sensor array. Nature Communications, 2017, 8, 1664.	5.8	381
284	Weiche elektrochemische Sonden zum Abbilden der Verteilung von Biomarkern und injizierten Nanomaterialien in tierischem und menschlichem Gewebe. Angewandte Chemie, 2017, 129, 16722-16727.	1.6	0
285	Reconfigurable systems for multifunctional electronics. Npj Flexible Electronics, 2017, 1, .	5.1	27
286	Thin, Transferred Layers of Silicon Dioxide and Silicon Nitride as Water and Ion Barriers for Implantable Flexible Electronic Systems. Advanced Electronic Materials, 2017, 3, 1700077.	2.6	61
287	High-Rate Assembly of Nanomaterials on Insulating Surfaces Using Electro-Fluidic Directed Assembly. ACS Nano, 2017, 11, 7679-7689.	7.3	18
288	Improved M-Government Based on Mobile WiMAX. , 2017, , .		1
289	Stability of MOSFET-Based Electronic Components in Wearable and Implantable Systems. IEEE Transactions on Electron Devices, 2017, 64, 3443-3451.	1.6	16
290	Efficient Skin Temperature Sensor and Stable Gelâ€Less Sticky ECG Sensor for a Wearable Flexible Healthcare Patch. Advanced Healthcare Materials, 2017, 6, 1700495.	3.9	223
291	Embroidered electrochemical sensors on gauze for rapid quantification of wound biomarkers. Biosensors and Bioelectronics, 2017, 98, 189-194.	5.3	43
292	A wearable and highly sensitive strain sensor based on a polyethylenimineâ€"rGO layered nanocomposite thin film. Journal of Materials Chemistry C, 2017, 5, 7746-7752.	2.7	64
293	Wearable Training-Monitoring Technology: Applications, Challenges, and Opportunities. International Journal of Sports Physiology and Performance, 2017, 12, S2-55-S2-62.	1.1	110
294	A wearable multisensing patch for continuous sweat monitoring. Biosensors and Bioelectronics, 2017, 93, 139-145.	5.3	311
295	Decal Electronics: Printable Packaged with 3D Printing Highâ€Performance Flexible CMOS Electronic Systems. Advanced Materials Technologies, 2017, 2, 1600175.	3.0	8

#	Article	IF	Citations
296	Lancet-free and label-free diagnostics of glucose in sweat using Zinc Oxide based flexible bioelectronics. Sensors and Actuators B: Chemical, 2017, 238, 482-490.	4.0	142
297	Flexible Thinâ€Film Electrodes on Porous Polyester Membranes for Wearable Sensors. Advanced Engineering Materials, 2017, 19, 1600592.	1.6	8
298	High performance flexible pH sensor based on polyaniline nanopillar array electrode. Journal of Colloid and Interface Science, 2017, 490, 53-58.	5.0	82
299	Sizeâ€Scalable and Highâ€Density Liquidâ€Metalâ€Based Soft Electronic Passive Components and Circuits Using Soft Lithography. Advanced Functional Materials, 2017, 27, 1604466.	7.8	107
300	Flexible pH sensor and system fabricated using PET film. , 2017, , .		6
302	Skin-like biosensor system via electrochemical channels for noninvasive blood glucose monitoring. Science Advances, 2017, 3, e1701629.	4.7	336
303	A wireless smart UV accumulation patch based on conductive polymer and CNT composites. RSC Advances, 2017, 7, 54741-54746.	1.7	6
304	Temperature compensation for ISFETs using a floating gate current mirror. , 2017, , .		2
305	The birth of a new pediatric medical journal: Pediatric Investigation. Pediatric Investigation, 2017, 1, 1-2.	0.6	1
306	Ultrathin flexible coils for wireless power and data link in biomedical sensors. , 2017, , .		1
307	High resolution and linearity enhanced SAR ADC for wearable sensing systems. , 2017, , .		22
308	Barriers in acceptance of Ambient Assisted Living technologies among older Australians. , 2017, , .		4
309	Non-invasive measurement of blood lactate in humans using microwave sensors. , 2017, , .		3
310	An analysis of deformed flexible wearable patch antenna parameters. , 2017, , .		0
311	Lab on skin^{â„¢}: 3D monolithically integrated zero-energy micro/nanofludics and FD SOI ion sensitive FETs for wearable multi-sensing sweat applications. , 2017, , .		11
312	Skin-like nanostrucutred biosensor system for noninvasive blood glucose monitoring. , 2017, , .		1
313	Sensing of heat source in deep layer using heat flow. , 2017, , .		0
314	Modular design for epidermal temperature sensing. , 2017, , .		0

#	Article	IF	Citations
315	A hybrid, networked, wireless system for humidity sensing. , 2017, , .		2
316	Designing the Health-Related Internet of Things: Ethical Principles and Guidelines. SSRN Electronic Journal, 0, , .	0.4	4
317	Can Blockchain Improve Healthcare Management? Consumer Medical Electronics and the IoMT. SSRN Electronic Journal, 0, , .	0.4	22
318	Smart Sensor Systems for Wearable Electronic Devices. Polymers, 2017, 9, 303.	2.0	185
319	Designing the Health-related Internet of Things: Ethical Principles and Guidelines. Information (Switzerland), 2017, 8, 77.	1.7	40
320	A Single-Use, Self-Powered, Paper-Based Sensor Patch for Detection of Exercise-Induced Hypoglycemia. Micromachines, 2017, 8, 265.	1.4	67
321	Arrayed Force Sensors Made of Paper, Elastomer, and Hydrogel Particles. Micromachines, 2017, 8, 356.	1.4	6
322	Ultra-Stretchable Piezoelectric Nanogenerators via Large-Scale Aligned Fractal Inspired Micro/Nanofibers. Polymers, 2017, 9, 714.	2.0	26
323	Solid-Contact Reference Electrode for Ion-Selective Sensors. Proceedings (mdpi), 2017, 1, .	0.2	4
324	Wearable Sensor for Real-Time Monitoring of Electrolytes in Sweat. Proceedings (mdpi), 2017, 1, 724.	0.2	0
325	The Boom in 3D-Printed Sensor Technology. Sensors, 2017, 17, 1166.	2.1	235
326	Glucose Sensing for Diabetes Monitoring: Recent Developments. Sensors, 2017, 17, 1866.	2.1	546
327	Wireless Biological Electronic Sensors. Sensors, 2017, 17, 2289.	2.1	13
328	An IoT-Based Computational Framework for Healthcare Monitoring in Mobile Environments. Sensors, 2017, 17, 2302.	2.1	132
329	Wearable Devices in Medical Internet of Things: Scientific Research and Commercially Available Devices. Healthcare Informatics Research, 2017, 23, 4.	1.0	519
330	Composite Hydrogels with Engineered Microdomains for Optical Glucose Sensing at Low Oxygen Conditions. Biosensors, 2017, 7, 8.	2.3	34
331	Nanostructured Inorganic Materials at Work in Electrochemical Sensing and Biofuel Cells. Catalysts, 2017, 7, 31.	1.6	23
332	All-Solid-State Sodium-Selective Electrode with a Solid Contact of Chitosan/Prussian Blue Nanocomposite. Sensors, 2017, 17, 2536.	2.1	26

#	Article	IF	Citations
333	Mechanisms and Materials of Flexible and Stretchable Skin Sensors. Micromachines, 2017, 8, 69.	1.4	46
334	Towards low-power wearable wireless sensors for molecular biomarker and physiological signal monitoring. , 2017, , .		10
335	Hybrid monitor belt: A non-invasive health monitoring system with flexible printed ECG array. , 2017, , .		1
336	Highly Stretchable, Compliant, Polymeric Microelectrode Arrays for In Vivo Electrophysiological Interfacing. Advanced Materials, 2017, 29, 1702800.	11.1	144
337	Fully-Polymeric pH Sensor Realized by Means of a Single-Step Soft Embossing Technique. Sensors, 2017, 17, 1169.	2.1	14
338	One-batch transfer process for the additive manufacturing of a cantilever with a weight. Japanese Journal of Applied Physics, 2017, 56, 06GN03.	0.8	1
339	Electrical Conductivity of Skin Compared to Skin Perfusion Recordings. International Journal of Biomedical and Clinical Engineering, 2017, 6, 1-17.	0.2	1
340	Microporous Capacitive Sensors for Use in Surgical Procedures. , 2017, , .		2
341	Giant and Linear Piezoâ€Phototronic Response in Layered GaSe Nanosheets. Advanced Electronic Materials, 2018, 4, 1700447.	2.6	14
342	A Four-Channel Electrical Impedance Spectroscopy Module for Cortisol Biosensing in Sweat-Based Wearable Applications. SLAS Technology, 2018, 23, 529-539.	1.0	32
343	Self-powered versatile shoes based on hybrid nanogenerators. Nano Research, 2018, 11, 3972-3978.	5.8	45
345	A Printed Organic Amplification System for Wearable Potentiometric Electrochemical Sensors. Scientific Reports, 2018, 8, 3922.	1.6	52
346	Largeâ€Scale Directâ€Writing of Aligned Nanofibers for Flexible Electronics. Small, 2018, 14, e1703521.	5.2	126
348	Engineering Approaches to Assessing Hydration Status. IEEE Reviews in Biomedical Engineering, 2018, 11, 233-248.	13.1	28
351	Wearable and Implantable Sensors for Biomedical Applications. Annual Review of Analytical Chemistry, 2018, 11, 127-146.	2.8	211
352	Strain engineering and mechanical assembly of silicon/germanium nanomembranes. Materials Science and Engineering Reports, 2018, 128, 1-31.	14.8	48
353	Bio-inspired superhydrophilic coatings with high anti-adhesion against mineral scales. NPG Asia Materials, 2018, 10, e471-e471.	3.8	30
354	A facile modular approach to the 2D oriented assembly MOF electrode for non-enzymatic sweat biosensors. Nanoscale, 2018, 10, 6629-6638.	2.8	73

#	Article	IF	Citations
355	Stretchable temperature-sensing circuits with strain suppression based on carbon nanotube transistors. Nature Electronics, 2018, 1, 183-190.	13.1	263
356	Wearable sweat sensors. Nature Electronics, 2018, 1, 160-171.	13.1	947
357	Materials and Wearable Devices for Autonomous Monitoring of Physiological Markers. Advanced Materials, 2018, 30, e1705024.	11.1	145
358	GPS-Inspired Stretchable Self-Powered Electronic Skin. IEEE Nanotechnology Magazine, 2018, 17, 460-466.	1.1	6
359	A wearable electrochemical glucose sensor based on simple and low-cost fabrication supported micro-patterned reduced graphene oxide nanocomposite electrode on flexible substrate. Biosensors and Bioelectronics, 2018, 109, 75-82.	5.3	310
360	A flexible sandwich-structured supercapacitor with poly(vinyl alcohol)/H3PO4-soaked cotton fabric as solid electrolyte, separator and supporting layer. Cellulose, 2018, 25, 3459-3469.	2.4	19
361	Recent progress on printable power supply devices and systems with nanomaterials. Nano Research, 2018, 11, 3065-3087.	5.8	60
362	Flexible active-matrix organic light-emitting diode display enabled by MoS ₂ thin-film transistor. Science Advances, 2018, 4, eaas8721.	4.7	163
363	In Situ Selfâ€Assembled Polyoxotitanate Cages on Flexible Cellulosic Substrates: Multifunctional Coating for Hydrophobic, Antibacterial, and UVâ€Blocking Applications. Advanced Functional Materials, 2018, 28, 1800345.	7.8	45
364	A Printed Organic Circuit System for Wearable Amperometric Electrochemical Sensors. Scientific Reports, 2018, 8, 6368.	1.6	43
365	3D Printed Functional and Biological Materials on Moving Freeform Surfaces. Advanced Materials, 2018, 30, e1707495.	11.1	147
366	Non-enzymatic electrochemical lactate sensing by NiO and Ni(OH)2 electrodes: A mechanistic investigation. Electrochimica Acta, 2018, 276, 240-246.	2.6	43
367	Stretchable and Photocatalytically Renewable Electrochemical Sensor Based on Sandwich Nanonetworks for Real-Time Monitoring of Cells. Analytical Chemistry, 2018, 90, 5977-5981.	3.2	43
368	Chitosan-Based Polysaccharide-Gated Flexible Indium Tin Oxide Synaptic Transistor with Learning Abilities. ACS Applied Materials & Interfaces, 2018, 10, 16881-16886.	4.0	120
369	Simultaneous lancet-free monitoring of alcohol and glucose from low-volumes of perspired human sweat. Scientific Reports, 2018, 8, 6507.	1.6	59
370	Rapid recognition of volatile organic compounds with colorimetric sensor arrays for lung cancer screening. Analytical and Bioanalytical Chemistry, 2018, 410, 3671-3681.	1.9	41
371	Transparent and flexible tactile sensors based on graphene films designed for smart panels. Journal of Materials Science, 2018, 53, 9589-9597.	1.7	26
372	High-sensitivity ion detection at low voltages with current-driven organic electrochemical transistors. Nature Communications, 2018, 9, 1441.	5.8	103

#	Article	IF	Citations
373	Open-Source Potentiostat for Wireless Electrochemical Detection with Smartphones. Analytical Chemistry, 2018, 90, 6240-6246.	3.2	260
374	Three-dimensional helical inorganic thermoelectric generators and photodetectors for stretchable and wearable electronic devices. Journal of Materials Chemistry C, 2018, 6, 4866-4872.	2.7	63
375	An electrochemically modulated single-walled carbon nanotube network for the development of a transparent flexible sensor for dopamine. Sensors and Actuators B: Chemical, 2018, 267, 438-447.	4.0	38
376	Morphological Behavior of Printed Silver Electrodes with Protective Self-Assembled Monolayers for Electrochemical Migration. ACS Applied Materials & Interfaces, 2018, 10, 16210-16215.	4.0	12
377	Methylxanthine Drug Monitoring with Wearable Sweat Sensors. Advanced Materials, 2018, 30, e1707442.	11.1	226
378	Challenges and perspectives in continuous glucose monitoring. Chemical Communications, 2018, 54, 5032-5045.	2.2	95
379	Synthetic biology-based cellular biomedical tattoo for detection of hypercalcemia associated with cancer. Science Translational Medicine, 2018, 10, .	5.8	44
380	Facile fabrication of wire-type indium gallium zinc oxide thin-film transistors applicable to ultrasensitive flexible sensors. Scientific Reports, 2018, 8, 5546.	1.6	23
381	Network cracks-based wearable strain sensors for subtle and large strain detection of human motions. Journal of Materials Chemistry C, 2018, 6, 5140-5147.	2.7	164
382	Functional, RFâ€Trilayer Sensors for Toothâ€Mounted, Wireless Monitoring of the Oral Cavity and Food Consumption. Advanced Materials, 2018, 30, e1703257.	11.1	146
383	Controllable synthesis of nickel nanowires and its application in high sensitivity, stretchable strain sensor for body motion sensing. Journal of Materials Chemistry C, 2018, 6, 4737-4745.	2.7	61
384	Battery-free, wireless sensors for full-body pressure and temperature mapping. Science Translational Medicine, 2018, 10, .	5.8	247
385	Possible Clinical Use of Big Data: Personal Brain Connectomics. ICSA Book Series in Statistics, 2018, , 23-31.	0.0	0
386	Skin-Attachable, Stretchable Electrochemical Sweat Sensor for Glucose and pH Detection. ACS Applied Materials & Interfaces, 2018, 10, 13729-13740.	4.0	314
387	Wearable Platform for Realâ€time Monitoring of Sodium in Sweat. ChemPhysChem, 2018, 19, 1531-1536.	1.0	42
388	In-situ NIR-laser mediated bioactive substance delivery to single cell for EGFP expression based on biocompatible microchamber-arrays. Journal of Controlled Release, 2018, 276, 84-92.	4.8	37
389	Non-invasive, transdermal, path-selective and specific glucose monitoring via a graphene-based platform. Nature Nanotechnology, 2018, 13, 504-511.	15.6	242
390	Materials and Techniques for Implantable Nutrient Sensing Using Flexible Sensors Integrated with Metalâ€“Organic Frameworks. Advanced Materials, 2018, 30, e1800917.	11.1	80

#	Article	IF	Citations
391	Naked-eye point-of-care testing platform based on a pH-responsive superwetting surface: toward the non-invasive detection of glucose. NPG Asia Materials, 2018, 10, 177-189.	3.8	57
392	Systematic study and experiment of a flexible pressure and tactile sensing array for wearable devices applications. Journal of Micromechanics and Microengineering, 2018, 28, 075019.	1.5	14
393	Flexible Transparent Nanogenerators Utilizing Shapeâ€Modulated ZnO Nanorod Arrays on Graphene Electrodes. Advanced Materials Technologies, 2018, 3, 1700355.	3.0	10
394	Skin-interfaced systems for sweat collection and analytics. Science Advances, 2018, 4, eaar3921.	4.7	303
395	Vitrimer Elastomerâ€Based Jigsaw Puzzleâ€Like Healable Triboelectric Nanogenerator for Selfâ€Powered Wearable Electronics. Advanced Materials, 2018, 30, e1705918.	11.1	265
396	Skin electronics from scalable fabrication of an intrinsically stretchable transistor array. Nature, 2018, 555, 83-88.	13.7	1,588
397	A 3-D-Printed Integrated PCB-Based Electrochemical Sensor System. IEEE Sensors Journal, 2018, 18, 2959-2966.	2.4	39
398	Superâ€Absorbent Polymer Valves and Colorimetric Chemistries for Timeâ€Sequenced Discrete Sampling and Chloride Analysis of Sweat via Skinâ€Mounted Soft Microfluidics. Small, 2018, 14, e1703334.	5.2	119
399	Nanotransducers on printed circuit boards by rational design of high-density, long, thin and untapered ZnO nanowires. Nano Energy, 2018, 46, 54-62.	8.2	23
400	Highly stretchable strain sensors with reduced graphene oxide sensing liquids for wearable electronics. Nanoscale, 2018, 10, 5264-5271.	2.8	144
401	Low-cost, Î¼m-thick, tape-free electronic tattoo sensors with minimized motion and sweat artifacts. Npj Flexible Electronics, 2018, 2, .	5.1	132
402	An elastomer for epidermal electronics with adjustable adhesion force and stretchability obtained via a reverse-micelle-induced process. Journal of Materials Chemistry C, 2018, 6, 2210-2215.	2.7	8
403	An Architecture for Large-Area Sensor Acquisition Using Frequency-Hopping ZnO TFT DCOs. IEEE Journal of Solid-State Circuits, 2018, 53, 297-308.	3.5	9
404	High-Performance Carbon Nanotube Complementary Electronics and Integrated Sensor Systems on Ultrathin Plastic Foil. ACS Nano, 2018, 12, 2773-2779.	7.3	90
405	Dynamic Poly(3,4â€ethylenedioxythiophene)s Integrate Low Impedance with Redoxâ€Switchable Biofunction. Advanced Functional Materials, 2018, 28, 1703890.	7.8	27
406	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. Nature Communications, 2018, 9, 244.	5.8	1,034
407	Highly Sensitive and Wearable In₂O₃ Nanoribbon Transistor Biosensors with Integrated On-Chip Gate for Glucose Monitoring in Body Fluids. ACS Nano, 2018, 12, 1170-1178.	7.3	185
408	Wearable Wireless Tyrosinase Bandage and Microneedle Sensors: Toward Melanoma Screening. Advanced Healthcare Materials, 2018, 7, e1701264.	3.9	170

#	Article	IF	Citations
409	Fabrication of High-Sensitivity Skin-Attachable Temperature Sensors with Bioinspired Microstructured Adhesive. ACS Applied Materials & Interfaces, 2018, 10, 7263-7270.	4.0	165
410	User-centered Interface Design Approach for a Smart Heated Garment. Fibers and Polymers, 2018, 19, 238-247.	1.1	8
411	Cutting the cord. Nature Electronics, 2018, 1, 89-89.	13.1	1
412	Stretchable wireless system for sweat pH monitoring. Biosensors and Bioelectronics, 2018, 107, 192-202.	5.3	247
413	All Inkjet-Printed Amperometric Multiplexed Biosensors Based on Nanostructured Conductive Hydrogel Electrodes. Nano Letters, 2018, 18, 3322-3327.	4.5	176
414	Magnetosensitive e-skins with directional perception for augmented reality. Science Advances, 2018, 4, eaao2623.	4.7	89
415	Encoding, Reading, and Transforming Information Using Multifluorescent Supramolecular Polymeric Hydrogels. Advanced Materials, 2018, 30, 1705480.	11.1	185
416	Mechanoâ€Based Transductive Sensing for Wearable Healthcare. Small, 2018, 14, e1702933.	5.2	91
417	Soft, smart contact lenses with integrations of wireless circuits, glucose sensors, and displays. Science Advances, 2018, 4, eaap9841.	4.7	465
418	A fluorescent wearable platform for sweat Cl^{â^'} analysis and logic smart-device fabrication based on color adjustable lanthanide MOFs. Journal of Materials Chemistry C, 2018, 6, 1863-1869.	2.7	71
419	Alcohol gas sensors capable of wireless detection using In2O3/Pt nanoparticles and Ag nanowires. Sensors and Actuators B: Chemical, 2018, 259, 825-832.	4.0	45
420	Recent Developments in Grapheneâ€Based Tactile Sensors and Eâ€Skins. Advanced Materials Technologies, 2018, 3, 1700248.	3.0	153
421	Self-powered implantable electronic-skin forin situanalysis of urea/uric-acid in body fluids and the potential applications in real-time kidney-disease diagnosis. Nanoscale, 2018, 10, 2099-2107.	2.8	49
422	Dual-Function Metalâ€“Organic Framework-Based Wearable Fibers for Gas Probing and Energy Storage. ACS Applied Materials & Interfaces, 2018, 10, 2837-2842.	4.0	68
423	Nanostructured Biomaterials for InÂVivo Biosensors. , 2018, , 183-219.		1
424	Selfâ€Powered Vehicle Emission Testing System Based on Coupling of Triboelectric and Chemoresistive Effects. Advanced Functional Materials, 2018, 28, 1703420.	7.8	95
425	A multifunctional wearable sensor based on a graphene/inverse opal cellulose film for simultaneous, in situ monitoring of human motion and sweat. Nanoscale, 2018, 10, 2090-2098.	2.8	130
426	Electroless Deposition Metals on Poly(dimethylsiloxane) with Strong Adhesion As Flexible and Stretchable Conductive Materials. ACS Applied Materials & Interfaces, 2018, 10, 2075-2082.	4.0	65

#	Article	IF	Citations
427	Detection of tuberculosis in patients with the use of portable SPR device. Sensors and Actuators B: Chemical, 2018, 260, 786-792.	4.0	38
428	Enzymeâ€Based Glucose Sensor: From Invasive to Wearable Device. Advanced Healthcare Materials, 2018, 7, e1701150.	3.9	483
429	Potentiometric textile-based pH sensor. Sensors and Actuators B: Chemical, 2018, 260, 601-608.	4.0	59
430	Superwettable Electrochemical Biosensor toward Detection of Cancer Biomarkers. ACS Sensors, 2018, 3, 72-78.	4.0	84
431	Recent Advances in Wearable Transdermal Delivery Systems. Advanced Materials, 2018, 30, 1704530.	11.1	151
432	Programmable Nucleic Acid Nanoswitches for the Rapid, Single-Step Detection of Antibodies in Bodily Fluids. Journal of the American Chemical Society, 2018, 140, 947-953.	6.6	91
433	Ultraconformable Temporary Tattoo Electrodes for Electrophysiology. Advanced Science, 2018, 5, 1700771.	5.6	136
434	High Linearity SAR ADC for High Performance Sensor System. , 2018, , .		10
435	Bidirectional Hetero-Associative Memory Network With Flexible Sensors and Cloud Computing for Blood Leakage Detection in Intravenous and Dialysis Therapy. IEEE Transactions on Emerging Topics in Computational Intelligence, 2018, 2, 298-307.	3.4	6
436	Design and Development of Signal Conditioning Unit for Acquisition of Acoustic Emission Signal for Metallic Materials. Transactions of the Indian Institute of Metals, 2018, 71, 1913-1918.	0.7	6
437	Fabric Organic Electrochemical Transistors for Biosensors. Advanced Materials, 2018, 30, e1800051.	11.1	137
438	Lowâ€Temperatureâ€Processed SiO‹i›‹sub›x‹/sub›‹/i› One Diodeâ€“One Resistor Crossbar Array and Its Flexible Memory Application. Advanced Electronic Materials, 2018, 4, 1700665.	2.6	19
439	Electroluminescent Pressure-Sensing Displays. ACS Applied Materials & Interfaces, 2018, 10, 13757-13766.	4.0	56
440	Soft, Highly Elastic, and Dischargeâ€Currentâ€Controllable Eutectic Galliumâ€“Indium Liquid Metalâ€“Air Battery Operated at Room Temperature. Advanced Energy Materials, 2018, 8, 1703652.	10.2	91
441	Soft and transient magnesium plasmonics for environmental and biomedical sensing. Nano Research, 2018, 11, 4390-4400.	5.8	21
442	NafionÂ®-coated mesoporous Pd film toward remarkably enhanced detection of lactic acid. RSC Advances, 2018, 8, 10446-10449.	1.7	6
444	Inkjet printed large-area flexible circuits: a simple methodology for optimizing the printing quality. Journal of Semiconductors, 2018, 39, 015001.	2.0	17
445	A Wearable Amperometric Biosensor on a Cotton Fabric for Lactate. IEEE Electron Device Letters, 2018, 39, 123-126.	2.2	25

#	Article	IF	Citations
446	Wireless chemical sensors and biosensors: A review. Sensors and Actuators B: Chemical, 2018, 266, 228-245.	4.0	232
447	Mobile Technologies for the Discovery, Analysis, and Engineering of the Global Microbiome. ACS Nano, 2018, 12, 3065-3082.	7.3	18
448	Ultra-thin chips for high-performance flexible electronics. Npj Flexible Electronics, 2018, 2, .	5.1	249
449	Stretchable Triboelectricâ€“Photonic Smart Skin for Tactile and Gesture Sensing. Advanced Materials, 2018, 30, e1800066.	11.1	205
450	Fully Printed Wearable Vital Sensor for Human Pulse Rate Monitoring using Ferroelectric Polymer. Scientific Reports, 2018, 8, 4442.	1.6	90
451	Noninvasive <italic>In-Situ</italic> Measurement of Blood Lactate Using Microwave Sensors. IEEE Transactions on Biomedical Engineering, 2018, 65, 698-705.	2.5	33
452	Transferred, Ultrathin Oxide Bilayers as Biofluid Barriers for Flexible Electronic Implants. Advanced Functional Materials, 2018, 28, 1702284.	7.8	49
453	Detection of vapor-phase organophosphate threats using wearable conformable integrated epidermal and textile wireless biosensor systems. Biosensors and Bioelectronics, 2018, 101, 227-234.	5.3	79
454	Step into â€œThe Circleâ€â€”A Close Look at Wearables and Quantified Self. SpringerBriefs in Law, 2018, , 81-91.	0.0	6
455	Chemical Monitoring in Clinical Settings: Recent Developments toward Real-Time Chemical Monitoring of Patients. Analytical Chemistry, 2018, 90, 2-18.	3.2	31
456	Wearable physiological systems and technologies for metabolic monitoring. Journal of Applied Physiology, 2018, 124, 548-556.	1.2	60
457	Nanomaterials for bioelectronics and integrated medical systems. Korean Journal of Chemical Engineering, 2018, 35, 1-11.	1.2	76
458	Wearable non-invasive epidermal glucose sensors: A review. Talanta, 2018, 177, 163-170.	2.9	432
459	Device-assisted transdermal drug delivery. Advanced Drug Delivery Reviews, 2018, 127, 35-45.	6.6	237
460	Surface-modified CMOS IC electrochemical sensor array targeting single chromaffin cells for highly parallel amperometry measurements. Pflugers Archiv European Journal of Physiology, 2018, 470, 113-123.	1.3	17
461	Metabolomics analysis of human sweat collected after moderate exercise. Talanta, 2018, 177, 47-65.	2.9	46
462	A low-cost, printable, and stretchable strain sensor based on highly conductive elastic composites with tunable sensitivity for human motion monitoring. Nano Research, 2018, 11, 1938-1955.	5.8	99
463	Novel Ecoâ€Friendly Starch Paper for Use in Flexible, Transparent, and Disposable Organic Electronics. Advanced Functional Materials, 2018, 28, 1704433.	7.8	87

#	Article	IF	Citations
464	Polymer-Based Technologies for Sensing Applications. Analytical Chemistry, 2018, 90, 459-479.	3.2	39
465	Seamless Healthcare Monitoring. , 2018, , .		14
466	Body Temperature, Heat Flow, and Evaporation. , 2018, , 281-307.		2
467	Wearable sensors: modalities, challenges, and prospects. Lab on A Chip, 2018, 18, 217-248.	3.1	778
468	Nanomaterialâ€Enabled Wearable Sensors for Healthcare. Advanced Healthcare Materials, 2018, 7, 1700889.	3.9	412
469	Graphene paper supported MoS2 nanocrystals monolayer with Cu submicron-buds: High-performance flexible platform for sensing in sweat. Analytical Biochemistry, 2018, 543, 82-89.	1.1	46
470	Human Sweat Analysis Using a Portable Device Based on a Screenâ€printed Electrolyte Sensor. Electroanalysis, 2018, 30, 665-671.	1.5	19
471	Aptamer-functionalized carbon nanomaterials electrochemical sensors for detecting cancer relevant biomolecules. Carbon, 2018, 129, 380-395.	5.4	135
472	Wearable Chemosensors: A Review of Recent Progress. ChemistryOpen, 2018, 7, 118-130.	0.9	40
473	A self-powered brain multi-perception receptor for sensory-substitution application. Nano Energy, 2018, 44, 43-52.	8.2	44
474	Sliced graphene foam films for dual-functional wearable strain sensors and switches. Nanoscale Horizons, 2018, 3, 35-44.	4.1	84
475	Inhomogeneity in pore size appreciably lowering thermal conductivity for porous thermal insulators. Applied Thermal Engineering, 2018, 130, 1004-1011.	3.0	78
476	Silicone-based adhesives for long-term skin application: cleaning protocols and their effect on peel strength. Biomedical Physics and Engineering Express, 2018, 4, 015004.	0.6	26
477	Prolonged and localized sweat stimulation by iontophoretic delivery of the slowly-metabolized cholinergic agent carbachol. Journal of Dermatological Science, 2018, 89, 40-51.	1.0	62
478	Integrated water quality monitoring system with pH, free chlorine, and temperature sensors. Sensors and Actuators B: Chemical, 2018, 255, 781-790.	4.0	72
479	Contacts with Nanocarbon Structures in Flexible Electronics. , 2018, , .		0
480	Triboelectric flexible sensors employing single-walled carbon nanotube field-effect transistors. , 2018, , .		0
481	Porous Graphene Based PVDF Aerogel Composite for Sweat Sensing Applications. , 2018, , .		0

#	Article	IF	Citations
482	Multifunctional Wearable System that Integrates Sweatâ€Based Sensing and Vitalâ€Sign Monitoring to Estimate Preâ€/Postâ€Exercise Glucose Levels. Advanced Functional Materials, 2018, 28, 1805754.	7.8	143
483	Smart Materials for Wearable Healthcare Devices. , 0, , .		4
484	A Pilot Study of Neural Stimulation and Motion Intervention via Self-powered Wearable Electronics*. , 2018, , .		0
485	Measurement of cytokine biomarkers using an aptamer-based affinity graphene nanosensor on a flexible substrate toward wearable applications. Nanoscale, 2018, 10, 21681-21688.	2.8	69
486	A general strategy for printing colloidal nanomaterials into one-dimensional micro/nanolines. Nanoscale, 2018, 10, 22374-22380.	2.8	20
488	Flexible Superwettable Tapes for On-Site Detection of Heavy Metals. Analytical Chemistry, 2018, 90, 14105-14110.	3.2	59
489	A wearable pH sensor with high sensitivity based on a flexible charge-coupled device. Nature Electronics, 2018, 1, 596-603.	13.1	167
490	Wearable pH sensing beyond the Nernst limit. Nature Electronics, 2018, 1, 580-581.	13.1	15
491	Carbon dot aggregates as an alternative to gold nanoparticles for the laser-induced opening of microchamber arrays. Soft Matter, 2018, 14, 9012-9019.	1.2	19
492	Bioresorbable Silicon Nanomembranes and Iron Catalyst Nanoparticles for Flexible, Transient Electrochemical Dopamine Monitors. Advanced Healthcare Materials, 2018, 7, e1801071.	3.9	48
493	Sweat-based wearable energy harvesting-storage hybrid textile devices. Energy and Environmental Science, 2018, 11, 3431-3442.	15.6	196
494	Conformal and Disposable Antenna-Based Sensor for Non-Invasive Sweat Monitoring. Sensors, 2018, 18, 4088.	2.1	26
495	Cosmetically Adaptable Transparent Strain Sensor for Sensitively Delineating Patterns in Small Movements of Vital Human Organs. ACS Applied Materials & Interfaces, 2018, 10, 44126-44133.	4.0	23
496	From Point-of-Care Testing to eHealth Diagnostic Devices (eDiagnostics). ACS Central Science, 2018, 4, 1600-1616.	5.3	140
497	All-Additive Solution Processed Silver/Silver Chloride Reference Electrode for Handheld Ion-Sensitive Field-Effect Transistor Sensing System. , 2018, 2, 1-4.		6
498	Nanomaterials in Skin-Inspired Electronics: Toward Soft and Robust Skin-like Electronic Nanosystems. ACS Nano, 2018, 12, 11731-11739.	7.3	142
499	A Self-Powered Breath Analyzer Based on PANI/PVDF Piezo-Gas-Sensing Arrays for Potential Diagnostics Application. Nano-Micro Letters, 2018, 10, 76.	14.4	80
500	Multifunctional La_{0.67}Sr_{0.33}MnO₃ (LSMO) Thin Films Integrated on Mica Substrates toward Flexible Spintronics and Electronics. ACS Applied Materials & Interfaces, 2018, 10, 42698-42705.	4.0	62

#	Article	IF	Citations
501	Wearable Bioelectronics: Enzyme-Based Body-Worn Electronic Devices. Accounts of Chemical Research, 2018, 51, 2820-2828.	7.6	214
502	Epidermis-Inspired Ultrathin 3D Cellular Sensor Array for Self-Powered Biomedical Monitoring. ACS Applied Materials & Interfaces, 2018, 10, 41070-41075.	4.0	136
503	Recent Advances in Smart Wearable Sensing Systems. Advanced Materials Technologies, 2018, 3, 1800444.	3.0	128
504	A flexible organic reflectance oximeter array. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11015-E11024.	3.3	201
505	An overview of healthcare monitoring by flexible electronics. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	11
506	Stretchable Location Sensor Based on Transparent AgNWs Electrodes. , 2018, , .		3
507	Reviewâ€"Electrochemical Synthesis of 2D Layered Materials and Their Potential Application in Pesticide Detection. Journal of the Electrochemical Society, 2018, 165, B848-B861.	1.3	32
508	Three-Dimensional Integrated Ultra-Low-Volume Passive Microfluidics with Ion-Sensitive Field-Effect Transistors for Multiparameter Wearable Sweat Analyzers. ACS Nano, 2018, 12, 12646-12656.	7.3	64
509	Complete validation of a continuous and blood-correlated sweat biosensing device with integrated sweat stimulation. Lab on A Chip, 2018, 18, 3750-3759.	3.1	104
510	A novel electrochemical sensor for non-invasive monitoring of lithium levels in mood disorders. , 2018, 2018, 3825-3828.		7
511	A compact perspiration meter system with capacitive humidity sensor for wearable health-care applications. Japanese Journal of Applied Physics, 2018, 57, 04FF10.	0.8	7
512	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784.	7.3	388
513	Precise Micropatterning of a Porous Poly(ionic liquid) via Maskless Photolithography for High-Performance Nonenzymatic H₂O₂ Sensing. ACS Nano, 2018, 12, 12551-12557.	7.3	26
514	A fully inkjet-printed disposable glucose sensor on paper. Npj Flexible Electronics, 2018, 2, .	5.1	136
515	A Freestanding Stretchable and Multifunctional Transistor with Intrinsic Selfâ€Healing Properties of all Device Components. Small, 2019, 15, e1803939.	5.2	71
516	Directly Visualizing Tactile Perception and Ultrasensitive Tactile Sensors by Utilizing Bodyâ€Enhanced Induction of Ambient Electromagnetic Waves. Advanced Functional Materials, 2018, 28, 1805277.	7.8	30
517	Innovative technologies for chemical security. Pure and Applied Chemistry, 2018, 90, 1527-1557.	0.9	6
518	Soft, Skinâ€Interfaced Microfluidic Systems with Wireless, Batteryâ€Free Electronics for Digital, Realâ€Time Tracking of Sweat Loss and Electrolyte Composition. Small, 2018, 14, e1802876.	5.2	88

#	Article	IF	Citations
519	Polymer solar cell textiles with interlaced cathode and anode fibers. Journal of Materials Chemistry A, 2018, 6, 19947-19953.	5.2	62
520	A hierarchical structure of l-cysteine/Ag NPs/hydrogel for conductive cotton fabrics with high stability against mechanical deformation. Cellulose, 2018, 25, 7355-7367.	2.4	20
521	Restickable Oxide Neuromorphic Transistors with Spikeâ€Timingâ€Dependent Plasticity and Pavlovian Associative Learning Activities. Advanced Functional Materials, 2018, 28, 1804025.	7.8	139
522	Efficient Delivery of Power Generated by a Rotating Triboelectric Nanogenerator by Conjunction of Wired and Wireless Transmissions Using Maxwell's Displacement Currents. Advanced Energy Materials, 2018, 8, 1802084.	10.2	74
523	All-Organic Conductive Biomaterial as an Electroactive Cell Interface. ACS Applied Materials & Interfaces, 2018, 10, 35547-35556.	4.0	16
524	Chemical Sensing at the Robot Fingertips: Toward Automated Taste Discrimination in Food Samples. ACS Sensors, 2018, 3, 2375-2384.	4.0	59
525	Highly conductive and bendable gold networks attached on intertwined cellulose fibers for output controllable power paper. Journal of Materials Chemistry A, 2018, 6, 19611-19620.	5.2	25
526	Fabric-based self-powered noncontact smart gloves for gesture recognition. Journal of Materials Chemistry A, 2018, 6, 20277-20288.	5.2	36
527	Hydrodynamic Layer-by-Layer Assembly of Transferable Enzymatic Conductive Nanonetworks for Enzyme-Sticker-Based Contact Printing of Electrochemical Biosensors. ACS Applied Materials & Interfaces, 2018, 10, 36267-36274.	4.0	18
528	Human Motion Recognition by Textile Sensors Based on Machine Learning Algorithms. Sensors, 2018, 18, 3109.	2.1	38
529	Ultrathin Trilayer Assemblies as Long-Lived Barriers against Water and Ion Penetration in Flexible Bioelectronic Systems. ACS Nano, 2018, 12, 10317-10326.	7.3	57
530	Flexible Electrochemical Urea Sensor Based on Surface Molecularly Imprinted Nanotubes for Detection of Human Sweat. Analytical Chemistry, 2018, 90, 13081-13087.	3.2	104
531	Designing Surface Chemistry of Silver Nanocrystals for Radio Frequency Circuit Applications. ACS Applied Materials & Interfaces, 2018, 10, 37643-37650.	4.0	4
532	Flexible Printed Reference Electrodes for Electrochemical Applications. Advanced Materials Technologies, 2018, 3, 1800252.	3.0	49
533	Integrated Bio/Nano/CMOS interfaces for electrochemical molecular sensing. IEEJ Transactions on Electrical and Electronic Engineering, 2018, 13, 1534-1539.	0.8	2
534	Optical conductivity-based ultrasensitive mid-infrared biosensing on a hybrid metasurface. Light: Science and Applications, 2018, 7, 67.	7.7	98
535	A novel electrochemical immunoassay for carcinoembryonic antigen based on glucose oxidase-encapsulated nanogold hollow spheres with a pH meter readout. Analyst, The, 2018, 143, 5271-5277.	1.7	21
536	(Keynote) Wireless Wearable and Implantable Monitoring and Therapeutic Systems for Cardiac and Neurological Disorders. ECS Transactions, 2018, 86, 21-30.	0.3	2

#	Article	IF	Citations
537	Self-powered ultra-flexible electronics via nano-grating-patterned organic photovoltaics. Nature, 2018, 561, 516-521.	13.7	743
538	Gasâ€Permeable, Multifunctional Onâ€Skin Electronics Based on Laserâ€Induced Porous Graphene and Sugarâ€Templated Elastomer Sponges. Advanced Materials, 2018, 30, e1804327.	11.1	269
539	Sensing of Heat Source in a Deep Layer by Considering Heat Propagation. IEEJ Journal of Industry Applications, 2018, 7, 229-235.	0.9	4
540	Graphene-based optical waveguide tactile sensor for dynamic response. Scientific Reports, 2018, 8, 16118.	1.6	18
541	Amperometric Glucose Sensing at Nanomolar Level Using MOF-Encapsulated TiO₂ Platform. ACS Omega, 2018, 3, 14634-14640.	1.6	38
542	Non-Invasive Monitoring of Glucose Level Changes Utilizing a mm-Wave Radar System. International Journal of Mobile Human Computer Interaction, 2018, 10, 10-29.	0.1	30
543	Device Configurations and Future Prospects of Flexible/Stretchable Lithiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1805596.	7.8	132
544	Rotation sensing and gesture control of a robot joint via triboelectric quantization sensor. Nano Energy, 2018, 54, 453-460.	8.2	203
545	Wearable Carbon Nanotube-Based Biosensors on Gloves for Lactate. Sensors, 2018, 18, 3398.	2.1	39
546	Accurate real time localization tracking in a clinical environment using Bluetooth Low Energy and deep learning. PLoS ONE, 2018, 13, e0205392.	1.1	43
547	Vertical Gold Nanowires Stretchable Electrochemical Electrodes. Analytical Chemistry, 2018, 90, 13498-13505.	3.2	58
548	Skin-touch-actuated textile-based triboelectric nanogenerator with black phosphorus for durable biomechanical energy harvesting. Nature Communications, 2018, 9, 4280.	5.8	433
549	Printed Organic Transistorâ€Based Enzyme Sensor for Continuous Glucose Monitoring in Wearable Healthcare Applications. ChemElectroChem, 2018, 5, 3881-3886.	1.7	36
550	Triboelectric Self-Powered Wearable Flexible Patch as 3D Motion Control Interface for Robotic Manipulator. ACS Nano, 2018, 12, 11561-11571.	7.3	179
551	Coffee Ringâ€“Inspired Approach toward Oriented Selfâ€Assembly of Biomimetic Murray MOFs as Sweat Biosensor. Small, 2018, 14, e1802670.	5.2	34
552	Delayed Sensor Activation Based on Transient Coatings: Biofouling Protection in Complex Biofluids. Journal of the American Chemical Society, 2018, 140, 14050-14053.	6.6	59
553	Noninvasive Transdermal Delivery System of Lidocaine Using an Acoustic Dropletâ€Vaporization Based Wearable Patch. Small, 2018, 14, e1803266.	5.2	47
554	Glucose Sensing Using Surface-Enhanced Raman-Mode Constraining. Analytical Chemistry, 2018, 90, 14269-14278.	3.2	52

#	Article	IF	Citations
555	Wearable Sensor System for Detection of Lactate in Sweat. Scientific Reports, 2018, 8, 15890.	1.6	116
556	Twoâ€Layered and Stretchable eâ€Textile Patches for Wearable Healthcare Electronics. Advanced Healthcare Materials, 2018, 7, e1801033.	3.9	86
557	Laser-Induced Carbon-Based Smart Flexible Sensor Array for Multiflavors Detection. ACS Applied Materials & Interfaces, 2018, 10, 34005-34012.	4.0	43
558	5 Blood Biomarkers: What is Needed in the Traumatic Brain Injury Field?. , 2018, , .		0
559	Mechanosensation-Active Matrix Based on Direct-Contact Tribotronic Planar Graphene Transistor Array. ACS Nano, 2018, 12, 9381-9389.	7.3	64
560	Point-of-Care Diagnoses: Flexible Patterning Technique for Self-Powered Wearable Sensors. Analytical Chemistry, 2018, 90, 11780-11784.	3.2	44
561	Micro additive manufacturing of glucose biosensors: A feasibility study. Analytica Chimica Acta, 2018, 1043, 142-149.	2.6	64
562	IOT: An Overview on Internet of Restorative Things. SSRN Electronic Journal, 2018, , .	0.4	0
563	Monitoring of the central blood pressure waveform via a conformal ultrasonic device. Nature Biomedical Engineering, 2018, 2, 687-695.	11.6	520
564	Flexible electrochemical film power supply with disposable glucose-based energy patch as a reconfigurable epidermal energy device. , 2018, , .		0
565	High electrical conductivity and carrier mobility in oCVD PEDOT thin films by engineered crystallization and acid treatment. Science Advances, 2018, 4, eaat5780.	4.7	167
566	Patchable micro/nanodevices interacting with skin. Biosensors and Bioelectronics, 2018, 122, 189-204.	5.3	47
567	Recent Patient Health Monitoring Platforms Incorporating Internet of Things-Enabled Smart Devices. International Neurourology Journal, 2018, 22, S76-82.	0.5	77
568	Weaving Sensing Fibers into Electrochemical Fabric for Realâ€Time Health Monitoring. Advanced Functional Materials, 2018, 28, 1804456.	7.8	216
569	All-in-one filler-elastomer-based high-performance stretchable piezoelectric nanogenerator for kinetic energy harvesting and self-powered motion monitoring. Nano Energy, 2018, 53, 550-558.	8.2	91
570	Extremely Stretchable, Stable, and Durable Strain Sensors Based on Double-Network Organogels. ACS Applied Materials & Interfaces, 2018, 10, 32640-32648.	4.0	107
571	Cut-and-Paste Transferrable Pressure Sensing Cartridge Films. Chemistry of Materials, 2018, 30, 6410-6419.	3.2	13
572	Flexible Organic Thin Film Transistors Incorporating a Biodegradable CO2-Based Polymer as the Substrate and Dielectric Material. Scientific Reports, 2018, 8, 8146.	1.6	31

#	Article	IF	Citations
573	Distributed electrochemical sensors: recent advances and barriers to market adoption. Analytical and Bioanalytical Chemistry, 2018, 410, 4077-4089.	1.9	21
574	Wearable electrochemical alcohol biosensors. Current Opinion in Electrochemistry, 2018, 10, 126-135.	2.5	101
575	Intraoperative monitoring of neuromuscular function with soft, skin-mounted wireless devices. Npj Digital Medicine, 2018, 1, .	5.7	22
576	Nonenzymatic Wearable Sensor for Electrochemical Analysis of Perspiration Glucose. ACS Sensors, 2018, 3, 1135-1141.	4.0	112
577	Wearable and flexible sensors for user-interactive health-monitoring devices. Journal of Materials Chemistry B, 2018, 6, 4043-4064.	2.9	255
578	Review on flexible photonics/electronics integrated devices and fabrication strategy. Science China Information Sciences, 2018, 61, 1.	2.7	72
579	Intensive care medicine in 2050: towards critical care without central lines. Intensive Care Medicine, 2018, 44, 922-924.	3.9	4
580	Visual and flexible temperature sensor based on a pectin-xanthan gum blend film. Organic Electronics, 2018, 59, 243-246.	1.4	28
581	Finger-Based Printed Sensors Integrated on a Glove for On-Site Screening Of Pseudomonas aeruginosa Virulence Factors. Analytical Chemistry, 2018, 90, 7761-7768.	3.2	53
582	An ultrasensitive strain sensor with a wide strain range based on graphene armour scales. Nanoscale, 2018, 10, 11524-11530.	2.8	77
583	Recent Advances in Materials, Devices, and Systems for Neural Interfaces. Advanced Materials, 2018, 30, e1800534.	11.1	148
584	Highly-stable Li+ ion-selective electrodes based on noble metal nanostructured layers as solid-contacts. Analytica Chimica Acta, 2018, 1027, 22-32.	2.6	64
585	Extremely Flexible Indiumâ€Galliumâ€Zinc Oxide (IGZO) Based Electronic Devices Placed on an Ultrathin Poly(Methyl Methacrylate) (PMMA) Substrate. Advanced Electronic Materials, 2018, 4, 1800167.	2.6	25
586	Novel SERS labels: Rational design, functional integration and biomedical applications. Coordination Chemistry Reviews, 2018, 371, 11-37.	9.5	112
587	Future trends in the market for electrochemical biosensing. Current Opinion in Electrochemistry, 2018, 10, 107-111.	2.5	55
588	Ultrastretchable Conductor Fabricated on Skinâ€Like Hydrogelâ€“Elastomer Hybrid Substrates for Skin Electronics. Advanced Materials, 2018, 30, e1800109.	11.1	167
589	A thumb-size electrochemical system for portable sensors. Analyst, The, 2018, 143, 2760-2764.	1.7	15
590	ELIPatch, a thumbnail-size patch with immunospot array for multiplexed protein detection from human skin surface. Biomicrofluidics, 2018, 12, 031101.	1.2	14

#	Article	IF	Citations
591	IonSens: A Wearable Potentiometric Sensor Patch for Monitoring Total Ion Content in Sweat. Electroanalysis, 2018, 30, 1536-1544.	1.5	23
592	Flexible plastic, paper and textile lab-on-a chip platforms for electrochemical biosensing. Lab on A Chip, 2018, 18, 1812-1830.	3.1	110
593	Sonochemically Synthesized ZnO Nanostructure-Based L-Lactate Enzymatic Sensors on Flexible Substrates. MRS Advances, 2018, 3, 277-282.	0.5	4
594	Biosafe, Ecoâ€Friendly Levan Polysaccharide toward Transient Electronics. Small, 2018, 14, e1801332.	5.2	33
595	Dual range lactate oxidase-based screen printed amperometric biosensor for analysis of lactate in diversified samples. Talanta, 2018, 188, 779-787.	2.9	33
596	Blown bubble assembly of ultralong 1D bismuth sulfide nanostructures with ordered alignment and shape control. Nanotechnology, 2018, 29, 395601.	1.3	5
597	Wearable potentiometric tattoo biosensor for on-body detection of G-type nerve agents simulants. Sensors and Actuators B: Chemical, 2018, 273, 966-972.	4.0	92
598	Screen Printed Thick Film Reference Electrodes for Electrochemical Sensing. IEEE Sensors Journal, 2018, 18, 7779-7785.	2.4	33
599	Planarâ€Type Printed Flexible Mechanical Switch. Advanced Electronic Materials, 2018, 4, 1800134.	2.6	3
600	Sequentially multiplexed amperometry for electrochemical biosensors. Biosensors and Bioelectronics, 2018, 117, 522-529.	5.3	22
601	Lactate biosensing: The emerging point-of-care and personal health monitoring. Biosensors and Bioelectronics, 2018, 117, 818-829.	5.3	107
602	Continuous biomarker monitoring by particle mobility sensing with single molecule resolution. Nature Communications, 2018, 9, 2541.	5.8	70
603	Thermal analysis of epidermal electronic devices integrated with human skin considering the effects of interfacial thermal resistance. AIP Advances, 2018, 8, .	0.6	10
604	Fabrication of a flexible polyimide-based electrostatically actuated MEMS relay. Journal of Micromechanics and Microengineering, 2018, 28, 105004.	1.5	5
605	From a literature review to a conceptual framework for affordable quality healthcare service using internet of things (IOT) network. International Journal of Enterprise Network Management, 2018, 9, 11.	0.2	1
606	Inflammation-free and gas-permeable on-skin triboelectric nanogenerator using soluble nanofibers. Nano Energy, 2018, 51, 260-269.	8.2	46
607	Internal Calibration Potentiometric Aptasensors for Simultaneous Detection of Hg²⁺, Cd²⁺, and As³⁺ Based on a Screen-Printed Carbon Electrodes Array. Analytical Chemistry, 2018, 90, 8337-8344.	3.2	44
608	Carbon nanotube-based flexible electronics. Journal of Materials Chemistry C, 2018, 6, 7714-7727.	2.7	77

#	Article	IF	Citations
609	Hybrid porous micro structured finger skin inspired self-powered electronic skin system for pressure sensing and sliding detection. Nano Energy, 2018, 51, 496-503.	8.2	131
610	Enhancing the Matrix Addressing of Flexible Sensory Arrays by a Highly Nonlinear Threshold Switch. Advanced Materials, 2018, 30, e1802516.	11.1	70
611	Highly Stable Battery Pack via Insulated, Reinforced, Buckling†Enabled Interconnect Array. Small, 2018, 14, e1800938.	5.2	35
612	CLASP (Continuous lifestyle awareness through sweat platform): A novel sensor for simultaneous detection of alcohol and glucose from passive perspired sweat. Biosensors and Bioelectronics, 2018, 117, 537-545.	5.3	51
613	ABC Spotlight on Analytics 4.0. Analytical and Bioanalytical Chemistry, 2018, 410, 5095-5097.	1.9	12
614	A fluorometric skin-interfaced microfluidic device and smartphone imaging module for in situ quantitative analysis of sweat chemistry. Lab on A Chip, 2018, 18, 2178-2186.	3.1	166
615	Wearable glove sensor for non-invasive organophosphorus pesticide detection based on a double-signal fluorescence strategy. Nanoscale, 2018, 10, 13722-13729.	2.8	71
616	A method of manufacturing microfluidic contact lenses by using irreversible bonding and thermoforming. Journal of Micromechanics and Microengineering, 2018, 28, 105008.	1.5	19
617	Wearable high-performance pressure sensors based on three-dimensional electrospun conductive nanofibers. NPG Asia Materials, 2018, 10, 540-551.	3.8	141
618	Integrated paper-based microfluidic devices for point-of-care testing. Analytical Methods, 2018, 10, 3567-3581.	1.3	65
619	Adoption of internet of things (IOT) based wearables for healthcare of older adults â€“ a behavioural reasoning theory (BRT) approach. Journal of Enabling Technologies, 2018, 12, 169-185.	0.7	85
620	Tackling Grand Challenges of the 21st Century with Electroanalytical Chemistry. Journal of the American Chemical Society, 2018, 140, 10629-10638.	6.6	37
621	Rimelike Structure-Inspired Approach toward in Situ-Oriented Self-Assembly of Hierarchical Porous MOF Films as a Sweat Biosensor. ACS Applied Materials & Interfaces, 2018, 10, 27936-27946.	4.0	34
622	A highly stretchable and conductive 3D porous graphene metal nanocomposite based electrochemical-physiological hybrid biosensor. Biosensors and Bioelectronics, 2018, 120, 160-167.	5.3	108
623	A wearable patch for continuous monitoring of sweat electrolytes during exertion. Lab on A Chip, 2018, 18, 2632-2641.	3.1	122
624	Fully integrated wearable impedance cytometry platform on flexible circuit board with online smartphone readout. Microsystems and Nanoengineering, 2018, 4, 20.	3.4	44
625	Recent progress in stretchable supercapacitors. Journal of Materials Chemistry A, 2018, 6, 15478-15494.	5.2	188
626	Simultaneous Monitoring of Sweat and Interstitial Fluid Using a Single Wearable Biosensor Platform. Advanced Science, 2018, 5, 1800880.	5.6	371

#	Article	IF	Citations
627	Ionic Gels and Their Applications in Stretchable Electronics. Macromolecular Rapid Communications, 2018, 39, e1800246.	2.0	112
628	Organic electronics incorporating crown ethers as Na + binding elements, towards a simple printable hydration sensor. Medical Devices & Sensors, 2018, 1, e10001.	2.7	2
629	Skin Temperature Measurement Using Contact Thermometry: A Systematic Review of Setup Variables and Their Effects on Measured Values. Frontiers in Physiology, 2018, 9, 29.	1.3	54
630	A Critical Review of Consumer Wearables, Mobile Applications, and Equipment for Providing Biofeedback, Monitoring Stress, and Sleep in Physically Active Populations. Frontiers in Physiology, 2018, 9, 743.	1.3	317
631	Imperceptible electrooculography graphene sensor system for humanâ€“robot interface. Npj 2D Materials and Applications, 2018, 2, .	3.9	114
632	Flexible and Stretchable Smart Display: Materials, Fabrication, Device Design, and System Integration. Advanced Functional Materials, 2018, 28, 1801834.	7.8	357
633	A Wrinkled PEDOT:PSS Film Based Stretchable and Transparent Triboelectric Nanogenerator for Wearable Energy Harvesters and Active Motion Sensors. Advanced Functional Materials, 2018, 28, 1803684.	7.8	286
634	Protein engineering for improving the thermostability of tryptophan oxidase and insights from structural analysis. Journal of Biochemistry, 2018, 164, 359-367.	0.9	12
635	Flexible substrate sensors for multiplex biomarker monitoring. MRS Communications, 2018, 8, 627-641.	0.8	14
636	Novel Electronics for Flexible and Neuromorphic Computing. Advanced Functional Materials, 2018, 28, 1801690.	7.8	94
637	Soft Material-Enabled, Flexible Hybrid Electronics for Medicine, Healthcare, and Human-Machine Interfaces. Materials, 2018, 11, 187.	1.3	166
638	Body map of regional vs. whole body sweating rate and sweat electrolyte concentrations in men and women during moderate exercise-heat stress. Journal of Applied Physiology, 2018, 124, 1304-1318.	1.2	71
639	Flexible Electronics Based on Micro/Nanostructured Paper. Advanced Materials, 2018, 30, e1801588.	11.1	249
640	Polydimethylsiloxane (PDMS)-Based Flexible Resistive Strain Sensors for Wearable Applications. Applied Sciences (Switzerland), 2018, 8, 345.	1.3	170
641	Sensors Based on Bio and Biomimetic Receptors in Medical Diagnostic, Environment, and Food Analysis. Biosensors, 2018, 8, 35.	2.3	100
642	Washable and Reliable Textile Electrodes Embedded into Underwear Fabric for Electrocardiography (ECG) Monitoring. Materials, 2018, 11, 256.	1.3	93
643	Real Time Analysis of Bioanalytes in Healthcare, Food, Zoology and Botany. Sensors, 2018, 18, 5.	2.1	32
644	A Real-Time Wireless Sweat Rate Measurement System for Physical Activity Monitoring. Sensors, 2018, 18, 533.	2.1	36

#	Article	IF	Citations
645	Fabrication of Composite Microneedle Array Electrode for Temperature and Bio-Signal Monitoring. Sensors, 2018, 18, 1193.	2.1	17
646	Integrated Framework of Load Monitoring by a Combination of Smartphone Applications, Wearables and Point-of-Care Testing Provides Feedback that Allows Individual Responsive Adjustments to Activities of Daily Living. Sensors, 2018, 18, 1632.	2.1	55
647	Flexible, Stretchable Sensors for Wearable Health Monitoring: Sensing Mechanisms, Materials, Fabrication Strategies and Features. Sensors, 2018, 18, 645.	2.1	258
648	Highâ€Mobility Helical Tellurium Fieldâ€Effect Transistors Enabled by Transferâ€Free, Lowâ€Temperature Direct Growth. Advanced Materials, 2018, 30, e1803109.	11.1	71
649	Microfiberâ€Knitted Crossweave Patterns for Multiresolution Physical Kineses Analysis Electronics. Advanced Materials Technologies, 2018, 3, 1800107.	3.0	9
650	Adhesionâ€Enhanced Flexible Conductive Metal Patterns on Polyimide Substrate Through Direct Writing Catalysts with Novel Surfaceâ€Modification Electroless Deposition. ChemistrySelect, 2018, 3, 7612-7618.	0.7	7
651	Monitoring potentially modifiable lifestyle factors in cancer survivors: A narrative review on currently available methodologies and innovations for large-scale surveillance. European Journal of Cancer, 2018, 103, 327-340.	1.3	8
652	Open nanofluidic films with rapid transport and no analyte exchange for ultra-low sample volumes. Lab on A Chip, 2018, 18, 2816-2825.	3.1	28
653	Wearable Technology for Chronic Wound Monitoring: Current Dressings, Advancements, and Future Prospects. Frontiers in Bioengineering and Biotechnology, 2018, 6, 47.	2.0	132
654	Potentiometric sensors with chalcogenide glasses as sensitive membranes: A short review. Journal of Non-Crystalline Solids, 2018, 495, 8-18.	1.5	28
655	Integration of biocompatible organic resistive memory and photoresistor for wearable image sensing application. Science China Information Sciences, 2018, 61, 1.	2.7	5
656	A skin-like stretchable colorimetric temperature sensor. Science China Materials, 2018, 61, 969-976.	3.5	20
657	A Colloidalâ€Quantumâ€Dotâ€Based Selfâ€Charging System via the Nearâ€Infrared Band. Advanced Materials, 2018, 30, e1707224.	11.1	17
658	Multiplexed analysis of molecular and elemental ions using nanowire transistor sensors. Sensors and Actuators B: Chemical, 2018, 270, 89-96.	4.0	15
659	Artificial intelligence meets large-scale sensing: Using Large-Area Electronics (LAE) to enable intelligent spaces. , 2018, , .		8
660	Embedded passive nano-liter micropump for sweat collection and analysis. , 2018, , .		2
661	A Wearable Microfluidic Sensing Patch for Dynamic Sweat Secretion Analysis. ACS Sensors, 2018, 3, 944-952.	4.0	285
662	Highly Robust, Transparent, and Breathable Epidermal Electrode. ACS Nano, 2018, 12, 9326-9332.	7.3	153

#	Article	IF	Citations
663	Wearable triboelectric nanogenerators based on hybridized triboelectric modes for harvesting mechanical energy. RSC Advances, 2018, 8, 26243-26250.	1.7	12
664	An integrated self-healable electronic skin system fabricated via dynamic reconstruction of a nanostructured conducting network. Nature Nanotechnology, 2018, 13, 1057-1065.	15.6	736
665	Integration of wireless flexible sensor and virtual internal impedance model for blood leakage detection during haemodialysis. IET Science, Measurement and Technology, 2018, 12, 617-625.	0.9	1
666	Soft Electronically Functional Polymeric Composite Materials for a Flexible and Stretchable Digital Future. Advanced Materials, 2018, 30, e1802560.	11.1	140
667	Structural and electrochemical properties of LiMn0.6Fe0.4PO4 as a cathode material for flexible lithium-ion batteries and self-charging power pack. Nano Energy, 2018, 52, 510-516.	8.2	78
668	Edge and Cluster Computing as Enabling Infrastructure for Internet of Medical Things. , 2018, , .		8
669	Cohesive thermoplastic-assisted patterning and assembly of a textile-supported piezoresistive sensor for monitoring human vital signs. Smart Materials and Structures, 2018, 27, 105027.	1.8	17
670	Recent development of fiber-optic chemical sensors and biosensors: Mechanisms, materials, micro/nano-fabrications and applications. Coordination Chemistry Reviews, 2018, 376, 348-392.	9.5	179
671	Graphene field-effect transistors: the road to bioelectronics. Journal Physics D: Applied Physics, 2018, 51, 493001.	1.3	28
672	Flexible THV/COC Piezoelectret Nanogenerator for Wide-Range Pressure Sensing. ACS Applied Materials & Interfaces, 2018, 10, 29675-29683.	4.0	21
673	A self-powered electronic-skin for real-time perspiration analysis and application in motion state monitoring. Journal of Materials Chemistry C, 2018, 6, 9624-9630.	2.7	53
674	Carbon nanotube conductive additives for improved electrical and mechanical properties of flexible battery electrodes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 269-274.	2.6	22
675	Toothed Substrate Design to Improve Stretchability of Serpentine Interconnect for Stretchable Electronics. Advanced Materials Technologies, 2018, 3, 1800169.	3.0	17
676	Biofabrication Strategy for Functional Fabrics. Nano Letters, 2018, 18, 6017-6021.	4.5	16
677	All-in-one piezoresistive-sensing patch integrated with micro-supercapacitor. Nano Energy, 2018, 53, 189-197.	8.2	79
678	Electrochemical Microphysiometry Detects Cellular Glutamate Uptake. Journal of the Electrochemical Society, 2018, 165, G3120-G3124.	1.3	10
679	A textile-based triboelectric nanogenerator with humidity-resistant output characteristic and its applications in self-powered healthcare sensors. Nano Energy, 2018, 50, 513-520.	8.2	217
680	Microgel-Enhanced Double Network Hydrogel Electrode with High Conductivity and Stability for Intrinsically Stretchable and Flexible All-Gel-State Supercapacitor. ACS Applied Materials & Interfaces, 2018, 10, 19323-19330.	4.0	62

#	Article	IF	Citations
681	Eâ€Skin Tactile Sensor Matrix Pixelated by Positionâ€Registered Conductive Microparticles Creating Pressureâ€Sensitive Selectors. Advanced Functional Materials, 2018, 28, 1801858.	7.8	86
682	Smart Healthcare. Foundations and Trends in Electronic Design Automation, 2018, 12, 401-166.	1.0	25
683	Chem/bio wearable sensors: current and future direction. Pure and Applied Chemistry, 2018, 90, 1605-1613.	0.9	5
684	Soft humanâ€“machine interfaces: design, sensing and stimulation. International Journal of Intelligent Robotics and Applications, 2018, 2, 313-338.	1.6	55
685	Assessment of the Fitbit Charge 2 for monitoring heart rate. PLoS ONE, 2018, 13, e0192691.	1.1	115
686	360Â° omnidirectional, printable and transparent photodetectors for flexible optoelectronics. Npj Flexible Electronics, 2018, 2, .	5.1	40
687	Flexible electronic-wallpaper integrated with FGRAM-based tactile memory and temperature sensors. , 2018, , .		0
688	Toward Wireless Health Monitoring via an Analog Signal Compression-Based Biosensing Platform. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 461-470.	2.7	10
689	Wearables in Medicine. Advanced Materials, 2018, 30, e1706910.	11.1	358
690	Rational Design of Ultrasensitive Pressure Sensors by Tailoring Microscopic Features. Advanced Materials Interfaces, 2018, 5, 1800403.	1.9	90
691	High Performance Humidity Fluctuation Sensor for Wearable Devices via a Bioinspired Atomic-Precise Tunable Graphene-Polymer Heterogeneous Sensing Junction. Chemistry of Materials, 2018, 30, 4343-4354.	3.2	120
692	Stretchable Ionics â€“ A Promising Candidate for Upcoming Wearable Devices. Advanced Materials, 2018, 30, e1704403.	11.1	234
693	Recent Advances in Biointegrated Optoelectronic Devices. Advanced Materials, 2018, 30, e1800156.	11.1	76
694	Biomechanoâ€Interactive Materials and Interfaces. Advanced Materials, 2018, 30, e1800572.	11.1	93
695	Roll-to-Roll Gravure Printed Electrochemical Sensors for Wearable and Medical Devices. ACS Nano, 2018, 12, 6978-6987.	7.3	275
696	Optical-reconfigurable carbon nanotube and indium-tin-oxide complementary thin-film transistor logic gates. Nanoscale, 2018, 10, 13122-13129.	2.8	17
697	Flexible-detachable dual-output sensors of fluid temperature and dynamics based on structural design of thermoelectric materials. Nano Energy, 2018, 50, 733-743.	8.2	13
698	Three-Dimensional Printed Wearable Sensors with Liquid Metals for Detecting the Pose of Snakelike Soft Robots. ACS Applied Materials & Interfaces, 2018, 10, 23208-23217.	4.0	108

#	Article	IF	Citations
699	A flexible sensing system capable of sensations imitation and motion monitoring with reliable encapsulation. Sensors and Actuators A: Physical, 2018, 279, 424-432.	2.0	3
700	Flexible integrated black phosphorus sensor arrays for high performance ion sensing. Sensors and Actuators B: Chemical, 2018, 273, 358-364.	4.0	34
701	Reconfigurable Carbon Nanotube Multiplexed Sensing Devices. Nano Letters, 2018, 18, 4130-4135.	4.5	52
702	Gold-Nanoparticle-Encapsulated ZIF-8 for a Mediator-Free Enzymatic Glucose Sensor by Amperometry. ACS Applied Nano Materials, 2018, 1, 3600-3607.	2.4	89
703	Skinâ€worn Soft Microfluidic Potentiometric Detection System. Electroanalysis, 2019, 31, 239-245.	1.5	77
704	Organic electrochromic timer for enzymatic skin patches. Biosensors and Bioelectronics, 2019, 123, 108-113.	5.3	34
705	Piezoelectrets for wearable energy harvesters and sensors. Nano Energy, 2019, 65, 104033.	8.2	107
706	Wearable Sweat Band for Noninvasive Levodopa Monitoring. Nano Letters, 2019, 19, 6346-6351.	4.5	121
707	Point-of-Care, Cable-Type Electrochemical Zn²⁺ Sensor with Ultrahigh Sensitivity and Wide Detection Range for Soil and Sweat Analysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 14569-14579.	3.2	31
708	Paper-Based Disk-Type Self-Powered Glucose Biosensor Based on Screen-Printed Biofuel Cell Array. Journal of the Electrochemical Society, 2019, 166, B1063-B1068.	1.3	52
709	Nanomaterials-based flexible and stretchable bioelectronics. MRS Bulletin, 2019, 44, 643-656.	1.7	30
710	A thermoresponsive microfluidic system integrating a shape memory polymer-modified textile and a paper-based colorimetric sensor for the detection of glucose in human sweat. RSC Advances, 2019, 9, 23957-23963.	1.7	52
711	Biomimicking Stretchable Organic Electrochemical Transistor. Advanced Electronic Materials, 2019, 5, 1900566.	2.6	35
712	Ordered mesoporous carbon sphere-based solid-contact ion-selective electrodes. Journal of Materials Science, 2019, 54, 13674-13684.	1.7	15
713	A self-powered electronic-skin for detecting CRP level in body fluid based on the piezoelectric-biosensing coupling effect of GaN nanowire. Smart Materials and Structures, 2019, 28, 105001.	1.8	11
714	Wearable electrochemical sensors for forensic and clinical applications. TrAC - Trends in Analytical Chemistry, 2019, 119, 115622.	5.8	104
715	Soft sensors form a network. Nature Electronics, 2019, 2, 327-328.	13.1	8
716	A multi-modal sweat sensing patch for cross-verification of sweat rate, total ionic charge, and Na⁺ concentration. Lab on A Chip, 2019, 19, 3179-3189.	3.1	56

#	Article	IF	Citations
717	Regional and correlative sweat analysis using high-throughput microfluidic sensing patches toward decoding sweat. Science Advances, 2019, 5, eaaw9906.	4.7	234
718	Silk Flexible Electronics: From Bombyx mori Silk Ag Nanoclusters Hybrid Materials to Mesoscopic Memristors and Synaptic Emulators. Advanced Functional Materials, 2019, 29, 1904777.	7.8	71
719	Carbon Nanofiber-Based Wearable Patches for Bio-Potential Monitoring. Journal of Medical and Biological Engineering, 2019, 39, 892-900.	1.0	13
720	Bioâ€Multifunctional Smart Wearable Sensors for Medical Devices. Advanced Intelligent Systems, 2019, 1, 1900040.	3.3	115
721	Assembling Metalâ€“Organic Frameworks into the Fractal Scale for Sweat Sensing. ACS Applied Materials & Interfaces, 2019, 11, 32310-32319.	4.0	33
722	Sensing and memorising liquids with polarity-interactive ferroelectric sound. Nature Communications, 2019, 10, 3575.	5.8	25
723	A Structured Design for Highly Stretchable Electronic Skin. Advanced Materials Technologies, 2019, 4, 1900492.	3.0	18
724	An ultraflexible organic differential amplifier for recording electrocardiograms. Nature Electronics, 2019, 2, 351-360.	13.1	114
725	A wireless body area sensor network based on stretchable passive tags. Nature Electronics, 2019, 2, 361-368.	13.1	421
726	Progress on wearable triboelectric nanogenerators in shapes of fiber, yarn, and textile. Science and Technology of Advanced Materials, 2019, 20, 837-857.	2.8	79
727	Multi-Target Electrolyte Sensing Front-End for Wearable Physical Monitoring. , 2019, , .		6
728	Quadruply-labeled serum albumin as a biodegradable nanosensor for simultaneous fluorescence imaging of intracellular pH values, oxygen and temperature. Mikrochimica Acta, 2019, 186, 584.	2.5	12
729	Flexible Smart Noncontact Control Systems with Ultrasensitive Humidity Sensors. Small, 2019, 15, e1902801.	5.2	110
730	Multifunctional Electronic Textiles Using Silver Nanowire Composites. ACS Applied Materials & Interfaces, 2019, 11, 31028-31037.	4.0	95
731	Mini Review on Flexible and Wearable Electronics for Monitoring Human Health Information. Nanoscale Research Letters, 2019, 14, 263.	3.1	172
732	Potentiometric performance of flexible pH sensor based on polyaniline nanofiber arrays. Nano Convergence, 2019, 6, 9.	6.3	69
733	Wearable sensors based on colloidal nanocrystals. Nano Convergence, 2019, 6, 10.	6.3	43
734	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

#	Article	IF	Citations
735	Sweat Biomarker Sensor Incorporating Picowatt, Three-Dimensional Extended Metal Gate Ion Sensitive Field Effect Transistors. ACS Sensors, 2019, 4, 2039-2047.	4.0	54
736	Flexible electronic/optoelectronic microsystems with scalable designs for chronic biointegration. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15398-15406.	3.3	66
737	Super-robust and frequency-multiplied triboelectric nanogenerator for efficient harvesting water and wind energy. Nano Energy, 2019, 64, 103908.	8.2	239
738	Sweat sensing in the smart wearables era: Towards integrative, multifunctional and body-compliant perspiration analysis. Sensors and Actuators A: Physical, 2019, 296, 200-221.	2.0	82
739	A rapid and low-cost fabrication and integration scheme to render 3D microfluidic architectures for wearable biofluid sampling, manipulation, and sensing. Lab on A Chip, 2019, 19, 2844-2853.	3.1	37
740	A stretchable and breathable form of epidermal device based on elastomeric nanofibre textiles and silver nanowires. Journal of Materials Chemistry C, 2019, 7, 9748-9755.	2.7	37
741	A novel Cu-metal-organic framework with two-dimensional layered topology for electrochemical detection using flexible sensors. Nanotechnology, 2019, 30, 424002.	1.3	31
742	Continuous Monitoring of Soil Nitrate Using a Miniature Sensor with Poly(3-octyl-thiophene) and Molybdenum Disulfide Nanocomposite. ACS Applied Materials & Interfaces, 2019, 11, 29195-29206.	4.0	66
743	A Wearable Paperâ€Based Sweat Sensor for Human Perspiration Monitoring. Advanced Healthcare Materials, 2019, 8, e1900342.	3.9	67
744	Stamped multilayer graphene laminates for disposable in-field electrodes: application to electrochemical sensing of hydrogen peroxide and glucose. Mikrochimica Acta, 2019, 186, 533.	2.5	19
745	Interface electronics: State-of-the-art, opportunities and needs. Sensors and Actuators A: Physical, 2019, 296, 24-30.	2.0	5
746	Biologically Coupled Gate Field-Effect Transistors Meet in Vitro Diagnostics. ACS Omega, 2019, 4, 11852-11862.	1.6	56
747	Multifunctional Fibers to Shape Future Biomedical Devices. Advanced Functional Materials, 2019, 29, 1902834.	7.8	74
748	A Selfâ€Conformable Smart Skin with Sensing and Variable Stiffness Functions. Advanced Intelligent Systems, 2019, 1, 1900054.	3.3	14
749	Real-Time InÂVivo Control of Neural Membrane Potential by Electro-Ionic Modulation. IScience, 2019, 17, 347-358.	1.9	3
750	Development of respiratory monitoring and actions recognition based on a pressure sensor with multi-arch structures. Sensors and Actuators A: Physical, 2019, 296, 357-366.	2.0	14
751	Wearable sensors for monitoring the physiological and biochemical profile of the athlete. Npj Digital Medicine, 2019, 2, 72.	5.7	235
752	Skinâ€Inspired Electronics and Its Applications in Advanced Intelligent Systems. Advanced Intelligent Systems, 2019, 1, 1900063.	3.3	15

#	Article	IF	Citations
753	Unprecedented Enhancement of Thermoelectric Power Factor Induced by Pressure in Smallâ€Molecule Organic Semiconductors. Advanced Materials, 2019, 31, e1901956.	11.1	30
754	A non-enzymatic glucose sensor enabled by bioelectronic pH control. Scientific Reports, 2019, 9, 10844.	1.6	76
755	A wearable electrofluidic actuation system. Lab on A Chip, 2019, 19, 2966-2972.	3.1	15
756	A novel and ultrasensitive nonenzymatic glucose sensor based on pulsed laser scribed carbon paper decorated with nanoporous nickel network. Analytica Chimica Acta, 2019, 1082, 165-175.	2.6	28
757	Fabrication of High-resolution Graphene-based Flexible Electronics via Polymer Casting. Scientific Reports, 2019, 9, 10595.	1.6	26
758	Toward Multifunctional and Wearable Smart Skins with Energyâ€Harvesting, Touchâ€Sensing, and Exteroceptionâ€Visualizing Capabilities by an Allâ€Polymer Design. Advanced Electronic Materials, 2019, 5, 1900553.	2.6	41
759	Body-Interfaced Chemical Sensors for Noninvasive Monitoring and Analysis of Biofluids. Trends in Chemistry, 2019, 1, 559-571.	4.4	71
760	Water Splitting-Assisted Electrocatalytic Oxidation of Glucose with a Metalâ€“Organic Framework for Wearable Nonenzymatic Perspiration Sensing. Analytical Chemistry, 2019, 91, 10764-10771.	3.2	62
761	3D printed microstructures for flexible electronic devices. Nanotechnology, 2019, 30, 414001.	1.3	26
762	Wearable and Flexible Sensors Based on 2D and Nanomaterials. , 2019, , 437-463.		6
763	Step-by-Step Assembled Enzymeâ€“Polymerâ€“Carbon Nanotubes for Solution-Processed Bioreactive Composites. ACS Applied Nano Materials, 2019, 2, 4323-4332.	2.4	3
764	Toward Flexible Surfaceâ€Enhanced Raman Scattering (SERS) Sensors for Pointâ€ofâ€Care Diagnostics. Advanced Science, 2019, 6, 1900925.	5.6	396
765	Highâ€Transconductance Stretchable Transistors Achieved by Controlled Gold Microcrack Morphology. Advanced Electronic Materials, 2019, 5, 1900347.	2.6	70
766	A Fully Integrated and Self-Powered Smartwatch for Continuous Sweat Glucose Monitoring. ACS Sensors, 2019, 4, 1925-1933.	4.0	184
767	Monte Carlo simulations of novel optical imaging methods for 131I radiometabolic therapy dosimetry. Journal of Instrumentation, 2019, 14, P07003-P07003.	0.5	0
768	A Single Process for Homogeneous and Heterogeneous Bonding in Flexible Electronics : Ethanol-Assisted Vacuum Ultraviolet (E-VUV) Irradiation Process. , 2019, , .		1
769	Wearable Woven Triboelectric Nanogenerator Utilizing Electrospun PVDF Nanofibers for Mechanical Energy Harvesting. Micromachines, 2019, 10, 438.	1.4	56
770	Electronic Skin for Closed-Loop Systems. ACS Nano, 2019, 13, 12287-12293.	7.3	103

#	Article	IF	Citations
771	Quasifractal Networks as Current Collectors for Transparent Flexible Supercapacitors. Advanced Functional Materials, 2019, 29, 1906618.	7.8	28
772	Electronic Skin: Recent Progress and Future Prospects for Skinâ€Attachable Devices for Health Monitoring, Robotics, and Prosthetics. Advanced Materials, 2019, 31, e1904765.	11.1	936
773	Skinâ€Friendly Electronics for Acquiring Human Physiological Signatures. Advanced Materials, 2019, 31, e1905767.	11.1	91
774	Allâ€Oxide Thin Film Transistors and Rectifiers Enabling Onâ€Chip Capacitive Energy Storage. Advanced Electronic Materials, 2019, 5, 1900531.	2.6	4
775	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
776	Short-term exposure to ambient ozone and inflammatory biomarkers in cross-sectional studies of children and adolescents: Results of the GINIplus and LISA birth cohorts. Environmental Pollution, 2019, 255, 113264.	3.7	21
778	Self-Powered Transparent Stretchable 3D Motion Sensor. , 2019, , .		4
779	Recent Progress in Wireless Sensors for Wearable Electronics. Sensors, 2019, 19, 4353.	2.1	99
780	Biocompatible and Na⁺-sensitive thin-film transistor for biological fluid sensing. Science and Technology of Advanced Materials, 2019, 20, 917-926.	2.8	10
781	Simple and convenient microfluidic flow rate measurement based on microbubble image velocimetry. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	7
782	Flexible and wearable healthcare sensors for visual reality health-monitoring. Virtual Reality & Intelligent Hardware, 2019, 1, 411-427.	1.8	42
783	Wearable flexible sweat sensors for healthcare monitoring: a review. Journal of the Royal Society Interface, 2019, 16, 20190217.	1.5	236
784	Recent Advances in Skin Chemical Sensors. Sensors, 2019, 19, 4376.	2.1	26
785	A Noninvasive, Electromagnetic, Epidermal Sensing Device for Hemodynamics Monitoring. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1393-1404.	2.7	17
786	Liquidâ€Gated Transistors Based on Reduced Graphene Oxide for Flexible and Wearable Electronics. Advanced Functional Materials, 2019, 29, 1905375.	7.8	37
787	An Illuminationâ€Assisted Flexible Selfâ€Powered Energy System Based on a Liâ€“O₂ Battery. Angewandte Chemie - International Edition, 2019, 58, 16411-16415.	7.2	78
788	Design and applications of stretchable and self-healable conductors for soft electronics. Nano Convergence, 2019, 6, 25.	6.3	83
789	Nighttime Reflectance Generation in the Visible Band of Satellites. Remote Sensing, 2019, 11, 2087.	1.8	19

#	Article	IF	Citations
790	A Simple, Low-Cost Micro-Coating Method for Accuracy Improvement and Its Application in Pressure Sensors. Sensors, 2019, 19, 4601.	2.1	2
791	Application of Microfluidics in Wearable Devices. Small Methods, 2019, 3, 1900688.	4.6	37
792	Integrated textile sensor patch for real-time and multiplex sweat analysis. Science Advances, 2019, 5, eaax0649.	4.7	345
793	Wearable Organic Electrochemical Transistor Patch for Multiplexed Sensing of Calcium and Ammonium Ions from Human Perspiration. Advanced Healthcare Materials, 2019, 8, e1901321.	3.9	115
794	Gold nanoparticles decorated on single layer graphene applied for electrochemical ultrasensitive glucose biosensor. Journal of Electroanalytical Chemistry, 2019, 855, 113495.	1.9	36
795	Impact of Fabric Properties on Textile Pressure Sensors Performance. Sensors, 2019, 19, 4686.	2.1	27
796	A programmable low-power ADC interface for an ISFET sweat sensor used in a wearable multi-sensing system. , 2019, , .		0
797	Design, mechanics, and operation of spiral-interconnect based networked sensor for stretchable electronics. Applied Physics Letters, 2019, 115, .	1.5	8
799	The Optimization of Analog Front-End for Fully Integrated Wearable Sweat Sensor. , 2019, 2019, 1123-1126.		3
800	Disease Detection with Molecular Biomarkers: From Chemistry of Body Fluids to Nature-Inspired Chemical Sensors. Chemical Reviews, 2019, 119, 11761-11817.	23.0	269
801	Fiber-Based Piezoresistive Wearable Sensor for Knittable Tactile Sensing. , 2019, , .		1
802	Simultaneous Determination of Dopamine and Tyrosine Using Poly-glycine/Nafion/MWCNTs Functionalized Plastic-based Miniature Electrochemical Platform. International Journal of Electrochemical Science, 2019, 14, 9584-9595.	0.5	5
803	Passively Addressable Ultra-Low Volume Sweat Chloride Sensor. Sensors, 2019, 19, 4590.	2.1	19
804	Stretchable, Patchâ€Type Calorieâ€Expenditure Measurement Device Based on Popâ€Up Shaped Nanoscale Crackâ€Based Sensor. Advanced Healthcare Materials, 2019, 8, e1801593.	3.9	21
805	A Highly Responsive Organic Image Sensor Based on a Twoâ€Terminal Organic Photodetector with Photomultiplication. Advanced Materials, 2019, 31, e1903687.	11.1	123
806	An Illuminationâ€Assisted Flexible Selfâ€Powered Energy System Based on a Liâ€“O₂ Battery. Angewandte Chemie, 2019, 131, 16563-16567.	1.6	35
807	Sâ€Click Reaction for Isotropic Orientation of Oxidases on Electrodes to Promote Electron Transfer at Low Potentials. Angewandte Chemie, 2019, 131, 16632-16636.	1.6	5
808	Sâ€Click Reaction for Isotropic Orientation of Oxidases on Electrodes to Promote Electron Transfer at Low Potentials. Angewandte Chemie - International Edition, 2019, 58, 16480-16484.	7.2	8

#	Article	IF	Citations
809	Willow-like portable triboelectric respiration sensor based on polyethylenimine-assisted CO2 capture. Nano Energy, 2019, 65, 103990.	8.2	23
810	Hybrid LAE-CMOS Force-Sensing System Employing TFT-Based Compressed Sensing for Scalability of Tactile Sensing Skins. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1264-1276.	2.7	14
811	Wireless bipotentiostat circuit for glucose and H2O2 interrogation. , 2019, 2019, 1567-1570.		1
812	Flexible Electronic Skin: From Humanoids to Humans [Scanning the Issue]. Proceedings of the IEEE, 2019, 107, 2011-2015.	16.4	89
813	Flexible Pressure Sensors with Wide Linearity Range and High Sensitivity Based on Selective Laser Sintering 3D Printing. Advanced Materials Technologies, 2019, 4, 1900679.	3.0	38
814	Oxygenâ€Tolerant Hydrogen Peroxide Reduction Catalysts for Reliable Noninvasive Bioassays. Small, 2019, 15, e1903320.	5.2	7
815	Graphene Aerogel Broken to Fragments for a Piezoresistive Pressure Sensor with a Higher Sensitivity. ACS Applied Materials & Interfaces, 2019, 11, 33165-33172.	4.0	58
816	Ultrastretchable Elastic Shape Memory Fibers with Electrical Conductivity. Advanced Science, 2019, 6, 1901579.	5.6	74
817	Frequency-independent self-powered sensing based on capacitive impedance matching effect of triboelectric nanogenerator. Nano Energy, 2019, 65, 103984.	8.2	44
818	Fabrication of sharp silicon hollow microneedles by deep-reactive ion etching towards minimally invasive diagnostics. Microsystems and Nanoengineering, 2019, 5, 41.	3.4	124
819	Submicrometer-Scale All-Soft Electronics Based on Liquid Metal. , 2019, , .		1
820	Dynamically Stretchable Supercapacitor for Powering an Integrated Biosensor in an All-in-One Textile System. ACS Nano, 2019, 13, 10469-10480.	7.3	116
821	Highly sensitive and wearable gel-based sensors with a dynamic physically cross-linked structure for strain-stimulus detection over a wide temperature range. Journal of Materials Chemistry C, 2019, 7, 11303-11314.	2.7	65
822	Stretchable and Highly Sensitive Optical Strain Sensors for Human-Activity Monitoring and Healthcare. ACS Applied Materials & Interfaces, 2019, 11, 33589-33598.	4.0	96
823	XBioSiP. , 2019, , .		6
824	Gelatin-hydrogel based organic synaptic transistor. Organic Electronics, 2019, 75, 105409.	1.4	36
825	Membraneâ€Free Detection of Metal Cations with an Organic Electrochemical Transistor. Advanced Functional Materials, 2019, 29, 1904403.	7.8	80
826	Local Crackâ€Programmed Gold Nanowire Electronic Skin Tattoos for Inâ€Plane Multisensor Integration. Advanced Materials, 2019, 31, e1903789.	11.1	161

#	Article	IF	Citations
827	Flexible pH Sensor for Wireless Monitoring of the Human Skin from the Medimun Distances. , 2019, , .		15
828	A Machine-Learning Assisted Sensor for Chemo-Physical Dual Sensing Based on Ion-Sensitive Field-Effect Transistor Architecture. IEEE Sensors Journal, 2019, 19, 9983-9990.	2.4	14
829	Carbon Nanomaterial-Based Biosensors: A Review of Design and Applications. IEEE Nanotechnology Magazine, 2019, 13, 4-14.	0.9	32
830	Position: Smart KT Tape -- A Bendable Wearable System for Muscle Fatigue Sensing. , 2019, , .		0
831	Two-Chip Wireless H2S Gas Sensor System Requiring Zero Additional Electronic Components. , 2019, , .		2
832	Graphene-based wearable sensors. Nanoscale, 2019, 11, 18923-18945.	2.8	98
833	Recent progress of self-powered wearable monitoring systems integrated with microsupercapacitors. Materials Today Nano, 2019, 8, 100050.	2.3	33
834	A flexible skin-mounted wireless acoustic device for bowel sounds monitoring and evaluation. Science China Information Sciences, 2019, 62, 1.	2.7	20
835	A Single Bonding Process for Diverse Organic-Inorganic Integration in IoT Devices. , 2019, , .		0
836	Design of an Energy-Efficient Current-to-Frequency Converter for a Wearable Sensor Platform. , 2019, , .		1
837	Biofriendly and Regenerable Emotional Monitor from Interfacial Ultrathin 2D PDA/AuNPs Cross-linking Films. ACS Applied Materials & Interfaces, 2019, 11, 36259-36269.	4.0	24
838	Human-interactive drone system remotely controlled by printed strain/pressure sensors consisting of carbon-based nanocomposites. Composites Science and Technology, 2019, 182, 107784.	3.8	19
839	The architecture of an innovative smart T-shirt based on the Internet of Medical Things paradigm. , 2019, , .		22
840	Stretchable photodetector utilizing the change in capacitance formed in a composite film containing semiconductor particles. Composites Science and Technology, 2019, 182, 107773.	3.8	10
841	Effects of pore size and surface properties of MgO-templated carbon on the performance of bilirubin oxidaseâ€“modified oxygen reduction reaction cathode. Electrochimica Acta, 2019, 322, 134744.	2.6	23
842	Core-Shell Fiber-Based 2D Woven Triboelectric Nanogenerator for Effective Motion Energy Harvesting. Nanoscale Research Letters, 2019, 14, 311.	3.1	19
843	The technology tree in the design of glucose biosensors. TrAC - Trends in Analytical Chemistry, 2019, 120, 115642.	5.8	38
844	Flexible Ultralow-Power Sensor Interfaces for E-Skin. Proceedings of the IEEE, 2019, 107, 2084-2105.	16.4	41

#	Article	IF	Citations
845	In Situ Sensor Electrode Patterning on Urinary Catheters towards Infection Prevention. , 2019, , .		1
846	Highly selective detection of methanol over ethanol by a handheld gas sensor. Nature Communications, 2019, 10, 4220.	5.8	215
847	Wearable droplet microfluidics. Science Bulletin, 2019, 64, 1472-1473.	4.3	14
848	A bimodal soft electronic skin for tactile and touchless interaction in real time. Nature Communications, 2019, 10, 4405.	5.8	188
849	Wearable-Based Affect Recognitionâ€"A Review. Sensors, 2019, 19, 4079.	2.1	114
850	Microfluidic Chip-Based Wearable Colorimetric Sensor for Simple and Facile Detection of Sweat Glucose. Analytical Chemistry, 2019, 91, 14803-14807.	3.2	176
851	Versatile Electronic Skins with Biomimetic Micronanostructures Fabricated Using Natural Reed Leaves as Templates. ACS Applied Materials & Interfaces, 2019, 11, 38084-38091.	4.0	50
852	Inhibited enzymatic reaction of crosslinked lactate oxidase through a pH-dependent mechanism. Colloids and Surfaces B: Biointerfaces, 2019, 184, 110490.	2.5	10
853	Wearable biomolecule smartsensors based on one-step fabricated berlin green printed arrays. Biosensors and Bioelectronics, 2019, 144, 111637.	5.3	22
854	Pacifier Biosensor: Toward Noninvasive Saliva Biomarker Monitoring. Analytical Chemistry, 2019, 91, 13883-13891.	3.2	122
855	Precision pH Sensor Based on WO₃ Nanofiber-Polymer Composites and Differential Amplification. ACS Sensors, 2019, 4, 2593-2598.	4.0	30
856	Sweet sensation. Nature Biotechnology, 2019, 37, 340-344.	9.4	19
857	Printed, Flexible Lactate Sensors: Design Considerations Before Performing On-Body Measurements. Scientific Reports, 2019, 9, 13720.	1.6	62
858	Motion recognition by a liquid filled tubular triboelectric nanogenerator. Nanoscale, 2019, 11, 495-503.	2.8	19
859	High sensitivity knitted fabric bi-directional pressure sensor based on conductive blended yarn. Smart Materials and Structures, 2019, 28, 035017.	1.8	24
860	Point-of-use robotic sensors for simultaneous pressure detection and chemical analysis. Materials Horizons, 2019, 6, 604-611.	6.4	49
862	A Biodegradable and Stretchable Proteinâ€Based Sensor as Artificial Electronic Skin for Human Motion Detection. Small, 2019, 15, e1805084.	5.2	143
863	Using Artificial Skin Devices as Skin Replacements: Insights into Superficial Treatment. Small, 2019, 15, e1805453.	5.2	53

#	Article	IF	Citations
864	Achievements and Challenges for Real-Time Sensing of Analytes in Sweat within Wearable Platforms. Accounts of Chemical Research, 2019, 52, 297-306.	7.6	113
865	Bio-Integrated Wearable Systems: A Comprehensive Review. Chemical Reviews, 2019, 119, 5461-5533.	23.0	822
866	Recent Advances in Flexible and Wearable Pressure Sensors Based on Piezoresistive 3D Monolithic Conductive Sponges. ACS Applied Materials & Interfaces, 2019, 11, 6685-6704.	4.0	261
867	Organic-Inorganic Solid-State Hybridization with High-Strength and Anti-Hydrolysis Interface. Scientific Reports, 2019, 9, 504.	1.6	6
868	A thin film polyethylene terephthalate (PET) electrochemical sensor for detection of glucose in sweat. Talanta, 2019, 198, 86-92.	2.9	106
869	Activity-Aware Wearable System for Power-Efficient Prediction of Physiological Responses. Sensors, 2019, 19, 441.	2.1	20
870	Poly(N-isopropylacrylamide)/polydopamine/clay nanocomposite hydrogels with stretchability, conductivity, and dual light- and thermo- responsive bending and adhesive properties. Colloids and Surfaces B: Biointerfaces, 2019, 177, 149-159.	2.5	45
871	Towards truly wearable energy harvesters with full structural integrity of fiber materials. Nano Energy, 2019, 58, 365-374.	8.2	69
872	Fully 3D printed OECT based logic gate for detection of cation type and concentration. Sensors and Actuators B: Chemical, 2019, 286, 111-118.	4.0	27
873	Carbon Nanotube Complementary Gigahertz Integrated Circuits and Their Applications on Wireless Sensor Interface Systems. ACS Nano, 2019, 13, 2526-2535.	7.3	41
874	Enzymatic Low Volume Passive Sweat Based Assays for Multi-Biomarker Detection. Biosensors, 2019, 9, 13.	2.3	24
875	Wearable-band type visible-near infrared optical biosensor for non-invasive blood glucose monitoring. Sensors and Actuators B: Chemical, 2019, 286, 173-180.	4.0	125
876	Soft, Skin-Integrated Multifunctional Microfluidic Systems for Accurate Colorimetric Analysis of Sweat Biomarkers and Temperature. ACS Sensors, 2019, 4, 379-388.	4.0	239
877	Wearable Potentiometric Sensors for Medical Applications. Sensors, 2019, 19, 363.	2.1	100
878	Towards Closed-Loop Integration of Point-of-Care Technologies. Trends in Biotechnology, 2019, 37, 775-788.	4.9	22
879	Conformable, Stretchable Sensor To Record Bladder Wall Stretch. ACS Omega, 2019, 4, 1907-1915.	1.6	21
880	Hybrid Metasurface-Based Mid-Infrared Biosensor for Simultaneous Quantification and Identification of Monolayer Protein. ACS Photonics, 2019, 6, 501-509.	3.2	47
881	Carbon fiber based electrochemical sensor for sweat cortisol measurement. Scientific Reports, 2019, 9, 403.	1.6	105

#	Article	IF	Citations
882	Waterproof, electronics-enabled, epidermal microfluidic devices for sweat collection, biomarker analysis, and thermography in aquatic settings. Science Advances, 2019, 5, eaau6356.	4.7	208
883	Progress on triboelectric nanogenerator with stretchability, self-healability and bio-compatibility. Nano Energy, 2019, 59, 237-257.	8.2	151
884	Wearable sweat monitoring system with integrated micro-supercapacitors. Nano Energy, 2019, 58, 624-632.	8.2	143
885	Self-powered multifunctional monitoring system using hybrid integrated triboelectric nanogenerators and piezoelectric microsensors. Nano Energy, 2019, 58, 612-623.	8.2	83
886	Stimuli-responsive materials: a web themed collection. Materials Chemistry Frontiers, 2019, 3, 10-11.	3.2	21
887	Advanced electronic skin devices for healthcare applications. Journal of Materials Chemistry B, 2019, 7, 173-197.	2.9	193
888	Organic semiconductors for biological sensing. Journal of Materials Chemistry C, 2019, 7, 1111-1130.	2.7	84
889	Ultraâ€Adaptable and Wearable Photonic Skin Based on a Shapeâ€Memory, Responsive Cellulose Derivative. Advanced Functional Materials, 2019, 29, 1902720.	7.8	89
890	More than a Liquid Junction: Effect of Stirring, Flow Rate, and Inward and Outward Electrolyte Diffusion on Reference Electrodes with Salt Bridges Contained in Nanoporous Glass. Analytical Chemistry, 2019, 91, 7698-7704.	3.2	10
891	Construction of a flexible electrochemiluminescence platform for sweat detection. Chemical Science, 2019, 10, 6295-6303.	3.7	49
892	A Soft Polydimethylsiloxane Liquid Metal Interdigitated Capacitor Sensor and Its Integration in a Flexible Hybrid System for On-Body Respiratory Sensing. Materials, 2019, 12, 1458.	1.3	28
893	Semiâ€Liquidâ€Metalâ€(Niâ€EGaIn)â€Based Ultraconformable Electronic Tattoo. Advanced Materials Technologies, 2019, 4, 1900183.	3.0	113
894	Flexible carbonic pen ink/carbon fiber paper composites for multifunctional switch-type sensors. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105452.	3.8	9
895	Fast Procedures for the Electrodeposition of Platinum Nanostructures on Miniaturized Electrodes for Improved Ion Sensing. Sensors, 2019, 19, 2260.	2.1	10
896	Clinical translation of biomedical sensors for sports medicine. Journal of Medical Engineering and Technology, 2019, 43, 66-81.	0.8	15
897	Porous Enzymatic Membrane for Nanotextured Glucose Sweat Sensors with High Stability toward Reliable Noninvasive Health Monitoring. Advanced Functional Materials, 2019, 29, 1902521.	7.8	120
898	Stretchable and Temperatureâ€Sensitive Polymer Optical Fibers for Wearable Health Monitoring. Advanced Functional Materials, 2019, 29, 1902898.	7.8	139
899	Wireless body sensor networks based on metamaterial textiles. Nature Electronics, 2019, 2, 243-251.	13.1	276

#	Article	IF	Citations
900	High sensitivity and wide sensing range of stretchable sensors with conductive microsphere array structures. Journal of Materials Chemistry C, 2019, 7, 8423-8431.	2.7	10
901	Recent advances in noninvasive flexible and wearable wireless biosensors. Biosensors and Bioelectronics, 2019, 141, 111422.	5.3	94
902	Theoretical and experimental investigations of transient thermo-mechanical analysis on flexible electronic devices. International Journal of Mechanical Sciences, 2019, 160, 192-199.	3.6	10
903	Bandage-like wearable flexible microfluidic recombinase polymerase amplification sensor for the rapid visual detection of nucleic acids. Talanta, 2019, 204, 685-692.	2.9	64
904	Potential Reproducibility of Potassium-Selective Electrodes Having Perfluorinated Alkanoate Side Chain Functionalized Poly(3,4-ethylenedioxytiophene) as a Hydrophobic Solid Contact. Analytical Chemistry, 2019, 91, 9111-9118.	3.2	51
905	Monitoring biomolecule concentrations in tissue using a wearable droplet microfluidic-based sensor. Nature Communications, 2019, 10, 2741.	5.8	93
906	Palladium/palladium oxide coated electrospun fibers for wearable sweat pH-sensors. Scientific Reports, 2019, 9, 8902.	1.6	39
907	Optimizing glucose sensing for diabetes monitoring. , 2019, , 765-778.		0
908	Transient thermomechanical analysis of epidermal electronic devices on human skin. Mechanics of Materials, 2019, 137, 103097.	1.7	3
909	Stretchable and Self-Healable Conductive Hydrogels for Wearable Multimodal Touch Sensors with Thermoresponsive Behavior. ACS Applied Materials & Interfaces, 2019, 11, 26134-26143.	4.0	81
910	A mass-customizable dermal patch with discrete colorimetric indicators for personalized sweat rate quantification. Microsystems and Nanoengineering, 2019, 5, 29.	3.4	30
911	Smartphone-based battery-free and flexible electrochemical patch for calcium and chloride ions detections in biofluids. Sensors and Actuators B: Chemical, 2019, 297, 126743.	4.0	86
912	Robust fabrication of nanomaterial-based all-solid-state ion-selective electrodes. RSC Advances, 2019, 9, 16713-16717.	1.7	8
913	An Artificial Sweating System for Sweat Sensor Testing Applications. Electronics (Switzerland), 2019, 8, 606.	1.8	6
914	Microfluidic contact lenses for unpowered, continuous and non-invasive intraocular pressure monitoring. Sensors and Actuators A: Physical, 2019, 295, 177-187.	2.0	46
915	Soft and stretchable electrochemical biosensors. Materials Today Nano, 2019, 7, 100041.	2.3	39
916	Flexible Water-proof Bio-Integrated Electronics. , 2019, , .		0
917	A Wrinkled Ag/CNTs-PDMS Composite Film for a High-Performance Flexible Sensor and Its Applications in Human-Body Single Monitoring. Nanomaterials, 2019, 9, 850.	1.9	31

#	Article	IF	Citations
918	Hollow coreâ€“sheath nanocarbon spheres grown on carbonized silk fabrics for self-supported and nonenzymatic glucose sensing. Nanoscale, 2019, 11, 11856-11863.	2.8	33
919	Flexible, strain gated logic transducer arrays enabled by initializing surface instability on elastic bilayers. APL Materials, 2019, 7, 031509.	2.2	7
920	Selfâ€Powered Bioâ€Inspired Spiderâ€Netâ€Coding Interface Using Singleâ€Electrode Triboelectric Nanogenerator. Advanced Science, 2019, 6, 1900617.	5.6	134
921	9â€2: Flexible Sensors and Memory Integration Toward Electronic Wallpaper. Digest of Technical Papers SID International Symposium, 2019, 50, 99-101.	0.1	0
922	General-purpose passive wireless pointâ€“ofâ€“care platform based on smartphone. Biosensors and Bioelectronics, 2019, 141, 111360.	5.3	36
923	Effect of capillary bridges on the interfacial adhesion of wearable electronics to epidermis. International Journal of Solids and Structures, 2019, 174-175, 85-97.	1.3	5
924	Dermal Tattoo Biosensors for Colorimetric Metabolite Detection. Angewandte Chemie, 2019, 131, 10616-10623.	1.6	23
925	Dermal Tattoo Biosensors for Colorimetric Metabolite Detection. Angewandte Chemie - International Edition, 2019, 58, 10506-10513.	7.2	53
926	Ultrasoft, Adhesive and Millimeter Scale Epidermis Electronic Sensor for Real-Time Enduringly Monitoring Skin Strain. Sensors, 2019, 19, 2442.	2.1	3
927	Skinâ€Inspired Antibacterial Conductive Hydrogels for Epidermal Sensors and Diabetic Foot Wound Dressings. Advanced Functional Materials, 2019, 29, 1901474.	7.8	371
928	Breathable Nanowood Biofilms as Guiding Layer for Green Onâ€Skin Electronics. Small, 2019, 15, 1901079.	5.2	19
929	Wearable Potentiometric Ion Patch for On-Body Electrolyte Monitoring in Sweat: Toward a Validation Strategy to Ensure Physiological Relevance. Analytical Chemistry, 2019, 91, 8644-8651.	3.2	93
930	Barrier materials for flexible bioelectronic implants with chronic stabilityâ€”Current approaches and future directions. APL Materials, 2019, 7, 050902.	2.2	27
931	Highly stretchable and sensitive sensor based on GnPs/EPDM composites with excellent heat dissipation performance. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	2
932	Biomechanical Energyâ€Harvesting Wearable Textileâ€Based Personal Thermal Management Device Containing Epitaxially Grown Aligned Agâ€Tippedâ€Ni_xCo_{1â^'}_xSe Nanowires/Reduced Graphene Oxide. Advanced Functional Materials, 2019, 29, 1903144.	7.8	80
933	Highly Sensitive Temperature Sensor: Ligandâ€Treated Ag Nanocrystal Thin Films on PDMS with Thermal Expansion Strategy. Advanced Functional Materials, 2019, 29, 1903047.	7.8	102
934	Timeâ€Resolved and Selfâ€Adjusting Hybrid Functional Fabric Sensor for Decoupling Multiple Stimuli from Bending. Advanced Materials Technologies, 2019, 4, 1900290.	3.0	7
935	Physiology of sweat gland function: The roles of sweating and sweat composition in human health. Temperature, 2019, 6, 211-259.	1.7	324

#	Article	IF	Citations
936	Recent progress in electrochemical biosensors as point of care diagnostics in livestock health. Analytical Biochemistry, 2019, 579, 25-34.	1.1	38
937	Nanoarchitectonics for Photoelectronics. , 2019, , 197-208.		0
938	Eyeglasses-based tear biosensing system: Non-invasive detection of alcohol, vitamins and glucose. Biosensors and Bioelectronics, 2019, 137, 161-170.	5.3	180
939	Editors' Choiceâ€"Development of Screen-Printed Flexible Multi-Level Microfluidic Devices with Integrated Conductive Nanocomposite Polymer Electrodes on Textiles. Journal of the Electrochemical Society, 2019, 166, B3116-B3124.	1.3	16
940	Towards ultra-wide operation range and high sensitivity: Graphene film based pressure sensors for fingertips. Biosensors and Bioelectronics, 2019, 139, 111296.	5.3	26
941	Wearable Devices for Single-Cell Sensing andÂTransfection. Trends in Biotechnology, 2019, 37, 1175-1188.	4.9	23
942	A Megatrend Challenging Analytical Chemistry: Biosensor and Chemosensor Concepts Ready for the Internet of Things. Chemical Reviews, 2019, 119, 7996-8027.	23.0	197
943	Cableâ€Shaped Lithiumâ€"Sulfur Batteries Based on Nitrogenâ€Doped Carbon/Carbon Nanotube Composite Yarns. Macromolecular Materials and Engineering, 2019, 304, 1900201.	1.7	5
944	Modular and Reconfigurable Wireless Eâ€Tattoos for Personalized Sensing. Advanced Materials Technologies, 2019, 4, 1900117.	3.0	86
945	Infrared Skinâ€Like Active Stretchable Electronics Based on Organicâ€"Inorganic Composite Structures for Promotion of Cutaneous Wound Healing. Advanced Materials Technologies, 2019, 4, 1900150.	3.0	19
946	Laser Transfer, Printing, and Assembly Techniques for Flexible Electronics. Advanced Electronic Materials, 2019, 5, 1800900.	2.6	91
947	Disposable Sensors in Diagnostics, Food, and Environmental Monitoring. Advanced Materials, 2019, 31, e1806739.	11.1	540
948	Effect of Process Parameters on Organic Micro Patterns Fabricated on a Flexible Substrate Using the Near-Field Electrohydrodynamic Direct-Writing Method. Micromachines, 2019, 10, 287.	1.4	10
949	An Ultrastretchable and Self-Healable Nanocomposite Conductor Enabled by Autonomously Percolative Electrical Pathways. ACS Nano, 2019, 13, 6531-6539.	7.3	99
950	Fluorescent microbeads for point-of-care testing: a review. Mikrochimica Acta, 2019, 186, 361.	2.5	46
951	Assembly and applications of 3D conformal electronics on curvilinear surfaces. Materials Horizons, 2019, 6, 642-683.	6.4	141
952	Integration of biological systems with electronic-mechanical assemblies. Acta Biomaterialia, 2019, 95, 91-111.	4.1	23
953	Highly Stretchable and Strain-Insensitive Fiber-Based Wearable Electrochemical Biosensor to Monitor Glucose in the Sweat. Analytical Chemistry, 2019, 91, 6569-6576.	3.2	209

#	Article	IF	Citations
954	Design and Assembly of Reconfigurable 3D Radioâ€Frequency Antennas Based on Mechanically Triggered Switches. Advanced Electronic Materials, 2019, 5, 1900256.	2.6	14
955	Nanomeshed Si nanomembranes. Npj Flexible Electronics, 2019, 3, .	5.1	12
956	Variable Heat Disturbance Observer for Control of Peltier Device. IEEJ Journal of Industry Applications, 2019, 8, 185-191.	0.9	5
957	Flexible Breathable Nanomesh Electronic Devices for Onâ€Demand Therapy. Advanced Functional Materials, 2019, 29, 1902127.	7.8	108
958	Interactive Skin Display with Epidermal Stimuli Electrode. Advanced Science, 2019, 6, 1802351.	5.6	68
959	Interwoven Carbon Nanotube Wires for High-Performing, Mechanically Robust, Washable, and Wearable Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 18285-18294.	4.0	33
960	Remarkable merits of triboelectric nanogenerator than electromagnetic generator for harvesting small-amplitude mechanical energy. Nano Energy, 2019, 61, 111-118.	8.2	144
961	Physical and Chemical Sensing With Electronic Skin. Proceedings of the IEEE, 2019, 107, 2155-2167.	16.4	56
962	Self-chargeable sodium-ion battery for soft electronics. Nano Energy, 2019, 61, 435-441.	8.2	30
963	Self-powered, flexible and remote-controlled breath monitor based on TiO₂nanowire networks. Nanotechnology, 2019, 30, 325503.	1.3	24
964	Ag nanowire-based transparent stretchable tactile sensor recognizing strain directions and pressure. Nanotechnology, 2019, 30, 315502.	1.3	20
965	Improving the Sensitivity of Solid-Contact Ion-Selective Electrodes by Using Coulometric Signal Transduction. ACS Sensors, 2019, 4, 900-906.	4.0	64
966	Flexible and Superwettable Bands as a Platform toward Sweat Sampling and Sensing. Analytical Chemistry, 2019, 91, 4296-4300.	3.2	136
967	Skin-Mountable Biosensors and Therapeutics: A Review. Annual Review of Biomedical Engineering, 2019, 21, 299-323.	5.7	45
968	Flexible perovskite solar cell-driven photo-rechargeable lithium-ion capacitor for self-powered wearable strain sensors. Nano Energy, 2019, 60, 247-256.	8.2	180
970	Three-dimensional thermomechanical analysis of epidermal electronic devices on human skin. International Journal of Solids and Structures, 2019, 167, 48-57.	1.3	11
971	Big science and big data in nephrology. Kidney International, 2019, 95, 1326-1337.	2.6	56
972	Highly transparent triboelectric nanogenerator utilizing in-situ chemically welded silver nanowire network as electrode for mechanical energy harvesting and body motion monitoring. Nano Energy, 2019, 59, 508-516.	8.2	69

#	Article	IF	Citations
973	E-Skin: From Humanoids to Humans [Point of View]. Proceedings of the IEEE, 2019, 107, 247-252.	16.4	144
974	Rapid fabrication of wearable carbon nanotube/graphite strain sensor for real-time monitoring of plant growth. Carbon, 2019, 147, 295-302.	5.4	68
975	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. Science, 2019, 363, .	6.0	521
976	Recent Progress in Inkjetâ€Printed Thinâ€Film Transistors. Advanced Science, 2019, 6, 1801445.	5.6	187
977	Multifunctional Skinâ€Inspired Flexible Sensor Systems for Wearable Electronics. Advanced Materials Technologies, 2019, 4, 1800628.	3.0	431
978	CdSSe nanowire-chip based wearable sweat sensor. Journal of Nanobiotechnology, 2019, 17, 42.	4.2	14
979	Passive sweat collection and colorimetric analysis of biomarkers relevant to kidney disorders using a soft microfluidic system. Lab on A Chip, 2019, 19, 1545-1555.	3.1	157
980	An airtight-cavity-structural triboelectric nanogenerator-based insole for high performance biomechanical energy harvesting. Nanoscale, 2019, 11, 6802-6809.	2.8	34
981	Highly Sensitive, Ultrastretchable Strain Sensors Prepared by Pumping Hybrid Fillers of Carbon Nanotubes/Cellulose Nanocrystal into Electrospun Polyurethane Membranes. ACS Applied Materials & Interfaces, 2019, 11, 12968-12977.	4.0	122
982	Amperometric biosensing system directly powered by button cell battery for lactate. PLoS ONE, 2019, 14, e0212943.	1.1	2
983	Structure-Property Relationships in Graphene-Based Strain and Pressure Sensors for Potential Artificial Intelligence Applications. Sensors, 2019, 19, 1250.	2.1	64
984	Recent Developments in Printing Flexible and Wearable Sensing Electronics for Healthcare Applications. Sensors, 2019, 19, 1230.	2.1	151
985	A self-powered wearable sweat-evaporation-biosensing analyzer for building sports big data. Nano Energy, 2019, 59, 754-761.	8.2	116
987	A MXeneâ€Based Wearable Biosensor System for Highâ€Performance In Vitro Perspiration Analysis. Small, 2019, 15, e1901190.	5.2	280
988	Sweat-Based in Vitro Diagnostics (IVD): From Sample Collection to Point-of-Care Testing (POCT). Journal of Analysis and Testing, 2019, 3, 80-88.	2.5	12
989	An integrated microchannel biosensor platform to analyse low density lactate metabolism in HepG2 cells in vitro. RSC Advances, 2019, 9, 9006-9013.	1.7	11
990	Wearable electrochemical glove-based sensor for rapid and on-site detection of fentanyl. Sensors and Actuators B: Chemical, 2019, 296, 126422.	4.0	134
991	Core@shell nanomaterials based sensing devices: A review. TrAC - Trends in Analytical Chemistry, 2019, 115, 147-161.	5.8	113

#	Article	IF	Citations
992	Low-resistance stretchable electrodes using a thick silver layer and a PDMS-PDMS bonding technique. AIP Advances, 2019, 9, .	0.6	4
993	Simultaneous electrophysiological recording and self-powered biosignal monitoring using epidermal, nanotexturized, triboelectronic devices. Nanotechnology, 2019, 30, 274003.	1.3	9
994	Intuitive-augmented human-machine multidimensional nano-manipulation terminal using triboelectric stretchable strip sensors based on minimalist design. Nano Energy, 2019, 60, 440-448.	8.2	47
995	Mechano-neuromodulation of autonomic pelvic nerve for underactive bladder: A triboelectric neurostimulator integrated with flexible neural clip interface. Nano Energy, 2019, 60, 449-456.	8.2	81
996	Second Skin Enabled by Advanced Electronics. Advanced Science, 2019, 6, 1900186.	5.6	177
997	Graphene-based fully integrated portable nanosensing system for on-line detection of cytokine biomarkers in saliva. Biosensors and Bioelectronics, 2019, 134, 16-23.	5.3	115
998	Toward a new generation of smart skins. Nature Biotechnology, 2019, 37, 382-388.	9.4	323
999	Fully Stretchable Capillary Microfluidics-Integrated Nanoporous Gold Electrochemical Sensor for Wearable Continuous Glucose Monitoring. ACS Applied Materials & Interfaces, 2019, 11, 14567-14575.	4.0	150
1000	A wearable, cotton thread/paper-based microfluidic device coupled with smartphone for sweat glucose sensing. Cellulose, 2019, 26, 4553-4562.	2.4	106
1001	Effects of material properties and geometric parameters on electromagnetic-assisted transfer printing. Journal Physics D: Applied Physics, 2019, 52, 255302.	1.3	8
1002	Rational Design of a Flexible CNTs@PDMS Film Patterned by Bioâ€Inspired Templates as a Strain Sensor and Supercapacitor. Small, 2019, 15, e1805493.	5.2	91
1003	Skin-inspired, open mesh electrochemical sensors for lactate and oxygen monitoring. Biosensors and Bioelectronics, 2019, 132, 343-351.	5.3	58
1004	Review of Printed Electrodes for Flexible Devices. Frontiers in Materials, 2019, 5, .	1.2	85
1005	Superwettabilityâ€Based Interfacial Chemical Reactions. Advanced Materials, 2019, 31, e1800718.	11.1	128
1006	Stretchable Piezoelectric Sensing Systems for Selfâ€Powered and Wireless Health Monitoring. Advanced Materials Technologies, 2019, 4, 1900100.	3.0	96
1007	Bioinspired Adhesive Architectures: From Skin Patch to Integrated Bioelectronics. Advanced Materials, 2019, 31, e1803309.	11.1	203
1008	Matrix-Independent Highly Conductive Composites for Electrodes and Interconnects in Stretchable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 8567-8575.	4.0	89
1009	Soft, skin-interfaced wearable systems for sports science and analytics. Current Opinion in Biomedical Engineering, 2019, 9, 47-56.	1.8	84

#	Article	IF	Citations
1010	Low Operating Voltage and Highly Pressure-Sensitive Printed Sensor for Healthcare Monitoring with Analogic Amplifier Circuit. ACS Applied Electronic Materials, 2019, 1, 246-252.	2.0	38
1011	Ordered mesoporous carbon-covered carbonized silk fabrics for flexible electrochemical dopamine detection. Journal of Materials Chemistry B, 2019, 7, 2145-2150.	2.9	15
1012	Developing a new device for continuously recording, in vivo, the excretion rate of sweat (perspiration) in humans. Skin Research and Technology, 2019, 25, 489-498.	0.8	3
1013	Self-Powered and Self-Functional Cotton Sock Using Piezoelectric and Triboelectric Hybrid Mechanism for Healthcare and Sports Monitoring. ACS Nano, 2019, 13, 1940-1952.	7.3	221
1014	Liquid metal-based electrical interconnects and interfaces with excellent stability and reliability for flexible electronics. Nanoscale, 2019, 11, 5441-5449.	2.8	32
1015	CMOS Interfaces for Internet-of-Wearables Electrochemical Sensors: Trends and Challenges. Electronics (Switzerland), 2019, 8, 150.	1.8	21
1016	A Fully Integrated Wireless Flexible Ammonia Sensor Fabricated by Soft Nano-Lithography. ACS Sensors, 2019, 4, 726-732.	4.0	89
1017	Wearable biosensors for healthcare monitoring. Nature Biotechnology, 2019, 37, 389-406.	9.4	1,895
1018	Wearable high-dielectric-constant polymers with coreâ€“shell liquid metal inclusions for biomechanical energy harvesting and a self-powered user interface. Journal of Materials Chemistry A, 2019, 7, 7109-7117.	5.2	48
1019	Tunable Contact of Epidermal Electronics With Skin Based on Ionic Polymerâ€“Metal Composite Material. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	2
1020	Soft Modular Electronic Blocks (SMEBs): A Strategy for Tailored Wearable Healthâ€Monitoring Systems. Advanced Science, 2019, 6, 1801682.	5.6	30
1021	Taking connected mobile-health diagnostics of infectious diseases to the field. Nature, 2019, 566, 467-474.	13.7	250
1022	Display meets biology: A vision for ubiquitous healthcare platforms. Journal of the Society for Information Display, 2019, 27, 181-191.	0.8	5
1023	Real-Time in Situ Monitoring of Nitrogen Dynamics in Wastewater Treatment Processes using Wireless, Solid-State, and Ion-Selective Membrane Sensors. Environmental Science & Technology, 2019, 53, 3140-3148.	4.6	40
1024	Enokitake Mushroom-like Standing Gold Nanowires toward Wearable Noninvasive Bimodal Glucose and Strain Sensing. ACS Applied Materials & Interfaces, 2019, 11, 9724-9729.	4.0	91
1025	Highly Electrocatalytic, Durable, and Stretchable Nanohybrid Fiber for On-Body Sweat Glucose Detection. ACS Applied Materials & Interfaces, 2019, 11, 10707-10717.	4.0	106
1026	Noninvasive Diabetes Monitoring through Continuous Analysis of Sweat Using Flow-Through Glucose Biosensor. Analytical Chemistry, 2019, 91, 3778-3783.	3.2	135
1027	Route towards sustainable smart sensors: ferroelectric polyvinylidene fluoride-based materials and their integration in flexible electronics. Chemical Society Reviews, 2019, 48, 1787-1825.	18.7	226

#	Article	IF	Citations
1028	Point-of-care testing based on smartphone: The current state-of-the-art (2017â€“2018). Biosensors and Bioelectronics, 2019, 132, 17-37.	5.3	249
1029	An efficient PEDOT-coated textile for wearable thermoelectric generators and strain sensors. Journal of Materials Chemistry C, 2019, 7, 3496-3502.	2.7	95
1030	Materials and Designs for Wearable Photodetectors. Advanced Materials, 2019, 31, e1808138.	11.1	279
1031	Textileâ€Based Wireless Pressure Sensor Array for Humanâ€Interactive Sensing. Advanced Functional Materials, 2019, 29, 1808786.	7.8	122
1032	Wearable Sensors for Biochemical Sweat Analysis. Annual Review of Analytical Chemistry, 2019, 12, 1-22.	2.8	259
1033	High Sensitivity Flexible Electronic Skin Based on Graphene Film. Sensors, 2019, 19, 794.	2.1	17
1034	Simultaneous detection of glucose, uric acid and cholesterol using flexible microneedle electrode array-based biosensor and multi-channel portable electrochemical analyzer. Sensors and Actuators B: Chemical, 2019, 287, 102-110.	4.0	136
1035	Single-Layer Graphene-Based Transparent and Flexible Multifunctional Electronics for Self-Charging Power and Touch-Sensing Systems. ACS Applied Materials & Interfaces, 2019, 11, 9301-9308.	4.0	44
1036	Structural Design for Stretchable Microstrip Antennas. ACS Applied Materials & Interfaces, 2019, 11, 8867-8877.	4.0	61
1037	Self-powered smart patch for sweat conductivity monitoring. Microsystems and Nanoengineering, 2019, 5, 3.	3.4	50
1038	Three-dimensional paper-based microfluidic electrochemical integrated devices (3D-PMED) for wearable electrochemical glucose detection. RSC Advances, 2019, 9, 5674-5681.	1.7	111
1039	Batteryâ€Free and Wireless Epidermal Electrochemical System with Allâ€Printed Stretchable Electrode Array for Multiplexed In Situ Sweat Analysis. Advanced Materials Technologies, 2019, 4, 1800658.	3.0	124
1040	Flexible Electronics toward Wearable Sensing. Accounts of Chemical Research, 2019, 52, 523-533.	7.6	713
1041	Self-healing electronic skins for aquatic environments. Nature Electronics, 2019, 2, 75-82.	13.1	424
1042	Printed subthreshold organic transistors operating at high gain and ultralow power. Science, 2019, 363, 719-723.	6.0	208
1043	A Minimally Invasive Flexible Micro-Needle Array as Continuous in vivo Electrochemical Glucose Sensor. , 2019, , .		0
1044	Towards Wearable Electrochemical Lactate Sensing using Osmotic-Capillary Microfluidic Pumping. , 2019, , .		10
1045	KAUSTat: A Wireless, Wearable, Open-Source Potentiostat for Electrochemical Measurements. , 2019, , .		11

#	Article	IF	Citations
1046	Advancements in Non-Invasive Biological Surface Sampling and Emerging Applications. Separations, 2019, 6, 52.	1.1	10
1047	AMANDA: An Autonomous Self-Powered Miniaturized Smart Sensing Embedded System. , 2019, , .		2
1048	Sweat Lactic Acid Monitoring System using Adhesive Plaster-based Sweat Sampling Device. , 2019, , .		2
1049	Wearable eHealth System for Physical Rehabilitation: Ankle Plantar-Dorsi-Flexion Monitoring. , 2019, , .		9
1050	Porous Microneedle Integrated in Paper based Glucose Sensor for Fluid Channel Interface. , 2019, , .		1
1051	Flexible and Easy-to-fabricate Electrochemical Sensors Integrating an Absorption Layer with Paper Microfluidic. , 2019, , .		1
1052	Ion Penetration Model of SiO2/SiNx/SiO2 Barrier Trilayer for Implantable Electronics. , 2019, , .		0
1053	Flexible and printed biosensors based on organic TFT devices. , 2019, , 291-306.		2
1054	Wearable and Implantable Electronics: Moving toward Precision Therapy. ACS Nano, 2019, 13, 12280-12286.	7.3	150
1055	Screen-printed soft triboelectric nanogenerator with porous PDMS and stretchable PEDOT:PSS electrode. Journal of Semiconductors, 2019, 40, 112601.	2.0	17
1056	Wearable Skin-Worn Enzyme-Based Electrochemical Devices: Biosensing, Energy Harvesting, and Self-Powered Sensing. , 0, , .		5
1057	Porous Polyvinylidene Fluoride Thin-Film Sensors from Colloidal Crystal Templates. Journal of Nanoscience and Nanotechnology, 2019, 19, 8104-8111.	0.9	5
1058	P3HT Processing Study for In-Liquid EGOFET Biosensors: Effects of the Solvent and the Surface. Sensors, 2019, 19, 4497.	2.1	6
1059	Extremely Fast Self-Healable Bio-Based Supramolecular Polymer for Wearable Real-Time Sweat-Monitoring Sensor. ACS Applied Materials & Interfaces, 2019, 11, 46165-46175.	4.0	110
1060	Noninvasive Concept for Optical Ethanol Sensing on the Skin Surface with Camera-Based Quantification. Analytical Chemistry, 2019, 91, 15860-15865.	3.2	18
1061	Highly Precise Multifunctional Thermal Management-Based Flexible Sensing Sheets. ACS Nano, 2019, 13, 14348-14356.	7.3	57
1062	Human sweat monitoring using polymer-based fiber. Scientific Reports, 2019, 9, 17294.	1.6	17
1063	Two Distinct Types of Sweat Profile in Healthy Subjects While Exercising at Constant Power Output Measured by a Wearable Sweat Sensor. Scientific Reports, 2019, 9, 17877.	1.6	9

#	Article	IF	Citations
1064	Printing of wirelessly rechargeable solid-state supercapacitors for soft, smart contact lenses with continuous operations. Science Advances, 2019, 5, eaay0764.	4.7	117
1065	Polyimide-Polyetheretherketone and Tin-Polyimide Direct Bonding via Ethanol-Assisted Vacuum Ultraviolet Irradiation. Transactions of the Japan Institute of Electronics Packaging, 2019, 12, E19-012-1-E19-012-8.	0.3	2
1066	Resettable skin interfaced microfluidic sweat collection devices with chemesthetic hydration feedback. Nature Communications, 2019, 10, 5513.	5.8	74
1067	Organic Electrochemical Transistors as Versatile Analytical Potentiometric Sensors. Frontiers in Bioengineering and Biotechnology, 2019, 7, 354.	2.0	17
1068	Sandwich-structure transferable free-form OLEDs for wearable and disposable skin wound photomedicine. Light: Science and Applications, 2019, 8, 114.	7.7	86
1069	A smartphone sensing system for solid-contact ion-selective electrodes. , 2019, , .		0
1070	Motion standard level system based on Internet of things. International Journal of Distributed Sensor Networks, 2019, 15, 155014771984415.	1.3	0
1071	Dielectric ceramics/TiO₂/single-crystalline silicon nanomembrane heterostructure for high performance flexible thin-film transistors on plastic substrates. RSC Advances, 2019, 9, 35289-35296.	1.7	3
1072	Thermo and flex multi-functional array ionic sensor for a human adaptive device. RSC Advances, 2019, 9, 36960-36966.	1.7	2
1073	A Microwatt Dual-Mode Electrochemical Sensing Current Readout With Current-Reducer Ramp Waveform Generation. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1163-1174.	2.7	24
1074	Joint DOA and frequency estimation with sub-Nyquist sampling. Signal Processing, 2019, 154, 87-96.	2.1	19
1075	Wrist-worn alcohol biosensors: Strengths, limitations, and future directions. Alcohol, 2019, 81, 83-92.	0.8	61
1076	Use of Polymer Coatings to Enhance the Response of Redoxâ€Polymerâ€Mediated Electrodes. ChemElectroChem, 2019, 6, 1344-1349.	1.7	16
1077	Non-invasive Monitoring of Glycogen in Real-Time Using an Electromagnetic Sensor. Smart Sensors, Measurement and Instrumentation, 2019, , 1-15.	0.4	7
1078	Controllably Enhancing Stretchability of Highly Sensitive Fiber-Based Strain Sensors for Intelligent Monitoring. ACS Applied Materials & Interfaces, 2019, 11, 2431-2440.	4.0	47
1079	Block Copolymer Elastomers for Stretchable Electronics. Accounts of Chemical Research, 2019, 52, 63-72.	7.6	85
1080	Facile Wearable Vapor/Liquid Amphibious Methanol Sensor. ACS Sensors, 2019, 4, 152-160.	4.0	41
1081	Hybrid piezo/triboelectric nanogenerator for highly efficient and stable rotation energy harvesting. Nano Energy, 2019, 57, 440-449.	8.2	164

#	Article	IF	Citations
1082	Smart ring: a wearable device for hand hygiene compliance monitoring at the point-of-need. Microsystem Technologies, 2019, 25, 3105-3110.	1.2	17
1083	Reliability of a wearable sweat rate monitor and routine sweat analysis techniques under heat stress in females. Journal of Thermal Biology, 2019, 79, 209-217.	1.1	13
1084	Development of a selective chloride sensing platform using a screen-printed platinum electrode. Talanta, 2019, 195, 771-777.	2.9	11
1085	Skin Adhesives with Controlled Adhesion by Polymer Chain Mobility. ACS Applied Materials & Interfaces, 2019, 11, 1496-1502.	4.0	48
1086	Recent Advances in Transparent Electronics with Stretchable Forms. Advanced Materials, 2019, 31, e1804690.	11.1	114
1087	Ingestible electronics for diagnostics and therapy. Nature Reviews Materials, 2019, 4, 83-98.	23.3	146
1088	Electrically-Transduced Chemical Sensors Based on Two-Dimensional Nanomaterials. Chemical Reviews, 2019, 119, 478-598.	23.0	521
1089	Non-Invasive Flexible and Stretchable Wearable Sensors With Nano-Based Enhancement for Chronic Disease Care. IEEE Reviews in Biomedical Engineering, 2019, 12, 34-71.	13.1	52
1090	Flexible Crossbarâ€Structured Phase Change Memory Array via Moâ€Based Interfacial Physical Liftâ€Off. Advanced Functional Materials, 2019, 29, 1806338.	7.8	31
1091	Beyond energy harvesting - multi-functional triboelectric nanosensors on a textile. Nano Energy, 2019, 57, 338-352.	8.2	173
1092	A Stretchable Strain-Insensitive Temperature Sensor Based on Free-Standing Elastomeric Composite Fibers for On-Body Monitoring of Skin Temperature. ACS Applied Materials & Interfaces, 2019, 11, 2317-2327.	4.0	125
1093	Novel temperature sensors based on strain-relieved braiding constructions. Textile Reseach Journal, 2019, 89, 3159-3168.	1.1	4
1094	Flexible Electronics: Stretchable Electrodes and Their Future. Advanced Functional Materials, 2019, 29, 1805924.	7.8	510
1095	Wireless powered wearable micro light-emitting diodes. Nano Energy, 2019, 55, 454-462.	8.2	83
1096	Thermoelectric effect induced electricity in stretchable graphene-polymer nanocomposites for ultrasensitive self-powered strain sensor system. Nano Energy, 2019, 56, 25-32.	8.2	113
1097	An edge-stream computing infrastructure for real-time analysis of wearable sensors data. Future Generation Computer Systems, 2019, 93, 515-528.	4.9	61
1098	Highly sensitive wearable glucose sensor systems based on functionalized single-wall carbon nanotubes with glucose oxidase-nafion composites. Applied Surface Science, 2019, 470, 13-18.	3.1	65
1099	Self-powered electronic skin based on the triboelectric generator. Nano Energy, 2019, 56, 252-268.	8.2	205

#	Article	IF	Citations
1100	Highly Bendable Piezoelectric Resonators for Flexible Radioâ€Frequency Electronics. Advanced Electronic Materials, 2019, 5, 1800545.	2.6	15
1101	Wearable potentiometric ion sensors. TrAC - Trends in Analytical Chemistry, 2019, 110, 303-320.	5.8	211
1102	More than energy harvesting â€“ Combining triboelectric nanogenerator and flexible electronics technology for enabling novel micro-/nano-systems. Nano Energy, 2019, 57, 851-871.	8.2	255
1103	Highâ€Energy Asymmetric Supercapacitor Yarns for Selfâ€Charging Power Textiles. Advanced Functional Materials, 2019, 29, 1806298.	7.8	109
1104	Direct write of a flexible high-sensitivity pressure sensor with fast response for electronic skins. Organic Electronics, 2019, 67, 10-18.	1.4	38
1105	Functionalized Organic Thin Film Transistors for Biosensing. Accounts of Chemical Research, 2019, 52, 277-287.	7.6	240
1106	Textile-Based Potentiometric Electrochemical pH Sensor for Wearable Applications. Biosensors, 2019, 9, 14.	2.3	116
1107	Battery-free, skin-interfaced microfluidic/electronic systems for simultaneous electrochemical, colorimetric, and volumetric analysis of sweat. Science Advances, 2019, 5, eaav3294.	4.7	497
1108	A Generic Soft Encapsulation Strategy for Stretchable Electronics. Advanced Functional Materials, 2019, 29, 1806630.	7.8	83
1109	Tribotronics for Active Mechanosensation and Selfâ€Powered Microsystems. Advanced Functional Materials, 2019, 29, 1808114.	7.8	35
1110	Minimallyâ€invasive Microneedleâ€based Biosensor Array for Simultaneous Lactate and Glucose Monitoring in Artificial Interstitial Fluid. Electroanalysis, 2019, 31, 374-382.	1.5	87
1111	A wearable origami-like paper-based electrochemical biosensor for sulfur mustard detection. Biosensors and Bioelectronics, 2019, 129, 15-23.	5.3	103
1112	Self-powered digital-analog hybrid electronic skin for noncontact displacement sensing. Nano Energy, 2019, 58, 121-129.	8.2	48
1113	High-efficiency self-charging smart bracelet for portable electronics. Nano Energy, 2019, 55, 29-36.	8.2	116
1114	Engineering Precision Medicine. Advanced Science, 2019, 6, 1801039.	5.6	55
1115	Efficient Welding of Silver Nanowires embedded in a Poly(vinylidene fluoride) Film for Robust Wearable Electronics. Advanced Materials Technologies, 2019, 4, 1800438.	3.0	14
1116	Microfluidic technologies for local drug delivery. , 2019, , 281-305.		5
1117	Future of microfluidics in research and in the market. , 2019, , 425-465.		12

#	Article	IF	Citations
1118	Cowpea-structured PVDF/ZnO nanofibers based flexible self-powered piezoelectric bending motion sensor towards remote control of gestures. Nano Energy, 2019, 55, 516-525.	8.2	331
1119	The Recent Advance in Fiberâ€Shaped Energy Storage Devices. Advanced Electronic Materials, 2019, 5, 1800456.	2.6	103
1120	Hybrid dual-functioning electrodes for combined ambient energy harvesting and charge storage: Towards self-powered systems. Biosensors and Bioelectronics, 2019, 126, 275-291.	5.3	28
1121	Wearables technology for drug abuse detection: A survey of recent advancement. Smart Health, 2019, 13, 100062.	2.0	14
1122	The design, fabrication, and applications of flexible biosensing devices. Biosensors and Bioelectronics, 2019, 124-125, 96-114.	5.3	124
1123	An Experimental Study on Stretchy and Tough PDMS/Fabric Composites. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	14
1124	Exercise intensity effects on total sweat electrolyte losses and regional vs. whole-body sweat [Na+], [Clâ^'], and [K+]. European Journal of Applied Physiology, 2019, 119, 361-375.	1.2	59
1125	Wearable Sweat Sensors: Background and Current Trends. Electroanalysis, 2019, 31, 411-421.	1.5	67
1126	Heterogeneous Integration of Three-Primary-Color Photoluminescent Nanoparticle Arrays with Defined Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 1616-1623.	4.0	12
1127	Real-time Mobile Monitoring of the Dynamic Associations Among Motor Activity, Energy, Mood, and Sleep in Adults With Bipolar Disorder. JAMA Psychiatry, 2019, 76, 190.	6.0	136
1128	3Dâ€Printed Gastric Resident Electronics. Advanced Materials Technologies, 2019, 4, 1800490.	3.0	72
1129	Quantitative Principles for Precise Engineering of Sensitivity in Graphene Electrochemical Sensors. Advanced Materials, 2019, 31, e1805752.	11.1	20
1130	Direct electrochemical biosensing in gastrointestinal fluids. Analytical and Bioanalytical Chemistry, 2019, 411, 4597-4604.	1.9	37
1131	Ultrathin Conformable Organic Artificial Synapse for Wearable Intelligent Device Applications. ACS Applied Materials & Interfaces, 2019, 11, 1071-1080.	4.0	106
1132	Printable Fabrication of a Fully Integrated and Selfâ€Powered Sensor System on Plastic Substrates. Advanced Materials, 2019, 31, e1804285.	11.1	148
1133	Wearable Fluid Capture Devices for Electrochemical Sensing of Sweat. ACS Applied Materials & Interfaces, 2019, 11, 238-243.	4.0	65
1134	Recent Developments in Carbon Sensors for At-Source Electroanalysis. Analytical Chemistry, 2019, 91, 27-43.	3.2	31
1135	Pointâ€ofâ€Care Smartphoneâ€based Electrochemical Biosensing. Electroanalysis, 2019, 31, 2-16.	1.5	87

#	Article	IF	Citations
1136	Self-powered gait pattern-based identity recognition by a soft and stretchable triboelectric band. Nano Energy, 2019, 56, 516-523.	8.2	92
1137	Advanced Carbon for Flexible and Wearable Electronics. Advanced Materials, 2019, 31, e1801072.	11.1	779
1138	Portable Multiplex Optical Assays. Advanced Optical Materials, 2019, 7, 1801109.	3.6	17
1139	Highly stretchable sensors for wearable biomedical applications. Journal of Materials Science, 2019, 54, 5187-5223.	1.7	49
1140	Bioinspired structural color sensors based on responsive soft materials. Current Opinion in Solid State and Materials Science, 2019, 23, 13-27.	5.6	79
1141	Polylactic acid sealed polyelectrolyte complex microcontainers for controlled encapsulation and NIR-Laser based release of cargo. Colloids and Surfaces B: Biointerfaces, 2019, 173, 521-528.	2.5	18
1142	Functional Nanomaterials and Nanostructures Enhancing Electrochemical Biosensors and Lab-on-a-Chip Performances: Recent Progress, Applications, and Future Perspective. Chemical Reviews, 2019, 119, 120-194.	23.0	436
1143	Development of a third-generation glucose sensor based on the open circuit potential for continuous glucose monitoring. Biosensors and Bioelectronics, 2019, 124-125, 216-223.	5.3	68
1144	Non-invasive textile based colorimetric sensor for the simultaneous detection of sweat pH and lactate. Talanta, 2019, 192, 424-430.	2.9	155
1145	Wearable Devices for Precision Medicine and Health State Monitoring. IEEE Transactions on Biomedical Engineering, 2019, 66, 1242-1258.	2.5	102
1146	Nanogenerators for wearable bioelectronics and biodevices. Journal Physics D: Applied Physics, 2019, 52, 023002.	1.3	37
1147	Low-temperature-solderable intermetallic nanoparticles for 3D printable flexible electronics. Acta Materialia, 2019, 162, 163-175.	3.8	29
1148	Wearable and flexible electronics for continuous molecular monitoring. Chemical Society Reviews, 2019, 48, 1465-1491.	18.7	855
1149	Soft and flexible material-based affinity sensors. Biotechnology Advances, 2020, 39, 107398.	6.0	60
1150	A low-dimension structure strategy for flexible photodetectors based on perovskite nanosheets/ZnO nanowires with broadband photoresponse. Science China Materials, 2020, 63, 100-109.	3.5	26
1151	When Flexible Organic Fieldâ€Effect Transistors Meet Biomimetics: A Prospective View of the Internet of Things. Advanced Materials, 2020, 32, e1901493.	11.1	136
1152	Flexible Hybrid Electronics for Digital Healthcare. Advanced Materials, 2020, 32, e1902062.	11.1	345
1153	Microparticleâ€Based Soft Electronic Devices: Toward Oneâ€Particle/Oneâ€Pixel. Advanced Functional Materials, 2020, 30, 1901810.	7.8	8

#	Article	IF	Citations
1154	An Overview of Internet of Dental Things: New Frontier in Advanced Dentistry. Wireless Personal Communications, 2020, 110, 1345-1371.	1.8	27
1155	Improved sensing response of nanostructured CuO thin films towards sweat rate monitoring: Effect of Cr doping. Materials Science in Semiconductor Processing, 2020, 105, 104698.	1.9	12
1156	Multifunctional and high-performance electronic skin based on silver nanowires bridging graphene. Carbon, 2020, 156, 253-260.	5.4	67
1157	A Combinatorial Electrochemical Biosensor for Sweat Biomarker Benchmarking. SLAS Technology, 2020, 25, 25-32.	1.0	25
1158	Onâ€Body Bioelectronics: Wearable Biofuel Cells for Bioenergy Harvesting and Selfâ€Powered Biosensing. Advanced Functional Materials, 2020, 30, 1906243.	7.8	134
1159	Smartphone-assisted personalized diagnosticÂdevices and wearable sensors. Current Opinion in Biomedical Engineering, 2020, 13, 42-50.	1.8	100
1160	Flexible Electrochemical Bioelectronics: The Rise of In Situ Bioanalysis. Advanced Materials, 2020, 32, e1902083.	11.1	200
1161	Novel textile moisture sensors based on multi-layered braiding constructions. Textile Reseach Journal, 2020, 90, 469-477.	1.1	3
1162	Materialâ€Based Approaches for the Fabrication of Stretchable Electronics. Advanced Materials, 2020, 32, e1902743.	11.1	243
1163	Integrating Flexible Electrochemical Sensor into Microfluidic Chip for Simulating and Monitoring Vascular Mechanotransduction. Small, 2020, 16, e1903204.	5.2	45
1164	Organic Photodetectors for Nextâ€Generation Wearable Electronics. Advanced Materials, 2020, 32, e1902045.	11.1	401
1165	Mimicking Human and Biological Skins for Multifunctional Skin Electronics. Advanced Functional Materials, 2020, 30, 1904523.	7.8	247
1166	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
1167	Integrating Artificial Intelligence and Nanotechnology for Precision Cancer Medicine. Advanced Materials, 2020, 32, e1901989.	11.1	187
1168	Printing Flexible and Hybrid Electronics for Human Skin and Eyeâ€Interfaced Health Monitoring Systems. Advanced Materials, 2020, 32, e1902051.	11.1	83
1169	1D Supercapacitors for Emerging Electronics: Current Status and Future Directions. Advanced Materials, 2020, 32, e1902387.	11.1	158
1170	Flexible 1D Batteries: Recent Progress and Prospects. Advanced Materials, 2020, 32, e1901961.	11.1	111
1171	Pressure Injury Prevention: A Survey. IEEE Reviews in Biomedical Engineering, 2020, 13, 352-368.	13.1	20

#	Article	IF	Citations
1172	Flexible Hybrid Sensors for Health Monitoring: Materials and Mechanisms to Render Wearability. Advanced Materials, 2020, 32, e1902133.	11.1	232
1173	Artificial Sensory Memory. Advanced Materials, 2020, 32, e1902434.	11.1	200
1174	Wearable Electronics Based on 2D Materials for Human Physiological Information Detection. Small, 2020, 16, e1901124.	5.2	97
1175	Implementation of a Compact Wearable Temperature, Pressure, Humidity and Gas Sensing Device. Advances in Intelligent Systems and Computing, 2020, , 825-830.	0.5	0
1176	Electrochemical characterization of reduced graphene oxide as an ion-to-electron transducer and application of screen-printed all-solid-state potassium ion sensors. Carbon Letters, 2020, 30, 73-80.	3.3	26
1177	Advanced materials of printed wearables for physiological parameter monitoring. Materials Today, 2020, 32, 147-177.	8.3	110
1178	Embedded Wideband Measurement System for Fast Impedance Spectroscopy Using Undersampling. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3461-3469.	2.4	20
1179	Kirigami-inspired strain-insensitive sensors based on atomically-thin materials. Materials Today, 2020, 34, 58-65.	8.3	65
1180	Flexible Neuromorphic Electronics for Computing, Soft Robotics, and Neuroprosthetics. Advanced Materials, 2020, 32, e1903558.	11.1	289
1181	Advanced Wearable Microfluidic Sensors for Healthcare Monitoring. Small, 2020, 16, e1903822.	5.2	107
1182	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
1183	Preparation of ultrathin defect-free graphene sheets from graphite via fluidic delamination for solid-contact ion-to-electron transducers in potentiometric sensors. Journal of Colloid and Interface Science, 2020, 560, 817-824.	5.0	17
1184	Chloride and pH Determination on a Wireless, Flexible Electrochemical Sensor Platform. IEEE Sensors Journal, 2020, 20, 599-609.	2.4	11
1185	Telecommunications and Data Processing in Flexible Electronic Systems. Advanced Materials Technologies, 2020, 5, .	3.0	25
1186	Inkjetâ€Printed Soft Resistive Pressure Sensor Patch for Wearable Electronics Applications. Advanced Materials Technologies, 2020, 5, 1900717.	3.0	81
1187	A Solidâ€State Reference Electrode Based on a Selfâ€Referencing Pulstrode. Angewandte Chemie - International Edition, 2020, 59, 2294-2298.	7.2	24
1188	The Era of Digital Health: A Review of Portable and Wearable Affinity Biosensors. Advanced Functional Materials, 2020, 30, 1906713.	7.8	178
1189	Multiscale Softâ€“Hard Interface Design for Flexible Hybrid Electronics. Advanced Materials, 2020, 32, e1902278.	11.1	65

#	Article	IF	Citations
1190	Nanomaterialâ€Enabled Flexible and Stretchable Sensing Systems: Processing, Integration, and Applications. Advanced Materials, 2020, 32, e1902343.	11.1	198
1191	Recent applications of paperâ€based pointâ€ofâ€care devices for biomarker detection. Electrophoresis, 2020, 41, 287-305.	1.3	44
1192	Robotics in the Gut. Advanced Therapeutics, 2020, 3, 1900125.	1.6	50
1193	A Photowelding Strategy for Conductivity Restoration in Flexible Circuits. Angewandte Chemie - International Edition, 2020, 59, 1098-1102.	7.2	10
1194	Modified staging classification of gallbladder carcinoma on the basis of the 8th edition of the American Joint Commission on Cancer (AJCC) staging system. European Journal of Surgical Oncology, 2020, 46, 527-533.	0.5	7
1195	Optimized deposition time boosts the performance of Prussian blue modified nanoporous gold electrodes for hydrogen peroxide monitoring. Nanotechnology, 2020, 31, 045501.	1.3	8
1196	Recent advances of tissue-interfaced chemical biosensors. Journal of Materials Chemistry B, 2020, 8, 3371-3381.	2.9	15
1197	Smart Flexible Electronicsâ€Integrated Wound Dressing for Realâ€Time Monitoring and Onâ€Demand Treatment of Infected Wounds. Advanced Science, 2020, 7, 1902673.	5.6	258
1198	Graphene-based wearable piezoresistive physical sensors. Materials Today, 2020, 36, 158-179.	8.3	262
1199	Refreshable Nanobiosensor Based on Organosilica Encapsulation of Biorecognition Elements. ACS Applied Materials & Interfaces, 2020, 12, 5420-5428.	4.0	6
1200	Printed Organic Transistor-based Biosensors for Non-invasive Sweat Analysis. Analytical Sciences, 2020, 36, 291-302.	0.8	26
1201	Polydopamine/polystyrene nanocomposite double-layer strain sensor hydrogel with mechanical, self-healing, adhesive and conductive properties. Materials Science and Engineering C, 2020, 109, 110567.	3.8	45
1202	Fabrication of a Bending-Insensitive In-Plane Strain Sensor from a Reversible Cross-Linker-Functionalized Silicone Polymer. ACS Applied Materials & Interfaces, 2020, 12, 6516-6524.	4.0	16
1203	Design Framework and Sensing System for Noninvasive Wearable Electroactive Drug Monitoring. ACS Sensors, 2020, 5, 265-273.	4.0	28
1204	Novel gas sensing platform based on a stretchable laser-induced graphene pattern with self-heating capabilities. Journal of Materials Chemistry A, 2020, 8, 6487-6500.	5.2	135
1205	Ultra-simple wearable local sweat volume monitoring patch based on swellable hydrogels. Lab on A Chip, 2020, 20, 168-174.	3.1	50
1206	Flexible pH sensor based on a conductive PANI membrane for pH monitoring. RSC Advances, 2020, 10, 21-28.	1.7	72
1207	Stretchable gold fiber-based wearable electrochemical sensor toward pH monitoring. Journal of Materials Chemistry B, 2020, 8, 3655-3660.	2.9	50

#	Article	IF	Citations
1208	Highly shape adaptive fiber based electronic skin for sensitive joint motion monitoring and tactile sensing. Nano Energy, 2020, 69, 104429.	8.2	149
1209	Soft, skin-interfaced microfluidic systems with integrated enzymatic assays for measuring the concentration of ammonia and ethanol in sweat. Lab on A Chip, 2020, 20, 84-92.	3.1	67
1210	Flexible wearable graphene/alginate composite non-woven fabric temperature sensor with high sensitivity and anti-interference. Cellulose, 2020, 27, 2369-2380.	2.4	55
1211	Flexible bioelectronics for physiological signals sensing and disease treatment. Journal of Materiomics, 2020, 6, 397-413.	2.8	28
1212	Reviews of wearable healthcare systems: Materials, devices and system integration. Materials Science and Engineering Reports, 2020, 140, 100523.	14.8	215
1213	Skin in the diagnostics game: Wearable biosensor nano- and microsystems for medical diagnostics. Nano Today, 2020, 30, 100828.	6.2	106
1214	Multiscale porous elastomer substrates for multifunctional on-skin electronics with passive-cooling capabilities. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 205-213.	3.3	131
1215	Wearable Tape-Based Smart Biosensing Systems for Lactate and Glucose. IEEE Sensors Journal, 2020, 20, 3757-3765.	2.4	19
1216	Multichannel Front-End for Electrochemical Sensing of Metabolites, Drugs, and Electrolytes. IEEE Sensors Journal, 2020, 20, 3636-3645.	2.4	11
1217	Embroidering a Filmsy Photorechargeable Energy Fabric with Wide Weather Adaptability. ACS Applied Materials & Interfaces, 2020, 12, 3654-3660.	4.0	17
1218	Surface Engineering of Laser-Scribed Graphene Sensor Enables Non-Enzymatic Glucose Detection in Human Body Fluids. ACS Applied Nano Materials, 2020, 3, 391-398.	2.4	56
1219	Bioinspired Triboelectric Nanogenerators as Selfâ€Powered Electronic Skin for Robotic Tactile Sensing. Advanced Functional Materials, 2020, 30, 1907312.	7.8	198
1220	A New Frontier of Printed Electronics: Flexible Hybrid Electronics. Advanced Materials, 2020, 32, e1905279.	11.1	475
1221	A Photowelding Strategy for Conductivity Restoration in Flexible Circuits. Angewandte Chemie, 2020, 132, 1114-1118.	1.6	2
1222	Smartphone for glucose monitoring. , 2020, , 45-65.		0
1223	Smartphone for monitoring basic vital signs: miniaturized, near-field communication based devices for chronic recording of health. , 2020, , 177-208.		5
1224	Self-healing, sensitive and antifreezing biomass nanocomposite hydrogels based on hydroxypropyl guar gum and application in flexible sensors. International Journal of Biological Macromolecules, 2020, 155, 1569-1577.	3.6	60
1225	A Solidâ€State Reference Electrode Based on a Selfâ€Referencing Pulstrode. Angewandte Chemie, 2020, 132, 2314-2318.	1.6	6

#	Article	IF	Citations
1226	An ultraflexible polyurethane yarn-based wearable strain sensor with a polydimethylsiloxane infiltrated multilayer sheath for smart textiles. Nanoscale, 2020, 12, 4110-4118.	2.8	75
1227	Flexible, low volume detection of chronobiology biomarkers from human sweat. Analyst, The, 2020, 145, 784-796.	1.7	27
1228	A synergistic self-assembled 3D PEDOT:PSS/graphene composite sponge for stretchable microsupercapacitors. Journal of Materials Chemistry A, 2020, 8, 554-564.	5.2	72
1229	Emerging intraoral biosensors. Journal of Materials Chemistry B, 2020, 8, 3341-3356.	2.9	11
1230	RhIr@MoS2 nanohybrids based disposable microsensor for the point-of-care testing of NADH in real human serum. Chinese Chemical Letters, 2020, 31, 2115-2118.	4.8	5
1231	Circumferential buckling and postbuckling analysis of thin films integrated on a soft cylindrical substrate with surface relief structures. Extreme Mechanics Letters, 2020, 35, 100624.	2.0	4
1232	Recent advances in potentiometric biosensors. TrAC - Trends in Analytical Chemistry, 2020, 124, 115803.	5.8	185
1233	Modeling and simulation of temporal and temperature drift for the development of an accurate ISFET SPICE macromodel. Journal of Computational Electronics, 2020, 19, 367-386.	1.3	11
1234	Relationship Between Sweat and Blood Lactate Levels During Exhaustive Physical Exercise. ChemElectroChem, 2020, 7, 191-194.	1.7	50
1235	Real-Time Non-Contact Integrated Chipless RF Sensor for Disposable Microfluidic Applications. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 171-178.	2.3	17
1236	A Mediatorâ€Free Electroenzymatic Sensing Methodology to Mitigate Ionic and Electroactive Interferents' Effects for Reliable Wearable Metabolite and Nutrient Monitoring. Advanced Functional Materials, 2020, 30, 1908507.	7.8	36
1237	Metal oxides based electrochemical pH sensors: Current progress and future perspectives. Progress in Materials Science, 2020, 109, 100635.	16.0	286
1238	Multiscale Disordered Porous Fibers for Self-Sensing and Self-Cooling Integrated Smart Sportswear. ACS Nano, 2020, 14, 559-567.	7.3	162
1239	Towards Wearable and Flexible Sensors and Circuits Integration for Stress Monitoring. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2208-2215.	3.9	22
1240	Functionalized helical fibre bundles of carbon nanotubes as electrochemical sensors for long-term in vivo monitoring of multiple disease biomarkers. Nature Biomedical Engineering, 2020, 4, 159-171.	11.6	208
1241	Carbon nanotube electronics for IoT sensors. Nano Futures, 2020, 4, 012001.	1.0	40
1242	Highly self-healable and flexible cable-type pH sensors for real-time monitoring of human fluids. Biosensors and Bioelectronics, 2020, 150, 111946.	5.3	78
1243	Stretchable Supercapacitors as Emergent Energy Storage Units for Health Monitoring Bioelectronics. Advanced Energy Materials, 2020, 10, 1902769.	10.2	93

#	Article	IF	Citations
1244	Rationally designed rotation triboelectric nanogenerators with much extended lifetime and durability. Nano Energy, 2020, 68, 104378.	8.2	111
1245	Series-Connected Flexible Biobatteries for Higher Voltage Electrical Skin Patches. ACS Applied Electronic Materials, 2020, 2, 170-176.	2.0	13
1246	Natural Perspiration Sampling and in Situ Electrochemical Analysis with Hydrogel Micropatches for User-Identifiable and Wireless Chemo/Biosensing. ACS Sensors, 2020, 5, 93-102.	4.0	69
1247	An Artificial Somatic Reflex Arc. Advanced Materials, 2020, 32, e1905399.	11.1	126
1248	A Contactâ€Slidingâ€Triboelectrificationâ€Driven Dynamic Optical Transmittance Modulator for Selfâ€Powered Information Covering and Selective Visualization. Advanced Materials, 2020, 32, e1904988.	11.1	21
1249	Carbonized silk fabric-based flexible organic electrochemical transistors for highly sensitive and selective dopamine detection. Sensors and Actuators B: Chemical, 2020, 304, 127414.	4.0	54
1250	Soft Wearable Systems for Colorimetric and Electrochemical Analysis of Biofluids. Advanced Functional Materials, 2020, 30, 1907269.	7.8	92
1251	Large-Area Exfoliated Lead-Free Perovskite-Derivative Single-Crystalline Membrane for Flexible Low-Defect Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 9141-9149.	4.0	36
1252	A laser-engraved wearable sensor for sensitive detection of uric acid and tyrosine in sweat. Nature Biotechnology, 2020, 38, 217-224.	9.4	683
1253	Hydrogelâ€Enabled Transferâ€Printing of Conducting Polymer Films for Soft Organic Bioelectronics. Advanced Functional Materials, 2020, 30, 1906016.	7.8	55
1254	Thermal analysis of the flexible electronics affixed on large curvature myocardium surface. International Journal of Heat and Mass Transfer, 2020, 147, 118983.	2.5	6
1255	Simple Fabrication of Flexible Biosensor Arrays Using Direct Writing for Multianalyte Measurement from Human Astrocytes. SLAS Technology, 2020, 25, 33-46.	1.0	11
1256	Emerging Soft Conductors for Bioelectronic Interfaces. Advanced Functional Materials, 2020, 30, 1907184.	7.8	70
1257	Wireless Monitoring Using a Stretchable and Transparent Sensor Sheet Containing Metal Nanowires. Advanced Materials, 2020, 32, e1902684.	11.1	75
1258	Recent Advances in Smart Contact Lenses. Advanced Materials Technologies, 2020, 5, 1900728.	3.0	67
1259	Textile-Based Stretchable and Flexible Glove Sensor for Monitoring Upper Extremity Prosthesis Functions. IEEE Sensors Journal, 2020, 20, 1754-1760.	2.4	28
1260	A Smart Contact Lens Controller IC Supporting Dual-Mode Telemetry With Wireless-Powered Backscattering LSK and EM-Radiated RF Transmission Using a Single-Loop Antenna. IEEE Journal of Solid-State Circuits, 2020, 55, 856-867.	3.5	30
1261	Heart Monitor Using Flexible Capacitive ECG Electrodes. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4314-4323.	2.4	42

#	Article	IF	Citations
1262	Sweat as a Source of Next-Generation Digital Biomarkers. Digital Biomarkers, 2020, 3, 155-165.	2.2	60
1263	An autonomous wearable system for diurnal sweat biomarker data acquisition. Lab on A Chip, 2020, 20, 4582-4591.	3.1	26
1264	A passive wireless triboelectric sensor via a surface acoustic wave resonator (SAWR). Nano Energy, 2020, 78, 105307.	8.2	20
1265	Albumen based protein gated bioinspired neuromorphic transistors with learning abilities. Organic Electronics, 2020, 87, 105961.	1.4	10
1266	Biosensor nanoengineering: Design, operation, and implementation for biomolecular analysis. Sensors International, 2020, 1, 100040.	4.9	205
1267	Recent advances and perspectives in sweat based wearable electrochemical sensors. TrAC - Trends in Analytical Chemistry, 2020, 131, 116024.	5.8	123
1268	A novel photolithographic method for fabrication of flexible micro-patterned glucose sensors. Journal of Electroanalytical Chemistry, 2020, 876, 114720.	1.9	17
1269	Flexible Ti3C2Tx MXene/ink human wearable strain sensors with high sensitivity and a wide sensing range. Sensors and Actuators A: Physical, 2020, 315, 112304.	2.0	27
1270	Flexible Integrated Circuits Based on Carbon Nanotubes. Accounts of Materials Research, 2020, 1, 88-99.	5.9	18
1271	Electrostatic Energy Harvesting from Human Interactions with Smart Paper Electronics*. , 2020, 2020, 4506-4509.		0
1272	Wireless battery-free wearable sweat sensor powered by human motion. Science Advances, 2020, 6, .	4.7	372
1273	A breathable, sensitive and wearable piezoresistive sensor based on hierarchical micro-porous PU@CNT films for long-term health monitoring. Composites Science and Technology, 2020, 200, 108419.	3.8	45
1274	A Noninvasive Wearable Device for Real-Time Monitoring of Secretion Sweat Pressure by Digital Display. IScience, 2020, 23, 101658.	1.9	12
1275	Optimization of printed sensors to monitor sodium, ammonium, and lactate in sweat. APL Materials, 2020, 8, .	2.2	33
1276	Real-Time Monitoring of Heavy Metals in Healthcare via Twistable and Washable Smartsensors. Analytical Chemistry, 2020, 92, 14536-14541.	3.2	20
1277	Effect of yarn interlacement pattern on the surface electrical conductivity of intrinsically conductive fabrics. Synthetic Metals, 2020, 268, 116512.	2.1	6
1278	A Review of Inkjet Printed Graphene and Carbon Nanotubes Based Gas Sensors. Sensors, 2020, 20, 5642.	2.1	53
1279	Smart Insole for Robust Wearable Biomechanical Energy Harvesting in Harsh Environments. ACS Nano, 2020, 14, 14126-14133.	7.3	107

#	Article	IF	Citations
1280	Internet of Things in Animal Healthcare (IoTAH): Review of Recent Advancements in Architecture, Sensing Technologies and Real-Time Monitoring. SN Computer Science, 2020, 1, 1.	2.3	20
1281	A robust stretchable pressure sensor for electronic skins. Organic Electronics, 2020, 86, 105926.	1.4	4
1282	Microengineered poly(HEMA) hydrogels for wearable contact lens biosensing. Lab on A Chip, 2020, 20, 4205-4214.	3.1	27
1283	Sweat detection theory and fluid driven methods: A review. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2020, 3, 126-140.	1.7	39
1284	Ionophore- Nafionâ„¢ modified gold-coated electrospun polymeric fibers electrodes for determination of electrolytes. Electrochimica Acta, 2020, 363, 137239.	2.6	13
1285	Optical Multisensor Array with Functionalized Photonic Droplets by an Interpenetrating Polymer Network for Human Blood Analysis. ACS Applied Materials & Interfaces, 2020, 12, 47342-47354.	4.0	21
1286	Textile sensors platform for the selective and simultaneous detection of chloride ion and pH in sweat. Scientific Reports, 2020, 10, 17180.	1.6	46
1287	A temperature sensor based on flexible substrate with ultra-high sensitivity for low temperature measurement. Sensors and Actuators A: Physical, 2020, 315, 112341.	2.0	30
1288	Electrochemical glucose sensors in diabetes management: an updated review (2010â€“2020). Chemical Society Reviews, 2020, 49, 7671-7709.	18.7	460
1289	Glucose oxidase-based biosensor for glucose detection from biological fluids. Sensor Review, 2020, 40, 497-511.	1.0	38
1290	All-printed nanomembrane wireless bioelectronics using a biocompatible solderable graphene for multimodal human-machine interfaces. Nature Communications, 2020, 11, 3450.	5.8	124
1291	One-dimensional organic artificial multi-synapses enabling electronic textile neural network for wearable neuromorphic applications. Science Advances, 2020, 6, .	4.7	102
1292	MicroRNAs in Extracellular Vesicles in Sweat Change in Response to Endurance Exercise. Frontiers in Physiology, 2020, 11, 676.	1.3	22
1293	SnapKiâ€”An Inertial Easy-to-Adapt Wearable Textile Device for Movement Quantification of Neurological Patients. Sensors, 2020, 20, 3875.	2.1	3
1294	Recent advances in bioelectronics chemistry. Chemical Society Reviews, 2020, 49, 7978-8035.	18.7	54
1295	Stretchable respiration sensors: Advanced designs and multifunctional platforms for wearable physiological monitoring. Biosensors and Bioelectronics, 2020, 166, 112460.	5.3	129
1296	Micro-supercapacitors powered integrated system for flexible electronics. Energy Storage Materials, 2020, 32, 402-417.	9.5	47
1297	Real-time in situ auto-correction of K+ interference for continuous and long-term NH4+ monitoring in wastewater using solid-state ion selective membrane (S-ISM) sensor assembly. Environmental Research, 2020, 189, 109891.	3.7	14

#	Article	IF	Citations
1298	Flexible Carbon Nanotube Synaptic Transistor for Neurological Electronic Skin Applications. ACS Nano, 2020, 14, 10402-10412.	7.3	86
1299	Synchronously improved stretchability and mobility by tuning the molecular weight for intrinsically stretchable transistors. Journal of Materials Chemistry C, 2020, 8, 15646-15654.	2.7	26
1300	Fiber-shaped organic electrochemical transistors for biochemical detections with high sensitivity and stability. Science China Chemistry, 2020, 63, 1281-1288.	4.2	51
1301	Electronic classification of barcoded particles for multiplexed detection using supervised machine learning analysis. Talanta, 2020, 215, 120791.	2.9	23
1302	Spray-coated paper supercapacitors. Npj Flexible Electronics, 2020, 4, .	5.1	50
1303	A Flexible 3D Organic Preamplifier for a Lactate Sensor. Macromolecular Bioscience, 2020, 20, e2000144.	2.1	17
1304	Biodegradable, flexible silicon nanomembrane-based NOx gas sensor system with record-high performance for transient environmental monitors and medical implants. NPG Asia Materials, 2020, 12, .	3.8	32
1305	Power saving by a smart breath sensor working in non-connectable advertising mode. Sensors and Actuators A: Physical, 2020, 315, 112324.	2.0	3
1306	Leverage Surface Chemistry for High-Performance Triboelectric Nanogenerators. Frontiers in Chemistry, 2020, 8, 577327.	1.8	45
1307	Mixed-dimensional MXene-hydrogel heterostructures for electronic skin sensors with ultrabroad working range. Science Advances, 2020, 6, .	4.7	182
1308	Printable, Highly Sensitive Flexible Temperature Sensors for Human Body Temperature Monitoring: A Review. Nanoscale Research Letters, 2020, 15, 200.	3.1	116
1309	3D motion tracking display enabled by magneto-interactive electroluminescence. Nature Communications, 2020, 11, 6072.	5.8	27
1310	Wearable sensors for continuous oral cavity and dietary monitoring toward personalized healthcare and digital medicine. Analyst, The, 2020, 145, 7796-7808.	1.7	19
1311	Sweat-Based Noninvasive Skin-Patchable Urea Biosensors with Photonic Interpenetrating Polymer Network Films Integrated into PDMS Chips. ACS Sensors, 2020, 5, 3988-3998.	4.0	34
1312	Image recognition technology based on cloud computing platform. Journal of Intelligent and Fuzzy Systems, 2020, 39, 5119-5129.	0.8	4
1313	Flexible Electronics for Monitoring in vivo Electrophysiology and Metabolite Signals. Frontiers in Chemistry, 2020, 8, 547591.	1.8	4
1314	A Capacitive Sweat Rate Sensor for Continuous and Real-Time Monitoring of Sweat Loss. ACS Sensors, 2020, 5, 3821-3826.	4.0	32
1315	Ultra-sensitive and resilient compliant strain gauges for soft machines. Nature, 2020, 587, 219-224.	13.7	279

#	Article	IF	Citations
1316	Fluidic Patch Device to Sample Sweat for Accurate Measurement of Sweat Rate and Chemical Composition: A Proof-of-Concept Study. Analytical Chemistry, 2020, 92, 15534-15541.	3.2	11
1317	Enhanced Power Generation from the Interaction between Sweat and Electrodes for Human Health Monitoring. ACS Energy Letters, 2020, 5, 3708-3717.	8.8	28
1318	Non-Invasive Electrochemical Biosensors Operating in Human Physiological Fluids. Sensors, 2020, 20, 6352.	2.1	27
1319	A Compliant Ionic Adhesive Electrode with Ultralow Bioelectronic Impedance. Advanced Materials, 2020, 32, e2003723.	11.1	86
1320	Smart materials for smart healthcareâ€“ moving from sensors and actuators to self-sustained nanoenergy nanosystems. Smart Materials in Medicine, 2020, 1, 92-124.	3.7	85
1321	Freestanding Multi-Gate Amorphous Oxide-Based TFTs on Graphene Oxide Enhanced Electrolyte Membranes. IEEE Electron Device Letters, 2020, 41, 1360-1363.	2.2	7
1322	3D printing in oral drug delivery. , 2020, , 359-386.		0
1323	Graphene-Based Sensing Skins Manufactured by Scalable and Controllable Assembly. , 2020, , .		1
1324	Recent Advances in the Construction of Flexible Sensors for Biomedical Applications. Biotechnology Journal, 2020, 15, e2000094.	1.8	27
1325	Noninvasive biosensors for diagnostic biomarkers. , 2020, , 167-181.		1
1326	Water-responsive pressure-sensitive adhesive with reversibly changeable adhesion for fabrication of stretchable devices. Materials and Design, 2020, 195, 108995.	3.3	8
1327	2-D Bi2O2Se Nanosheets for Nonenzymatic Electrochemical Detection of H2O2. , 2020, 4, 1-4.		3
1328	Single-atom doping of MoS ₂ with manganese enables ultrasensitive detection of dopamine: Experimental and computational approach. Science Advances, 2020, 6, eabc4250.	4.7	136
1329	Microfluidics by Additive Manufacturing for Wearable Biosensors: A Review. Sensors, 2020, 20, 4236.	2.1	41
1330	Safety and effectiveness evaluation of flexible electronic materials for next generation wearable and implantable medical devices. Nano Today, 2020, 35, 100939.	6.2	22
1331	Numerical modelling of the interaction between eccrine sweat and textile fabric for the development of smart clothing. International Journal of Clothing Science and Technology, 2020, 32, 761-774.	0.5	1
1332	Construction of highly accessible single Co site catalyst for glucose detection. Science Bulletin, 2020, 65, 2100-2106.	4.3	32
1333	3D touchless multiorder reflection structural color sensing display. Science Advances, 2020, 6, eabb5769.	4.7	81

#	Article	IF	Citations
1334	Advances in chemical sensing technology for enabling the next-generation self-sustainable integrated wearable system in the IoT era. Nano Energy, 2020, 78, 105155.	8.2	105
1335	Ultrathin Highly Flexible Featherweight Ceramic Temperature Sensor Arrays. ACS Applied Materials & Interfaces, 2020, 12, 36600-36608.	4.0	10
1336	Noninvasive wearable electroactive pharmaceutical monitoring for personalized therapeutics. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19017-19025.	3.3	71
1337	Laser induced graphene for biosensors. Sustainable Materials and Technologies, 2020, 25, e00205.	1.7	59
1338	Digitizing clinical trials. Npj Digital Medicine, 2020, 3, 101.	5.7	181
1339	Wearable Flexible Strain Sensor Based on Three-Dimensional Wavy Laser-Induced Graphene and Silicone Rubber. Sensors, 2020, 20, 4266.	2.1	50
1340	Inkâ€Based Additive Nanomanufacturing of Functional Materials for Humanâ€Integrated Smart Wearables. Advanced Intelligent Systems, 2020, 2, 2000117.	3.3	17
1341	Alternately Dipping Method to Prepare Graphene Fiber Electrodes for Ultra-high-Capacitance Fiber Supercapacitors. IScience, 2020, 23, 101396.	1.9	10
1342	Multimodal Plant Healthcare Flexible Sensor System. ACS Nano, 2020, 14, 10966-10975.	7.3	129
1343	Modeling, design guidelines, and detection limits of self-powered enzymatic biofuel cell-based sensors. Biosensors and Bioelectronics, 2020, 168, 112493.	5.3	27
1344	Exchange Bias in a La_{0.67}Sr_{0.33}MnO₃/NiO Heterointerface Integrated on a Flexible Mica Substrate. ACS Applied Materials & Interfaces, 2020, 12, 39920-39925.	4.0	36
1345	Highly stretchable sensing array for independent detection of pressure and strain exploiting structural and resistive control. Scientific Reports, 2020, 10, 12666.	1.6	31
1346	Devising Materials Manufacturing Toward Labâ€toâ€Fab Translation of Flexible Electronics. Advanced Materials, 2020, 32, e2001903.	11.1	60
1347	Weaving Offâ€Theâ€Shelf Yarns into Textile Micro Total Analysis Systems (Î¼TAS). Macromolecular Bioscience, 2020, 20, e2000150.	2.1	10
1348	Integration of PEGylated Polyaniline Nanocoatings with Multiple Plastic Substrates Generates Comparable Antifouling Performance. Langmuir, 2020, 36, 9114-9123.	1.6	9
1349	Sensors and Systems for Physical Rehabilitation and Health Monitoringâ€”A Review. Sensors, 2020, 20, 4063.	2.1	59
1350	Elevating Chemistry Research with a Modern Electronics Toolkit. Chemical Reviews, 2020, 120, 9482-9553.	23.0	49
1351	Nanoporous gold peel-and-stick biosensors created with etching inkjet maskless lithography for electrochemical pesticide monitoring with microfluidics. Journal of Materials Chemistry C, 2020, 8, 11376-11388.	2.7	29

#	Article	IF	Citations
1352	A Body Hydration Analysis System to improve running performance. , 2020, , .		2
1353	A Fouling-Resistant Voltammetric Sensing System for Wearable Electroactive Biomarker Monitoring. Journal of Microelectromechanical Systems, 2020, 29, 1059-1063.	1.7	4
1354	A durable nanomesh on-skin strain gauge for natural skin motion monitoring with minimum mechanical constraints. Science Advances, 2020, 6, eabb7043.	4.7	155
1355	Ultrafast Photoinduced Interconnection of Metalâ€“Polymer Composites for Fabrication of Transparent and Stretchable Electronic Skins. ACS Applied Materials & Interfaces, 2020, 12, 39695-39704.	4.0	11
1356	IoT and ICT for Healthcare Applications. EAI/Springer Innovations in Communication and Computing, 2020, , .	0.9	2
1357	Weavable and stretchable piezoresistive carbon nanotubes-embedded nanofiber sensing yarns for highly sensitive and multimodal wearable textile sensor. Carbon, 2020, 170, 464-476.	5.4	94
1358	Towards smart personalized perspiration analysis: An IoT-integrated cellulose-based microfluidic wearable patch for smartphone fluorimetric multi-sensing of sweat biomarkers. Biosensors and Bioelectronics, 2020, 168, 112450.	5.3	105
1359	A low-cost, composite collagen-PDMS material for extended fluid retention in the skin-interfaced microfluidic devices. Colloids and Interface Science Communications, 2020, 38, 100301.	2.0	11
1360	Printed Microprocessors. , 2020, , .		16
1361	Multisensory graphene-skin for harsh-environment applications. Applied Physics Letters, 2020, 117, .	1.5	24
1362	Polythiophene silver bromide nanostructure as ultra-sensitive non-enzymatic electrochemical glucose biosensor. European Polymer Journal, 2020, 138, 109959.	2.6	13
1363	Soft, skin-interfaced microfluidic systems with integrated immunoassays, fluorometric sensors, and impedance measurement capabilities. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27906-27915.	3.3	84
1364	Tilted magnetic micropillars enabled dual-mode sensor for tactile/touchless perceptions. Nano Energy, 2020, 78, 105382.	8.2	49
1365	Self-powered flexible pressure sensors based on nanopatterned polymer films. Sensor Review, 2020, 40, 629-635.	1.0	4
1366	Identifying human body states by using a flexible integrated sensor. Npj Flexible Electronics, 2020, 4, .	5.1	37
1367	Microfabricated Ionâ€Selective Transistors with Fast and Superâ€Nernstian Response. Advanced Materials, 2020, 32, e2004790.	11.1	54
1368	Multifunctional self-assembled BaTiO3-Au nanocomposite thin films on flexible mica substrates with tunable optical properties. Applied Materials Today, 2020, 21, 100856.	2.3	17
1369	Coplanar Waveguide Based Sensor Using Paper Superstrate for Non-Invasive Sweat Monitoring. IEEE Access, 2020, 8, 177757-177766.	2.6	6

#	Article	IF	Citations
1370	SPICEInverse: Synthesis of an Accelerated Multiplexed Impedance Measurement Technique for Wearable Low-Power Electrochemical Systems. , 2020, , .		0
1371	Flexible Symbiotic Biomedical Electronics for Disease Treatment. , 2020, , .		0
1372	Flexible Dual-Wave Mode AlN-Based Surface Acoustic Wave Device on Polymeric Substrate. IEEE Electron Device Letters, 2020, 41, 1692-1695.	2.2	15
1373	Printable Low Power Organic Transistor Technology for Customizable Hybrid Integration Towards Internet of Everything. IEEE Journal of the Electron Devices Society, 2020, 8, 1219-1226.	1.2	19
1374	Stretchable Triboelectric Nanogenerators for Energy Harvesting and Motion Monitoring. IEEE Open Journal of Nanotechnology, 2020, 1, 109-116.	0.9	11
1375	Optimized CNT-PDMS Flexible Composite for Attachable Health-Care Device. Sensors, 2020, 20, 4523.	2.1	37
1376	A programmable epidermal microfluidic valving system for wearable biofluid management and contextual biomarker analysis. Nature Communications, 2020, 11, 4405.	5.8	92
1377	Elastomeric polydimethylsiloxane polymer on conductive interdigitated electrode for analyzing skin hydration dynamics. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	17
1378	Development of a microfluidic collection system to measure electrolyte variations in sweat during exercise. , 2020, 2020, 4085-4088.		2
1380	Flexible and Stretchable Photonics: The Next Stretch of Opportunities. ACS Photonics, 2020, 7, 2618-2635.	3.2	49
1381	Nanocomposite hydrogel-based strain and pressure sensors: a review. Journal of Materials Chemistry A, 2020, 8, 18605-18623.	5.2	230
1382	Flexible and Printed Microwave Plasmonic Sensor for Noninvasive Measurement. IEEE Access, 2020, 8, 163238-163243.	2.6	17
1383	Non-Invasive Glucose Monitoring using Machine Learning. , 2020, , .		8
1384	Multifunctionality of Polypyrrole Polyethyleneoxide Composites: Concurrent Sensing, Actuation and Energy Storage. Polymers, 2020, 12, 2060.	2.0	8
1385	Recent Advances in Portable Biosensors for Biomarker Detection in Body Fluids. Biosensors, 2020, 10, 127.	2.3	61
1387	Stretchable piezoelectric energy harvesters and self-powered sensors for wearable and implantable devices. Biosensors and Bioelectronics, 2020, 168, 112569.	5.3	225
1388	Applications of Cellulose Nanomaterials in Stimuli-Responsive Optics. Journal of Agricultural and Food Chemistry, 2020, 68, 12940-12955.	2.4	29
1389	Mathematical Model and Experimental Design of Nanocomposite Proximity Sensors. IEEE Access, 2020, 8, 153087-153097.	2.6	14

#	Article	IF	Citations
1390	Hollow Microfibers of Elastomeric Nanocomposites for Fully Stretchable and Highly Sensitive Microfluidic Immunobiosensor Patch. Advanced Functional Materials, 2020, 30, 2004684.	7.8	28
1391	Large-scale flexible and transparent electronics based on monolayer molybdenum disulfide field-effect transistors. Nature Electronics, 2020, 3, 711-717.	13.1	255
1392	Noninvasive Epidermal Metabolite Profiling. Analytical Chemistry, 2020, 92, 12467-12472.	3.2	7
1393	Functional Conductive Hydrogels for Bioelectronics. , 2020, 2, 1287-1301.		193
1394	Highly Stretchable Fiber-Based Potentiometric Ion Sensors for Multichannel Real-Time Analysis of Human Sweat. ACS Sensors, 2020, 5, 2834-2842.	4.0	50
1395	Glove-based sensors for multimodal monitoring of natural sweat. Science Advances, 2020, 6, eabb8308.	4.7	86
1396	Recent Progress in Nanomaterial Enabled Chemical Sensors for Wearable Environmental Monitoring Applications. Advanced Functional Materials, 2020, 30, 2005703.	7.8	85
1397	Microfluidics for interrogating live intact tissues. Microsystems and Nanoengineering, 2020, 6, 69.	3.4	25
1398	Signal transfer via smart conductive networks for high temperature performing wearable electronics. Journal of Materials Science: Materials in Electronics, 2020, 31, 15996-16007.	1.1	1
1399	Continuous Heart Volume Monitoring by Fully Implantable Soft Strain Sensor. Advanced Healthcare Materials, 2020, 9, e2000855.	3.9	27
1400	Electrochemical detection of ascorbic acid in artificial sweat using aÂflexible alginate/CuO-modified electrode. Mikrochimica Acta, 2020, 187, 520.	2.5	37
1401	Recent Advances in Nanomaterialâ€Enabled Wearable Sensors: Material Synthesis, Sensor Design, and Personal Health Monitoring. Small, 2020, 16, e2002681.	5.2	133
1402	Highly stretchable conductive MWCNTâ€“PDMS composite with self-enhanced conductivity. Journal of Materials Chemistry C, 2020, 8, 13389-13395.	2.7	14
1403	Patterned, Wearable UV Indicators from Electrospun Photochromic Fibers and Yarns. Advanced Materials Technologies, 2020, 5, 2000564.	3.0	32
1404	Detachable Flexible ISFETâ€Based pH Sensor Array with a Flexible Connector. Advanced Electronic Materials, 2020, 6, 2000583.	2.6	8
1405	A Machineâ€Fabricated 3D Honeycombâ€Structured Flameâ€Retardant Triboelectric Fabric for Fire Escape and Rescue. Advanced Materials, 2020, 32, e2003897.	11.1	136
1406	Conical Microstructure Flexible High-Sensitivity Sensing Unit Adopting Chemical Corrosion. Sensors, 2020, 20, 4613.	2.1	3
1407	Pressure-Sensitive Adhesive with Controllable Adhesion for Fabrication of Ultrathin Soft Devices. ACS Applied Materials & Interfaces, 2020, 12, 40794-40801.	4.0	17

#	Article	IF	Citations
1408	Wearable Electrochemical Sensors for the Monitoring and Screening of Drugs. ACS Sensors, 2020, 5, 2679-2700.	4.0	227
1409	Realâ€Time Multiâ€Ion Detection in the Sweat Concentration Range Enabled by Flexible, Printed, and Microfluidicsâ€Integrated Organic Transistor Arrays. Advanced Materials Technologies, 2020, 5, 2000328.	3.0	41
1410	Symmetrical orientation of spiral-interconnects for high mechanical stability of stretchable electronics. , 2020, , .		1
1411	Ultra-Low Power on Skin ECG using RFID Communication. , 2020, , .		9
1412	Oxide nanomembrane induced assembly of a functional smart fiber composite with nanoporosity for an ultra-sensitive flexible glucose sensor. Journal of Materials Chemistry A, 2020, 8, 26119-26129.	5.2	28
1413	Recent Progress in Wearable Biosensors: From Healthcare Monitoring to Sports Analytics. Biosensors, 2020, 10, 205.	2.3	63
1414	Flexible Hybrid Sensor Systems with Feedback Functions. Advanced Functional Materials, 2021, 31, 2007436.	7.8	80
1415	Flexible Multiplexed In2O3 Nanoribbon Aptamer-Field-Effect Transistors for Biosensing. IScience, 2020, 23, 101469.	1.9	45
1416	Wearable sweat sensing for prolonged, semicontinuous, and nonobtrusive health monitoring. View, 2020, 1, 20200077.	2.7	53
1417	Fiber Electronics. , 2020, , .		4
1418	Skin-interfaced microfluidic system with personalized sweating rate and sweat chloride analytics for sports science applications. Science Advances, 2020, 6, .	4.7	110
1419	Recent Progress in Manufacturing Techniques of Printed and Flexible Sensors: A Review. Biosensors, 2020, 10, 199.	2.3	87
1420	Safe Human-Robot Interaction Using Variable Stiffness, Hyper-Redundancy, and Smart Robotic Skins. , 0, , .		0
1421	Emerging Telemedicine Tools for Remote COVID-19 Diagnosis, Monitoring, and Management. ACS Nano, 2020, 14, 16180-16193.	7.3	178
1422	Self-powered wearable electronics. Wearable Technologies, 2020, 1, .	1.6	36
1423	A handheld device to monitor physiological changes using sweat. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062036.	0.3	0
1424	The new generation of soft and wearable electronics for health monitoring in varying environment: From normal to extreme conditions. Materials Today, 2020, 41, 219-242.	8.3	125
1425	High precision epidermal radio frequency antenna via nanofiber network for wireless stretchable multifunction electronics. Nature Communications, 2020, 11, 5629.	5.8	48

#	Article	IF	Citations
1426	Heterogeneous integration of rigid, soft, and liquid materials for self-healable, recyclable, and reconfigurable wearable electronics. Science Advances, 2020, 6, .	4.7	118
1427	One-step electrodeposited MoS₂@Ni-mesh electrode for flexible and transparent asymmetric solid-state supercapacitors. Journal of Materials Chemistry A, 2020, 8, 24040-24052.	5.2	34
1428	Recent Advances in Noninvasive Biosensors for Forensics, Biometrics, and Cybersecurity. Sensors, 2020, 20, 5974.	2.1	13
1429	Inkjetâ€Printed Wearable Nanosystems for Selfâ€Powered Technologies. Advanced Materials Interfaces, 2020, 7, 2000015.	1.9	41
1430	Ionâ€Selective Sensors Based on Laserâ€Induced Graphene for Evaluating Human Hydration Levels Using Urine Samples. Advanced Materials Technologies, 2020, 5, 1901037.	3.0	34
1431	Flexible conducting platforms based on PEDOT and graphite nanosheets for electrochemical biosensing applications. Applied Surface Science, 2020, 525, 146440.	3.1	18
1432	Biosensors to support sustainable agriculture and food safety. TrAC - Trends in Analytical Chemistry, 2020, 128, 115906.	5.8	122
1433	Sweat monitoring beneath garments using passive, wireless resonant sensors interfaced with laser-ablated microfluidics. Npj Digital Medicine, 2020, 3, 62.	5.7	19
1434	Plasticizer-Free Thin-Film Sodium-Selective Optodes Inkjet-Printed on Transparent Plastic for Sweat Analysis. ACS Applied Materials & Interfaces, 2020, 12, 25616-25624.	4.0	21
1435	Nicotine Monitoring with a Wearable Sweat Band. ACS Sensors, 2020, 5, 1831-1837.	4.0	48
1436	An Onâ€Skin Electrode with Antiâ€Epidermalâ€Surfaceâ€Lipid Function Based on a Zwitterionic Polymer Brush. Advanced Materials, 2020, 32, e2001130.	11.1	74
1437	All-Soft Supercapacitors Based on Liquid Metal Electrodes with Integrated Functionalized Carbon Nanotubes. ACS Nano, 2020, 14, 5659-5667.	7.3	57
1438	Plantâ€Based Biodegradable Capacitive Tactile Pressure Sensor Using Flexible and Transparent Leaf Skeletons as Electrodes and Flower Petal as Dielectric Layer. Advanced Sustainable Systems, 2020, 4, 2000056.	2.7	59
1439	Wrist flexible heart pulse sensor integrated with a soft pump and a pneumatic balloon membrane. RSC Advances, 2020, 10, 17353-17358.	1.7	6
1440	A Wearable Supercapacitor Based on Conductive PEDOT:PSSâ€Coated Cloth and a Sweat Electrolyte. Advanced Materials, 2020, 32, e1907254.	11.1	282
1441	Mesoâ€Reconstruction of Wool Keratin 3D â€œMolecular Springsâ€• for Tunable Ultraâ€Sensitive and Highly Recovery Strain Sensors. Small, 2020, 16, e2000128.	5.2	33
1442	The Dynamic Response of Sweat Chloride to Changes in Exercise Load Measured by a Wearable Sweat Sensor. Scientific Reports, 2020, 10, 7699.	1.6	16
1443	Progress and challenges in fabrication of wearable sensors for health monitoring. Sensors and Actuators A: Physical, 2020, 312, 112105.	2.0	153

#	Article	IF	Citations
1444	Bending Strain-Tailored Magnetic and Electronic Transport Properties of Reactively Sputtered Î³â€²-Fe₄N/Muscovite Epitaxial Heterostructures toward Flexible Spintronics. ACS Applied Materials & Interfaces, 2020, 12, 27394-27404.	4.0	12
1445	A wearable sensor for the detection of sodium and potassium in human sweat during exercise. Talanta, 2020, 219, 121145.	2.9	79
1446	3D Crumpled Ultrathin 1T MoS₂ for Inkjet Printing of Mg-Ion Asymmetric Micro-supercapacitors. ACS Nano, 2020, 14, 7308-7318.	7.3	100
1447	Recent Advances in Flexible and Stretchable Sensing Systems: From the Perspective of System Integration. ACS Nano, 2020, 14, 6449-6469.	7.3	82
1448	Tunable ionic pressure sensor based on 3D printed ordered hierarchical mesh structure. Sensors and Actuators A: Physical, 2020, 308, 112012.	2.0	11
1449	Effect of nano-SiO2 hybridization of PDMS substrate on strain mismatch of flexible electronic film. Applied Physics Letters, 2020, 116, .	1.5	4
1450	Mechanistic insight in site-selective and anisotropic etching of prussian blue analogues toward designable complex architectures for efficient energy storage. Nanoscale, 2020, 12, 11112-11118.	2.8	29
1451	Experimental and theoretical analyses of curvature and surface strain in bent polymer films. Applied Physics Express, 2020, 13, 056502.	1.1	13
1452	A highly sensitive and wearable pressure sensor based on conductive polyacrylonitrile nanofibrous membrane via electroless silver plating. Chemical Engineering Journal, 2020, 394, 124960.	6.6	51
1453	From Molecular Reconstruction of Mesoscopic Functional Conductive Silk Fibrous Materials to Remote Respiration Monitoring. Small, 2020, 16, e2000203.	5.2	48
1454	Highly transparent, stretchable, and conformable silicone-based strain/pressure-sensitive capacitor using adhesive polydimethylsiloxane. Journal of Alloys and Compounds, 2020, 841, 155773.	2.8	9
1455	Ion selective electrodes utilizing a ferrocyanide doped redox active screen-printed solid contact - impact of electrode response to conditioning. Journal of Electroanalytical Chemistry, 2020, 870, 114262.	1.9	18
1456	Integrated Smart Janus Textile Bands for Self-Pumping Sweat Sampling and Analysis. ACS Sensors, 2020, 5, 1548-1554.	4.0	120
1457	Ratiometric Fluorescent Nanohybrid for Noninvasive and Visual Monitoring of Sweat Glucose. ACS Sensors, 2020, 5, 2096-2105.	4.0	108
1458	Recent advances in solid-contact ion-selective electrodes: functional materials, transduction mechanisms, and development trends. Chemical Society Reviews, 2020, 49, 4405-4465.	18.7	257
1459	Evaluation of Metal Oxide Thin-Film Electrolyte-Gated Field Effect Transistors for Glucose Monitoring in Small Volume of Body Analytes. IEEE Sensors Journal, 2020, , 1-1.	2.4	10
1460	Gold Coplanar Waveguide Resonator Integrated With a Microfluidic Channel for Aqueous Dielectric Detection. IEEE Sensors Journal, 2020, 20, 9825-9833.	2.4	52
1461	Polymers and Plastics Modified Electrodes for Biosensors: A Review. Molecules, 2020, 25, 2446.	1.7	23

#	Article	IF	Citations
1462	Trends in IoT based solutions for health care: Moving AI to the edge. Pattern Recognition Letters, 2020, 135, 346-353.	2.6	199
1463	Liquid Metal Based Islandâ€Bridge Architectures for All Printed Stretchable Electrochemical Devices. Advanced Functional Materials, 2020, 30, 2002041.	7.8	95
1464	Highly Flexible and Twistable Freestanding Single Crystalline Magnetite Film with Robust Magnetism. Advanced Functional Materials, 2020, 30, 2003495.	7.8	42
1465	Largeâ€Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors. Advanced Materials, 2020, 32, e2001258.	11.1	37
1466	Skin-inspired electronics: emerging semiconductor devices and systems. Journal of Semiconductors, 2020, 41, 041601.	2.0	63
1467	Selfâ€Healable Capacitive Photodetectors with Stretchability Based on Composite of ZnS:Cu Particles and Reversibly Crosslinkable Silicone Elastomer. Advanced Materials Technologies, 2020, 5, 2000327.	3.0	8
1468	Nano-engineering the material structure of preferentially oriented nano-graphitic carbon for making high-performance electrochemical micro-sensors. Scientific Reports, 2020, 10, 9444.	1.6	11
1469	Soft Electronics for the Skin: From Health Monitors to Humanâ€“Machine Interfaces. Advanced Materials Technologies, 2020, 5, .	3.0	80
1470	Sensitive piezoresistive sensors using ink-modified plant fiber sponges. Chemical Engineering Journal, 2020, 401, 126029.	6.6	22
1471	Optical Sensing with a Potentiometric Sensing Array by Prussian Blue Film Integrated Closed Bipolar Electrodes. Analytical Chemistry, 2020, 92, 9138-9145.	3.2	28
1472	Transdermal theranostics. View, 2020, 1, e21.	2.7	17
1473	Soft and ion-conducting hydrogel artificial tongue for astringency perception. Science Advances, 2020, 6, eaba5785.	4.7	74
1474	Skin-Interfaced Sensors in Digital Medicine: from Materials to Applications. Matter, 2020, 2, 1414-1445.	5.0	134
1475	Flexible Electronics and Materials for Synchronized Stimulation and Monitoring in Multiâ€Encephalic Regions. Advanced Functional Materials, 2020, 30, 2002644.	7.8	27
1476	Interface Engineering of Si Hybrid Nanostructures for Chemical and Biological Sensing. Advanced Materials Technologies, 2020, 5, .	3.0	10
1477	Bioâ€Derived Natural Materials Based Triboelectric Devices for Selfâ€Powered Ubiquitous Wearable and Implantable Intelligent Devices. Advanced Sustainable Systems, 2020, 4, 2000108.	2.7	42
1478	Graphene-Enabled Adaptive Infrared Textiles. Nano Letters, 2020, 20, 5346-5352.	4.5	98
1479	Metallic nanocrystals with low angle grain boundary for controllable plastic reversibility. Nature Communications, 2020, 11, 3100.	5.8	53

#	Article	IF	Citations
1480	Transient Epidermal Electronics for Learning the Physiological Signatures. , 2020, , .		1
1481	Stretchable conductive adhesives for connection of electronics in wearable devices based on metal-polymer conductors and carbon nanotubes. Composites Science and Technology, 2020, 197, 108237.	3.8	28
1482	Multi-parameter readout chip for interfacing with amperometric, potentiometric and impedometric sensors for wearable and point-of-care test applications. Microelectronics Journal, 2020, 100, 104769.	1.1	3
1483	Principles of long-term fluids handling in paper-based wearables with capillaryâ€“evaporative transport. Biomicrofluidics, 2020, 14, 034112.	1.2	32
1484	Biocompatible and flexible paper-based metal electrode for potentiometric wearable wireless biosensing. Science and Technology of Advanced Materials, 2020, 21, 379-387.	2.8	21
1485	Analytical errors in biosensors employing combined counter/pseudo-reference electrodes. Results in Chemistry, 2020, 2, 100028.	0.9	4
1486	Wearable and Stretchable Strain Sensors: Materials, Sensing Mechanisms, and Applications. Advanced Intelligent Systems, 2020, 2, 2000039.	3.3	327
1487	Cryoâ€Transferred Ultrathin and Stretchable Epidermal Electrodes. Small, 2020, 16, e2000450.	5.2	33
1488	Directed Assembly of Liquid Metalâ€“Elastomer Conductors for Stretchable and Selfâ€Healing Electronics. Advanced Materials, 2020, 32, e2001642.	11.1	72
1489	Polymer nanocomposite meshes for flexible electronic devices. Progress in Polymer Science, 2020, 107, 101279.	11.8	119
1490	Integration designs toward newâ€generation wearable energy supplyâ€sensor systems for realâ€time health monitoring: A minireview. InformaÃ•nÃ-MateriÃ¡ly, 2020, 2, 1109-1130.	8.5	35
1492	Sensitivity-Tunable and Disposable Ion-Sensing Platform Based on Reverse Electrodialysis. Analytical Chemistry, 2020, 92, 8776-8783.	3.2	9
1493	Mediator-free electron-transfer on patternable hierarchical meso/macro porous bienzyme interface for highly-sensitive sweat glucose and surface electromyography monitoring. Sensors and Actuators B: Chemical, 2020, 312, 127962.	4.0	47
1494	Salivary Cortisol Determination on Smartphone-Based Differential Pulse Voltammetry System. Sensors, 2020, 20, 1422.	2.1	32
1495	Ultraminiaturized Stretchable Strain Sensors Based on Single Silicon Nanowires for Imperceptible Electronic Skins. Nano Letters, 2020, 20, 2478-2485.	4.5	51
1496	Highly sensitive and flexible wearable pressure sensor with dielectric elastomer and carbon nanotube electrodes. Sensors and Actuators A: Physical, 2020, 305, 111941.	2.0	51
1497	Reviewâ€"Flexible and Stretchable Electrochemical Sensing Systems: Materials, Energy Sources, and Integrations. Journal of the Electrochemical Society, 2020, 167, 037573.	1.3	74
1498	A Self-Powered Flexible Thermoelectric Sensor and Its Application on the Basis of the Hollow PEDOT:PSS Fiber. Polymers, 2020, 12, 553.	2.0	29

#	Article	IF	Citations
1499	Photo-Rechargeable Fabrics as Sustainable and Robust Power Sources for Wearable Bioelectronics. Matter, 2020, 2, 1260-1269.	5.0	204
1501	A wearable lab-on-a-patch platform with stretchable nanostructured biosensor for non-invasive immunodetection of biomarker in sweat. Biosensors and Bioelectronics, 2020, 156, 112133.	5.3	107
1502	Highly stretchable potentiometric ion sensor based on surface strain redistributed fiber for sweat monitoring. Talanta, 2020, 214, 120869.	2.9	35
1503	All-organic flexible fabric antenna for wearable electronics. Journal of Materials Chemistry C, 2020, 8, 5662-5667.	2.7	43
1504	Enhancementâ€Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular Deâ€Doping. Advanced Materials, 2020, 32, e2000270.	11.1	109
1505	Smart Textiles for Electricity Generation. Chemical Reviews, 2020, 120, 3668-3720.	23.0	644
1506	Self-Powered Active Spherical Triboelectric Sensor for Fluid Velocity Detection. IEEE Nanotechnology Magazine, 2020, 19, 230-235.	1.1	22
1507	Skin-Patchable Electrodes for Biosensor Applications: A Review. ACS Biomaterials Science and Engineering, 2020, 6, 1823-1835.	2.6	98
1508	Miniaturised Electrochemical Analyser for Glucose Determination Based on Chitosan/GOD/Electroreduced Graphene Oxide Sensor. International Journal of Electrochemical Science, 2020, , 2458-2469.	0.5	6
1509	Contact lens-based lysozyme detection in tear using a mobile sensor. Lab on A Chip, 2020, 20, 1493-1502.	3.1	21
1510	A wearable freestanding electrochemical sensing system. Science Advances, 2020, 6, eaaz0007.	4.7	87
1511	A Four-Level Switching Scheme for SAR ADCs with 87.5% Area Saving and 97.85% Energy-Reduction. Circuits, Systems, and Signal Processing, 2020, 39, 4792-4809.	1.2	10
1512	Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. ACS Sensors, 2020, 5, 1582-1588.	4.0	14
1513	AI/ML-Enabled 2-D - RuS₂ Nanomaterial-Based Multifunctional, Low Cost, Wearable Sensor Platform for Non-Invasive Point of Care Diagnostics. IEEE Sensors Journal, 2020, 20, 8437-8444.	2.4	17
1514	Flexible Micropillar Array for Pressure Sensing in High Density Using Image Sensor. Advanced Materials Interfaces, 2020, 7, 1902205.	1.9	11
1515	Comparison of Colorimetric Analyses to Determine Cortisol in Human Sweat. ACS Omega, 2020, 5, 8211-8218.	1.6	41
1516	Cuâ€“EGaIn enabled stretchable e-skin for interactive electronics and CT assistant localization. Materials Horizons, 2020, 7, 1845-1853.	6.4	62
1517	Recent advances in voltammetric, amperometric and ion-selective (bio)sensors fabricated by microengineering manufacturing approaches. Current Opinion in Electrochemistry, 2020, 23, 21-25.	2.5	20

#	Article	IF	Citations
1518	PtNPs decorated chemically derived graphene and carbon nanotubes for sensitive and selective glucose biosensing. Journal of Electroanalytical Chemistry, 2020, 861, 113990.	1.9	38
1519	Spatiotemporal event detection: a review. International Journal of Digital Earth, 2020, 13, 1339-1365.	1.6	57
1520	Field Emission Cathodes to Form an Electron Beam Prepared from Carbon Nanotube Suspensions. Micromachines, 2020, 11, 260.	1.4	12
1522	Interdigital sensors: Biomedical, environmental and industrial applications. Sensors and Actuators A: Physical, 2020, 305, 111923.	2.0	40
1523	Evaluation for regional difference of skin-gas ethanol and sweat rate using alcohol dehydrogenase-mediated fluorometric gas-imaging system (sniff-cam). Analyst, The, 2020, 145, 2915-2924.	1.7	6
1524	Solid-Contact Ion-Selective Electrodes: Response Mechanisms, Transducer Materials and Wearable Sensors. Membranes, 2020, 10, 128.	1.4	73
1525	Highly stretchable and self-healing strain sensors for motion detection in wireless human-machine interface. Nano Energy, 2020, 76, 105064.	8.2	118
1526	Epidermal Patch with Glucose Biosensor: pH and Temperature Correction toward More Accurate Sweat Analysis during Sport Practice. Analytical Chemistry, 2020, 92, 10153-10161.	3.2	116
1527	Sign-to-speech translation using machine-learning-assisted stretchable sensor arrays. Nature Electronics, 2020, 3, 571-578.	13.1	513
1528	Hybrid hydrogel films with graphene oxide for continuous saliva-level monitoring. Journal of Materials Chemistry C, 2020, 8, 9655-9662.	2.7	8
1529	Study of the Dielectric Properties of Artificial Sweat Mixtures at Microwave Frequencies. Biosensors, 2020, 10, 62.	2.3	12
1530	An Impedance Sensor in Detection of Immunoglobulin G with Interdigitated Electrodes on Flexible Substrate. Applied Sciences (Switzerland), 2020, 10, 4012.	1.3	11
1531	Multisensor Systems and Arrays for Medical Applications Employing Naturally-Occurring Compounds and Materials. Sensors, 2020, 20, 3551.	2.1	14
1532	Artificial intelligence biosensors: Challenges and prospects. Biosensors and Bioelectronics, 2020, 165, 112412.	5.3	153
1533	Fully stretchable active-matrix organic light-emitting electrochemical cell array. Nature Communications, 2020, 11, 3362.	5.8	106
1534	Temperature Sensor with a Water-Dissolvable Ionic Gel for Ionic Skin. ACS Applied Materials & Interfaces, 2020, 12, 36449-36457.	4.0	59
1535	Advances in Sweat Wearables: Sample Extraction, Real-Time Biosensing, and Flexible Platforms. ACS Applied Materials & Interfaces, 2020, 12, 34337-34361.	4.0	72
1536	Lab-On-Chip, Internet of Things, Analytics and Health Care 4.0: A synergistic future forward. Journal of Physics: Conference Series, 2020, 1502, 012023.	0.3	2

#	Article	IF	Citations
1537	Bacterial Sensing and Biofilm Monitoring for Infection Diagnostics. Macromolecular Bioscience, 2020, 20, e2000129.	2.1	19
1538	Facile and Low-Cost Fabrication of a Thread/Paper-Based Wearable System for Simultaneous Detection of Lactate and pH in Human Sweat. Advanced Fiber Materials, 2020, 2, 265-278.	7.9	60
1539	A Portable Potentiostat for Three-Electrode Electrochemical Sensor. Journal of Physics: Conference Series, 2020, 1550, 042049.	0.3	8
1540	A Smartphone-Interfaced, Flexible Electrochemical Biosensor Based on Graphene Ink for Selective Detection of Dopamine. IEEE Sensors Journal, 2020, 20, 13204-13211.	2.4	17
1541	Population neuroscience in addiction research. , 2020, , 331-350.		0
1542	Deepâ€Learningâ€Enabled MXeneâ€Based Artificial Throat: Toward Sound Detection and Speech Recognition. Advanced Materials Technologies, 2020, 5, 2000262.	3.0	45
1543	Cotton thread-based wearable sensor for non-invasive simultaneous diagnosis of diabetes and kidney failure. Sensors and Actuators B: Chemical, 2020, 321, 128549.	4.0	74
1544	Wearable piezoelectric mass sensor based on pH sensitive hydrogels for sweat pH monitoring. Scientific Reports, 2020, 10, 10854.	1.6	50
1545	Dual-Mode Photonic Sensor Array for Detecting and Discriminating Hydrazine and Aliphatic Amines. ACS Applied Materials & Interfaces, 2020, 12, 11084-11093.	4.0	38
1546	Self-Powered, Self-Healed, and Shape-Adaptive Ultraviolet Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 9755-9765.	4.0	34
1547	Fully Integrated, Simple, and Low-Cost Electrochemical Sensor Array for in Situ Water Quality Monitoring. ACS Sensors, 2020, 5, 412-422.	4.0	77
1548	Blood Glucose Level Monitoring Using an FMCW Millimeter-Wave Radar Sensor. Remote Sensing, 2020, 12, 385.	1.8	41
1549	A Novel Sensorised Insole for Sensing Feet Pressure Distributions. Sensors, 2020, 20, 747.	2.1	23
1550	Liquidâ€State Optoelectronics Using Liquid Metal. Advanced Electronic Materials, 2020, 6, 1901135.	2.6	14
1551	Application of highly stretchy PDMS-based sensing fibers for sensitive weavable strain sensors. Journal of Materials Science: Materials in Electronics, 2020, 31, 4788-4796.	1.1	9
1552	Nanoscale triboelectrification gated transistor. Nature Communications, 2020, 11, 1054.	5.8	15
1553	Recent progress, challenges, and prospects of fully integrated mobile and wearable point-of-care testing systems for self-testing. Chemical Society Reviews, 2020, 49, 1812-1866.	18.7	310
1554	Injectable Biomedical Devices for Sensing and Stimulating Internal Body Organs. Advanced Materials, 2020, 32, e1907478.	11.1	42

#	Article	IF	Citations
1555	Microscale Biosensor Array Based on Flexible Polymeric Platform toward Lab-on-a-Needle: Real-Time Multiparameter Biomedical Assays on Curved Needle Surfaces. ACS Sensors, 2020, 5, 1363-1373.	4.0	37
1556	Lipophilic Multiâ€walled Carbon Nanotubeâ€based Solid Contact Potassium Ionâ€selective Electrodes with Reproducible Standard Potentials. A Comparative Study. Electroanalysis, 2020, 32, 867-873.	1.5	28
1557	Noninvasive monitoring of diabetes and hypoxia by wearable flow-through biosensors. Current Opinion in Electrochemistry, 2020, 23, 16-20.	2.5	19
1558	Precision medicine, bioanalytics and nanomaterials: toward a new generation of personalized portable diagnostics. Analyst, The, 2020, 145, 2841-2853.	1.7	11
1559	Flexible potentiometric pH sensors for wearable systems. RSC Advances, 2020, 10, 8594-8617.	1.7	144
1560	WGM-Based Sensing of Characterized Glucose- Aqueous Solutions at mm-Waves. IEEE Access, 2020, 8, 38809-38825.	2.6	41
1561	A chemically modified laser-induced porous graphene based flexible and ultrasensitive electrochemical biosensor for sweat glucose detection. Sensors and Actuators B: Chemical, 2020, 311, 127866.	4.0	178
1562	A Simple Drop-and-Dry Approach to Grass-Like Multifunctional Nanocoating on Flexible Cotton Fabrics Using In Situ-Generated Coating Solution Comprising Titanium-Oxo Clusters and Silver Nanoparticles. ACS Applied Materials & Interfaces, 2020, 12, 12093-12100.	4.0	19
1563	Stretchable Sensors for Nanomolar Glucose Detection. Advanced Materials Technologies, 2020, 5, 1900843.	3.0	16
1564	Vertically Aligned Gold Nanowires as Stretchable and Wearable Epidermal Ion-Selective Electrode for Noninvasive Multiplexed Sweat Analysis. Analytical Chemistry, 2020, 92, 4647-4655.	3.2	108
1565	Highly Stretchable Polymer Composite with Strainâ€Enhanced Electromagnetic Interference Shielding Effectiveness. Advanced Materials, 2020, 32, e1907499.	11.1	242
1566	3D textile structures with integrated electroactive electrodes for wearable electrochemical sensors. Journal of the Textile Institute, 2020, 111, 1587-1595.	1.0	9
1567	Influence of Flexibility of the Interconnects on the Dynamic Bending Reliability of Flexible Hybrid Electronics. Electronics (Switzerland), 2020, 9, 238.	1.8	9
1568	Recent Developments of Flexible and Stretchable Electrochemical Biosensors. Micromachines, 2020, 11, 243.	1.4	57
1569	Physiological mechanisms determining eccrine sweat composition. European Journal of Applied Physiology, 2020, 120, 719-752.	1.2	148
1570	Investigation of Cortisol Dynamics in Human Sweat Using a Graphene-Based Wireless mHealth System. Matter, 2020, 2, 921-937.	5.0	269
1571	Facile Fabrication of Stretchable Touch-Responsive Perovskite Light-Emitting Diodes Using Robust Stretchable Composite Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 14408-14415.	4.0	46
1572	Aerosol-Jet-Printed Graphene Immunosensor for Label-Free Cytokine Monitoring in Serum. ACS Applied Materials & Interfaces, 2020, 12, 8592-8603.	4.0	87

#	Article	IF	Citations
1573	Selective Ion Sweeping on Prussian Blue Analogue Nanoparticles and Activated Carbon for Electrochemical Kinetic Energy Harvesting. Nano Letters, 2020, 20, 1800-1807.	4.5	8
1574	Flexible inorganic bioelectronics. Npj Flexible Electronics, 2020, 4, .	5.1	134
1575	Electroforming-Free, Flexible, and Reliable Resistive Random-Access Memory Based on an Ultrathin TaO_x Film. ACS Applied Materials & Interfaces, 2020, 12, 10681-10688.	4.0	26
1576	Ti₃C₂T_x MXene-Reduced Graphene Oxide Composite Electrodes for Stretchable Supercapacitors. ACS Nano, 2020, 14, 3576-3586.	7.3	277
1577	Flex-GO (Flexible graphene oxide) sensor for electrochemical monitoring lactate in low-volume passive perspired human sweat. Talanta, 2020, 214, 120810.	2.9	55
1578	Allâ€Polymer Highâ€Performance Photodetector through Lamination. Advanced Electronic Materials, 2020, 6, 1901017.	2.6	30
1579	Progress in achieving high-performance piezoresistive and capacitive flexible pressure sensors: A review. Journal of Materials Science and Technology, 2020, 43, 175-188.	5.6	225
1580	Nanograting Structured Ultrathin Substrate for Ultraflexible Organic Photovoltaics. Small Methods, 2020, 4, 1900762.	4.6	18
1581	Simultaneous detection of salivary Î”9-tetrahydrocannabinol and alcohol using a Wearable Electrochemical Ring Sensor. Talanta, 2020, 211, 120757.	2.9	95
1582	Wearable biochemical sensors for human health monitoring: sensing materials and manufacturing technologies. Journal of Materials Chemistry B, 2020, 8, 3423-3436.	2.9	68
1583	The Role and Challenges of Body Channel Communication in Wearable Flexible Electronics. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 283-296.	2.7	28
1584	Imperceptible magnetic sensor matrix system integrated with organic driver and amplifier circuits. Science Advances, 2020, 6, eaay6094.	4.7	68
1585	Electrochemical Characterization of TEMPO Radical in Ionic Liquids. Electrochemistry, 2020, 88, 34-38.	0.6	13
1586	Materials, systems, and devices for wearable bioelectronics. , 2020, , 1-48.		0
1587	Wearable biosensors and sample handling strategies. , 2020, , 65-88.		10
1588	E-skin and wearable systems for health care. , 2020, , 133-178.		9
1589	â€œSelfâ€Matchedâ€•Tribo/Piezoelectric Nanogenerators Using Vaporâ€Induced Phaseâ€Separated Poly(vinylidene fluoride) and Recombinant Spider Silk. Advanced Materials, 2020, 32, e1907336.	11.1	63
1590	Malleability and Pliability of Silkâ€Derived Electrodes for Efficient Deformable Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903357.	10.2	19

#	Article	IF	Citations
1591	Wearable multiplexed biosensor system toward continuous monitoring of metabolites. Biosensors and Bioelectronics, 2020, 153, 112038.	5.3	92
1592	Multiaxially-stretchable kirigami-patterned mesh design for graphene sensor devices. Nano Research, 2020, 13, 1406-1412.	5.8	33
1593	Design of a low-cost tactile robotic sleeve for autonomous endoscopes and catheters. Measurement and Control, 2020, 53, 613-626.	0.9	3
1594	Continuous Energy Harvesting and Motion Sensing from Flexible Electrochemical Nanogenerators: Toward Smart and Multifunctional Textiles. ACS Nano, 2020, 14, 2308-2315.	7.3	50
1595	Ultraflexible and transparent electroluminescent skin for real-time and super-resolution imaging of pressure distribution. Nature Communications, 2020, 11, 663.	5.8	104
1596	A Green Triboelectric Nano-Generator Composite of Degradable Cellulose, Piezoelectric Polymers of PVDF/PA6, and Nanoparticles of BaTiO3. Sensors, 2020, 20, 506.	2.1	32
1597	Smartphone-based portable electrochemical biosensing system for detection of circulating microRNA-21 in saliva as a proof-of-concept. Sensors and Actuators B: Chemical, 2020, 308, 127718.	4.0	108
1598	The review of Labâ€onâ€PCB for biomedical application. Electrophoresis, 2020, 41, 1433-1445.	1.3	23
1599	Wearable chemical sensors. , 2020, , 49-63.		2
1600	Enabling Technologies for Personalized and Precision Medicine. Trends in Biotechnology, 2020, 38, 497-518.	4.9	169
1601	Recent insights into functionalized electrospun nanofibrous films for chemo-/bio-sensors. TrAC - Trends in Analytical Chemistry, 2020, 124, 115813.	5.8	51
1602	A Microfluidic Ion Sensor Array. Small, 2020, 16, e1906436.	5.2	12
1603	A Flexible Carbon Nanotube Senâ€Memory Device. Advanced Materials, 2020, 32, e1907288.	11.1	48
1604	Smart Sensing Systems Using Wearable Optoelectronics. Advanced Intelligent Systems, 2020, 2, 1900144.	3.3	19
1605	Microdroplet-captured tapes for rapid sampling and SERS detection of food contaminants. Biosensors and Bioelectronics, 2020, 152, 112013.	5.3	50
1606	Broadband photoresponse of flexible textured reduced graphene oxide films. Thin Solid Films, 2020, 697, 137785.	0.8	7
1607	Cyberâ€“Physiochemical Interfaces. Advanced Materials, 2020, 32, e1905522.	11.1	64
1608	Interfacial Phenomena of Advanced Composite Materials toward Wearable Platforms for Biological and Environmental Monitoring Sensors, Armor, and Soft Robotics. Advanced Materials Interfaces, 2020, 7, 1901851.	1.9	18

#	Article	IF	Citations
1609	Wearable capillary microfluidics for continuous perspiration sensing. Talanta, 2020, 212, 120786.	2.9	31
1610	Reliable Breathing Tracking With Wearable Mask Device. IEEE Sensors Journal, 2020, 20, 5510-5518.	2.4	20
1611	KickStat: A Coin-Sized Potentiostat for High-Resolution Electrochemical Analysis. Sensors, 2020, 20, 2407.	2.1	49
1612	Bacterial cellulose-based electrochemical sensing platform: A smart material for miniaturized biosensors. Electrochimica Acta, 2020, 349, 136341.	2.6	63
1613	Solid-Contact Ion-Selective and Reference Electrodes Covalently Attached to Functionalized Poly(ethylene terephthalate). Analytical Chemistry, 2020, 92, 7621-7629.	3.2	24
1614	All-Inkjet-Printed Flexible Nanobio-Devices with Efficient Electrochemical Coupling Using Amphiphilic Biomaterials. ACS Applied Materials & Interfaces, 2020, 12, 24231-24241.	4.0	25
1615	A Bioinspired Wireless Epidermal Photoreceptor for Artificial Skin Vision. Advanced Functional Materials, 2020, 30, 2000381.	7.8	24
1616	Phaseâ€Regulated Sensing Mechanism of MoS 2 Based Nanohybrids toward Pointâ€ofâ€Care Prostate Cancer Diagnosis. Small, 2020, 16, 2000307.	5.2	13
1617	Characteristics of humidity in classrooms with stack ventilation and development of calculation models of humidity based on the experiment. Journal of Building Engineering, 2020, 31, 101381.	1.6	9
1618	On-Site Therapeutic Drug Monitoring. Trends in Biotechnology, 2020, 38, 1262-1277.	4.9	128
1619	Cost-Efficient Flexible Supercapacitive Tactile Sensor With Superior Sensitivity and High Spatial Resolution for Human-Robot Interaction. IEEE Access, 2020, 8, 64836-64845.	2.6	16
1620	Electronic Skins for Robotics and Wearables. , 2020, , .		1
1621	Recent Advances on Thermal Management of Flexible Inorganic Electronics. Micromachines, 2020, 11, 390.	1.4	4
1622	Ultrasensitive micro/nanocrack-based graphene nanowall strain sensors derived from the substrate's Poisson's ratio effect. Journal of Materials Chemistry A, 2020, 8, 10310-10317.	5.2	28
1623	Wireless smart contact lens for diabetic diagnosis and therapy. Science Advances, 2020, 6, eaba3252.	4.7	255
1624	Wearable Textile Supercapacitors for Self-Powered Enzyme-Free Smartsensors. ACS Applied Materials & Interfaces, 2020, 12, 21779-21787.	4.0	34
1625	Novel Flexible Triboelectric Nanogenerator based on Metallized Porous PDMS and Parylene C. Energies, 2020, 13, 1625.	1.6	27
1626	Mechanical Tolerance of Cascade Bioreactions via Adaptive Curvature Engineering for Epidermal Bioelectronics. Advanced Materials, 2020, 32, e2000991.	11.1	17

#	Article	IF	Citations
1627	Clinical Opportunities for Continuous Biosensing and Closed-Loop Therapies. Trends in Chemistry, 2020, 2, 319-340.	4.4	39
1628	SLOCK (sensor for circadian clock): passive sweat-based chronobiology tracker. Lab on A Chip, 2020, 20, 1947-1960.	3.1	32
1629	Biofuel-powered soft electronic skin with multiplexed and wireless sensing for human-machine interfaces. Science Robotics, 2020, 5, .	9.9	385
1630	Highly flexible and conductive poly (3, 4-ethylene dioxythiophene)-poly (styrene sulfonate) anchored 3-dimensional porous graphene network-based electrochemical biosensor for glucose and pH detection in human perspiration. Biosensors and Bioelectronics, 2020, 160, 112220.	5.3	93
1631	Musselâ€Inspired Hydrogels for Selfâ€Adhesive Bioelectronics. Advanced Functional Materials, 2020, 30, 1909954.	7.8	285
1632	Charge Pumping Strategy for Rotation and Sliding Type Triboelectric Nanogenerators. Advanced Energy Materials, 2020, 10, 2000605.	10.2	124
1633	Conformal, waterproof electronic decals for wireless monitoring of sweat and vaginal pH at the point-of-care. Biosensors and Bioelectronics, 2020, 160, 112206.	5.3	38
1634	Validity of a wearable sweat rate monitor and routine sweat analysis techniques using heat acclimation. Journal of Thermal Biology, 2020, 90, 102577.	1.1	8
1635	Wearable non-invasive monitors of diabetes and hypoxia through continuous analysis of sweat. Talanta, 2020, 215, 120922.	2.9	31
1636	A tailored, electronic textile conformable suit for large-scale spatiotemporal physiological sensing in vivo. Npj Flexible Electronics, 2020, 4, .	5.1	102
1637	Nanostrip flexible microwave enzymatic biosensor for noninvasive epidermal glucose sensing. Nanoscale Horizons, 2020, 5, 934-943.	4.1	34
1638	Recent Advances in Printed Capacitive Sensors. Micromachines, 2020, 11, 367.	1.4	35
1639	Microfluidic Point-of-Care Devices: New Trends and Future Prospects for eHealth Diagnostics. Sensors, 2020, 20, 1951.	2.1	119
1640	Electrochemical biosensors: a nexus for precision medicine. Drug Discovery Today, 2021, 26, 69-79.	3.2	40
1641	Flexible and wearable monitoring systems for biomedical applications in organic flexible electronics: Fundamentals, devices, and applications. , 2021, , 599-625.		5
1642	Flexible and Stretchable Microwave Electronics: Past, Present, and Future Perspective. Advanced Materials Technologies, 2021, 6, 2000759.	3.0	39
1643	A Wearable Electrochemical Sensing System for Non-Invasive Monitoring of Lithium Drug in Bipolar Disorder. IEEE Sensors Journal, 2021, 21, 9649-9656.	2.4	11
1644	A Smartwatch Integrated with a Paperâ€based Microfluidic Patch for Sweat Electrolytes Monitoring. Electroanalysis, 2021, 33, 643-651.	1.5	27

#	Article	IF	Citations
1645	Medium-distance affordable, flexible and wireless epidermal sensor for pH monitoring in sweat. Talanta, 2021, 222, 121502.	2.9	67
1646	Stretchable gold fiber-based wearable textile electrochemical biosensor for lactate monitoring in sweat. Talanta, 2021, 222, 121484.	2.9	104
1647	An Integrated Paper-Based Microfluidic Device for Real-Time Sweat Potassium Monitoring. IEEE Sensors Journal, 2021, 21, 9642-9648.	2.4	35
1648	Functional Fibers and Fabrics for Soft Robotics, Wearables, and Humanâ€"Robot Interface. Advanced Materials, 2021, 33, e2002640.	11.1	278
1649	Highâ€Mobility Organic Lightâ€Emitting Semiconductors and Its Optoelectronic Devices. Small Structures, 2021, 2, 2000083.	6.9	47
1650	Wireless wearable wristband for continuous sweat pH monitoring. Sensors and Actuators B: Chemical, 2021, 327, 128948.	4.0	30
1651	Encapsulating enzyme into metal-organic framework during in-situ growth on cellulose acetate nanofibers as self-powered glucose biosensor. Biosensors and Bioelectronics, 2021, 171, 112690.	5.3	90
1652	Fibrous Materials for Flexible Liâ€"S Battery. Advanced Energy Materials, 2021, 11, 2002580.	10.2	85
1653	A TPA-DCPP organic semiconductor film-based room temperature NH3 sensor for insight into the sensing properties. Sensors and Actuators B: Chemical, 2021, 327, 128940.	4.0	25
1654	Electrochemical multi-analyte point-of-care perspiration sensors using on-chip three-dimensional graphene electrodes. Analytical and Bioanalytical Chemistry, 2021, 413, 763-777.	1.9	37
1655	Atomic Nanoarchitectonics for Catalysis. Advanced Materials Interfaces, 2021, 8, 2001395.	1.9	15
1656	Intelligent soccer system based on biosensor network technology. Measurement: Journal of the International Measurement Confederation, 2021, 173, 108564.	2.5	1
1657	Advances in triboelectric nanogenerators for biomedical sensing. Biosensors and Bioelectronics, 2021, 171, 112714.	5.3	159
1658	Hydrogel Cryoâ€Microtomy Continuously Making Soft Electronic Devices. Advanced Functional Materials, 2021, 31, 2008355.	7.8	19
1659	Multifunctional conductive hydrogel-based flexible wearable sensors. TrAC - Trends in Analytical Chemistry, 2021, 134, 116130.	5.8	207
1660	Eco-friendly Strategies for the Material and Fabrication of Wearable Sensors. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1323-1346.	2.7	35
1661	Electronic Skins for Healthcare Monitoring and Smart Prostheses. Annual Review of Control, Robotics, and Autonomous Systems, 2021, 4, 629-650.	7.5	12
1662	How is flexible electronics advancing neuroscience research?. Biomaterials, 2021, 268, 120559.	5.7	32

#	Article	IF	Citations
1663	Facile preparation and characterization of nanostructured ZnO/CuO composite thin film for sweat concentration sensing applications. Materials Science in Semiconductor Processing, 2021, 121, 105428.	1.9	26
1664	Flexible pressure sensor with high sensitivity and fast response for electronic skin using near-field electrohydrodynamic direct writing. Organic Electronics, 2021, 89, 106044.	1.4	25
1665	Topological comparison of unipolar and complementary digital inverter circuits. Organic Electronics, 2021, 89, 106034.	1.4	8
1666	Materials, Devices, and Systems of Onâ€Skin Electrodes for Electrophysiological Monitoring and Humanâ€“Machine Interfaces. Advanced Science, 2021, 8, 2001938.	5.6	168
1667	Wearable sensor networks for patient health monitoring: challenges, applications, future directions, and acoustic sensor challenges. , 2021, , 189-221.		6
1668	A Wearable Nutrition Tracker. Advanced Materials, 2021, 33, e2006444.	11.1	70
1669	A wearable battery-free wireless and skin-interfaced microfluidics integrated electrochemical sensing patch for on-site biomarkers monitoring in human perspiration. Biosensors and Bioelectronics, 2021, 175, 112844.	5.3	66
1670	FullyPrinted Flexible Plasmonic Metafilms with Directional Color Dynamics. Advanced Science, 2021, 8, 2002419.	5.6	20
1671	A review of biomarkers in the context of type 1 diabetes: Biological sensing for enhanced glucose control. Bioengineering and Translational Medicine, 2021, 6, e10201.	3.9	33
1672	Bioâ€Inspired Ionic Skin for Theranostics. Advanced Functional Materials, 2021, 31, 2008020.	7.8	99
1673	A highly integrated sensing paper for wearable electrochemical sweat analysis. Biosensors and Bioelectronics, 2021, 174, 112828.	5.3	113
1674	Textile Composite Electrodes for Flexible Batteries and Supercapacitors: Opportunities and Challenges. Advanced Energy Materials, 2021, 11, 2002838.	10.2	78
1675	Sensing of inorganic ions in microfluidic devices. Sensors and Actuators B: Chemical, 2021, 329, 129171.	4.0	28
1676	Continuous sweat lactate monitoring system with integrated screen-printed MgO-templated carbon-lactate oxidase biosensor and microfluidic sweat collector. Electrochimica Acta, 2021, 368, 137620.	2.6	47
1677	Microneedle based electrochemical (Bio)Sensing: Towards decentralized and continuous health status monitoring. TrAC - Trends in Analytical Chemistry, 2021, 135, 116148.	5.8	54
1678	How Far Are We from Achieving Selfâ€Powered Flexible Health Monitoring Systems: An Energy Perspective. Advanced Energy Materials, 2021, 11, 2002646.	10.2	70
1679	Strain Engineering in 2D Materialâ€Based Flexible Optoelectronics. Small Methods, 2021, 5, e2000919.	4.6	80
1680	Additive Manufacturable Materials for Electrochemical Biosensor Electrodes. Advanced Functional Materials, 2021, 31, 2006407.	7.8	58

#	Article	IF	Citations
1681	Tailored and Highly Stretchable Sensor Prepared by Crosslinking an Enhanced 3D Printed UVâ€Curable Sacrificial Mold. Advanced Functional Materials, 2021, 31, 2008729.	7.8	52
1682	Narrower Nanoribbon Biosensors Fabricated by Chemical Lift-off Lithography Show Higher Sensitivity. ACS Nano, 2021, 15, 904-915.	7.3	33
1683	A wearable biosensing system with in-sensor adaptive machine learning for hand gesture recognition. Nature Electronics, 2021, 4, 54-63.	13.1	317
1684	Laser-assisted approach for improved performance of Au-Ti based glucose sensing electrodes. Applied Surface Science, 2021, 543, 148788.	3.1	10
1685	Recent advances in biofluid detection with micro/nanostructured bioelectronic devices. Nanoscale, 2021, 13, 3436-3453.	2.8	12
1686	Induced bioresistance via BNP detection for machine learning-based risk assessment. Biosensors and Bioelectronics, 2021, 175, 112903.	5.3	5
1687	Enhancing the Longâ€Term Stability of a Polymer Dot Glucose Transducer by Using an Enzymatic Cascade Reaction System. Advanced Healthcare Materials, 2021, 10, e2001019.	3.9	18
1688	Wearable temperature sensors based on lanthanum-doped aluminum-oxide dielectrics operating at low-voltage and high-frequency for healthcare monitoring systems. Ceramics International, 2021, 47, 4579-4586.	2.3	17
1689	Improving selectivity of ion-sensitive membrane by polyethylene glycol doping. Sensors and Actuators B: Chemical, 2021, 328, 128955.	4.0	7
1690	Wirelessly powered multi-functional wearable humidity sensor based on RGO-WS2 heterojunctions. Sensors and Actuators B: Chemical, 2021, 329, 129077.	4.0	37
1691	Wearable multifunctional sweat-sensing system for efficient healthcare monitoring. Sensors and Actuators B: Chemical, 2021, 328, 129017.	4.0	48
1692	Sensing nanomaterials of wearable glucose sensors. Chinese Chemical Letters, 2021, 32, 221-228.	4.8	59
1693	Design Criteria for Horseshoe and Spiralâ€Based Interconnects for Highly Stretchable Electronic Devices. Advanced Functional Materials, 2021, 31, 2007445.	7.8	12
1694	Body Dust: Well Beyond Wearable and Implantable Sensors. IEEE Sensors Journal, 2021, 21, 12398-12406.	2.4	21
1695	Wearable electrochemical biosensors in North America. Biosensors and Bioelectronics, 2021, 172, 112750.	5.3	167
1696	Towards wearable and implantable continuous drug monitoring: A review. Journal of Pharmaceutical Analysis, 2021, 11, 1-14.	2.4	48
1697	Sweat rate and sweat composition following active or passive heat re-acclimation: A pilot study. Temperature, 2021, 8, 90-104.	1.7	9
1698	Engineering Materials for Electrochemical Sweat Sensing. Advanced Functional Materials, 2021, 31, 2008130.	7.8	52

#	Article	IF	Citations
1699	Battery-free, wireless, and flexible electrochemical patch for in situ analysis of sweat cortisol via near field communication. Biosensors and Bioelectronics, 2021, 172, 112782.	5.3	82
1700	Nanocellulose in biomedical and biosensing applications: A review. International Journal of Biological Macromolecules, 2021, 166, 587-600.	3.6	62
1701	A revised manuscript submitted to sensors and actuators B: Chemical illumination modification from an LED to a laser to improve the spatial resolution of IGZO thin film light-addressable potentiometric sensors in pH detections. Sensors and Actuators B: Chemical, 2021, 329, 128953.	4.0	10
1702	Wearable Devices to Monitor and Reduce the Risk of Cardiovascular Disease: Evidence and Opportunities. Annual Review of Medicine, 2021, 72, 459-471.	5.0	37
1703	Artificial Skin Perception. Advanced Materials, 2021, 33, e2003014.	11.1	203
1704	Wearable Sensing Devices for Point of Care Diagnostics. ACS Applied Bio Materials, 2021, 4, 47-70.	2.3	58
1705	Flexible Electrochemical Biosensors for Health Monitoring. ACS Applied Electronic Materials, 2021, 3, 53-67.	2.0	75
1706	Dynamic coordination of metalâ€“alanine to control the multi-stimuli responsiveness of self-powered polymer hydrogels. Journal of Materials Chemistry A, 2021, 9, 16594-16604.	5.2	13
1707	Design and simulation of a new wireless power transfer circuit with a single-stage regulating rectifier for flexible sensor patches. Microsystem Technologies, 2021, 27, 2303-2314.	1.2	1
1708	Harnessing selectivity in chemical sensing via supramolecular interactions: from functionalization of nanomaterials to device applications. Materials Horizons, 2021, 8, 2685-2708.	6.4	18
1709	Energy-Efficient PRBS Impedance Spectroscopy on a Digital Versatile Platform. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	7
1710	Self-Powered Implantable Biosensors: A Review of Recent Advancements and Future Perspectives. , 2021, , 399-410.		3
1711	Gasâ€“Liquidâ€“Solid Triphase Interfacial Chemical Reactions Associated with Gas Wettability. Advanced Materials Interfaces, 2021, 8, 2001636.	1.9	17
1712	A Multimodal Self-Healing Flexible Sweat Sensor for Healthcare Monitoring. , 2021, , .		2
1713	Point of care TECHNOLOGIES. , 2021, , 73-84.		0
1714	Scalable approach towards specific and ultrasensitive cation sensing under harsh environmental conditions by engineering the analyteâ€“transducer interface. Nanoscale Advances, 2021, 3, 3752-3761.	2.2	3
1715	Recent advances in wearable self-powered energy systems based on flexible energy storage devices integrated with flexible solar cells. Journal of Materials Chemistry A, 2021, 9, 18887-18905.	5.2	47
1716	Recent advances in MXene-based force sensors: a mini-review. RSC Advances, 2021, 11, 19169-19184.	1.7	12

#	Article	IF	Citations
1717	Conductive Hydrogel- and Organohydrogel-Based Stretchable Sensors. ACS Applied Materials & Interfaces, 2021, 13, 2128-2144.	4.0	214
1718	Sensing Methodologies in Agriculture for Soil Moisture and Nutrient Monitoring. IEEE Access, 2021, 9, 14095-14121.	2.6	57
1719	Recent Progress in Flexible Microstructural Pressure Sensors toward Humanâ€“Machine Interaction and Healthcare Applications. Small Methods, 2021, 5, e2001041.	4.6	101
1720	Soft Sensors for Electronic Skin. , 2023, , 51-67.		2
1721	Thermoplastic polyurethane flexible capacitive proximity sensor reinforced by CNTs for applications in the creative industries. Scientific Reports, 2021, 11, 1104.	1.6	32
1722	Nano- and Microelectrochemical Biosensors for Determining Blood Glucose. , 2021, , 265-284.		2
1723	Flexible Capacitive Pressure Sensor Based on Laserâ€“Induced Graphene and Polydimethylsiloxane Foam. IEEE Sensors Journal, 2021, 21, 12048-12056.	2.4	25
1724	IoT Based Wearable Healthcare System: Post COVID-19. , 2021, , 305-321.		14
1725	Low dimensional materials for glucose sensing. Nanoscale, 2021, 13, 11017-11040.	2.8	30
1726	Implantable Fiber Biosensors Based on Carbon Nanotubes. Accounts of Materials Research, 2021, 2, 138-146.	5.9	31
1727	Flexible capacitive pressure sensor based on multi-walled carbon nanotubes microstructure electrodes. Journal Physics D: Applied Physics, 2021, 54, 155101.	1.3	22
1728	3D Printed Flexible Strain Sensors: From Printing to Devices and Signals. Advanced Materials, 2021, 33, e2004782.	11.1	195
1729	Wearable devices for the detection of COVID-19. Nature Electronics, 2021, 4, 13-14.	13.1	174
1730	Natural Jute Fibreâ€Based Supercapacitors and Sensors for Ecoâ€Friendly Energy Autonomous Systems. Advanced Sustainable Systems, 2021, 5, 2000286.	2.7	39
1731	Monitoring Body Fluids in Textiles: Combining Impedance and Thermal Principles in a Printed, Wearable, and Washable Sensor. ACS Sensors, 2021, 6, 896-907.	4.0	20
1732	Microwave Metamaterials for Biomedical Sensing. , 2021, , .		2
1733	A Sub-1-V, Microwatt Power-Consumption Iontronic Pressure Sensor Based on Organic Electrochemical Transistors. IEEE Electron Device Letters, 2021, 42, 46-49.	2.2	27
1734	Recent progress of skin-integrated electronics for intelligent sensing. Light Advanced Manufacturing, 2021, 2, 39.	2.2	18

#	Article	IF	Citations
1735	Interpenetrating PAA-PEDOT conductive hydrogels for flexible skin sensors. Journal of Materials Chemistry C, 2021, 9, 11794-11800.	2.7	32
1736	Digital printing of selective and reversible ion optodes on fabrics: toward smart clothes for epidermal chemical sensing. Analyst, The, 2021, 146, 6119-6123.	1.7	4
1737	Stimuli-responsive engineered living materials. Soft Matter, 2021, 17, 785-809.	1.2	64
1738	A heat-melt adhesive-assisted transferable electrode films. Scientific Reports, 2021, 11, 36.	1.6	0
1739	Long-term cyclic use of a sample collector for toilet-based urine analysis. Scientific Reports, 2021, 11, 2170.	1.6	10
1740	Advanced applications of green materials in biosensor. , 2021, , 33-75.		0
1741	A fully screen-printed potentiometric chloride ion sensor employing a hydrogel-based touchpad for simple and non-invasive daily electrolyte analysis. Analytical and Bioanalytical Chemistry, 2021, 413, 1883-1891.	1.9	21
1742	A 3D Printed Wearable Bioelectronic Patch for Multiâ€Sensing and In Situ Sweat Electrolyte Monitoring. Advanced Materials Technologies, 2021, 6, 2001021.	3.0	32
1743	Biomedical Application of Interdigital Sensors. Smart Sensors, Measurement and Instrumentation, 2021, , 231-246.	0.4	0
1744	A flexible monolithic integrated silicon low noise amplifier on plastic substrate. Journal Physics D: Applied Physics, 2021, 54, 11LT01.	1.3	3
1745	Ultrafast rechargeable Zn micro-batteries endowing a wearable solar charging system with high overall efficiency. Energy and Environmental Science, 2021, 14, 1602-1611.	15.6	64
1746	A thermal activated and differential self-calibrated flexible epidermal biomicrofluidic device for wearable accurate blood glucose monitoring. Science Advances, 2021, 7, .	4.7	91
1747	Electrowetting valves for sweat-based microfluidics. Microfluidics and Nanofluidics, 2021, 25, 1.	1.0	15
1748	Intelligent Wearable Electronics: A New Paradigm in Smart Electronics. EAI/Springer Innovations in Communication and Computing, 2021, , 169-197.	0.9	4
1749	On-demand lactate monitoring towards assessing physiological responses in sedentary populations. Analyst, The, 2021, 146, 3482-3492.	1.7	16
1750	Advances in self-powered triboelectric pressure sensors. Journal of Materials Chemistry A, 2021, 9, 20100-20130.	5.2	85
1751	ZnO nanoparticle confined stress amplified all-fiber piezoelectric nanogenerator for self-powered healthcare monitoring. Sustainable Energy and Fuels, 2021, 5, 4389-4400.	2.5	21
1752	Hydrogen-doped viscoplastic liquid metal microparticles for stretchable printed metal lines. Nature Materials, 2021, 20, 533-540.	13.3	111

#	Article	IF	Citations
1753	Strain-insensitive intrinsically stretchable transistors and circuits. Nature Electronics, 2021, 4, 143-150.	13.1	170
1754	Rapid dissolution of Î²-chitin and hierarchical self-assembly of chitin chains in aqueous KOH/urea solution. Green Chemistry, 2021, 23, 3048-3060.	4.6	20
1755	Liquid-like Polymer Coating as a Promising Candidate for Reducing Electrode Contamination and Noise in Complex Biofluids. ACS Applied Materials & Interfaces, 2021, 13, 4450-4462.	4.0	15
1756	Wearable temperature sensor for human body temperature detection. Journal of Materials Science: Materials in Electronics, 2021, 32, 4784-4797.	1.1	35
1757	Structurally Reconfigurable Antennas for Spacecraft. , 2021, , .		2
1758	UHF epidermal sensors: Technology and applications. , 2021, , 133-161.		6
1759	All-Solid-State Ion-Selective Electrodes: A Tutorial for Correct Practice. IEEE Sensors Journal, 2021, 21, 22143-22154.	2.4	12
1760	Multifunctional Electronic Skin With a Stack of Temperature and Pressure Sensor Arrays. IEEE Sensors Journal, 2021, 21, 26243-26251.	2.4	60
1761	Coupling of Silk Fibroin Nanofibrils Enzymatic Membrane with Ultraâ€Thin PtNPs/Graphene Film to Acquire Long and Stable Onâ€Skin Sweat Glucose and Lactate Sensing. Small Methods, 2021, 5, e2000926.	4.6	28
1762	Flexible organic thin-film transistor immunosensor printed on a one-micron-thick film. Communications Materials, 2021, 2, .	2.9	42
1763	Wearable triboelectric sensors for biomedical monitoring and human-machine interface. IScience, 2021, 24, 102027.	1.9	125
1764	The effect of sweat sample storage condition on sweat content. Temperature, 2021, 8, 254-261.	1.7	5
1765	Recent Advances in Electrochemical Sensors for Wearable Sweat Monitoring: A Review. IEEE Sensors Journal, 2021, 21, 14522-14539.	2.4	55
1766	Bio-inspired fractal textile device for rapid sweat collection and monitoring. Lab on A Chip, 2021, 21, 2524-2533.	3.1	16
1767	Wearable plasmonic-metasurface sensor for noninvasive and universal molecular fingerprint detection on biointerfaces. Science Advances, 2021, 7, .	4.7	157
1768	A pH Sensing Pipette for Cross-Contamination Prevention in Industrial Fermentation. IEEE Transactions on Industrial Electronics, 2022, 69, 7461-7469.	5.2	0
1769	Issues and Adoption Barriers in Wearable Technologies. International Journal of Technology Diffusion, 2021, 12, 75-89.	0.2	3
1770	Research and Application Progress of Intelligent Wearable Devices. Chinese Journal of Analytical Chemistry, 2021, 49, 159-171.	0.9	21

#	Article	IF	Citations
1771	Smartphone-Addressable 3D-Printed Electrochemical Ring for Nonenzymatic Self-Monitoring of Glucose in Human Sweat. Analytical Chemistry, 2021, 93, 3331-3336.	3.2	79
1772	An epidermal patch for the simultaneous monitoring of haemodynamic and metabolic biomarkers. Nature Biomedical Engineering, 2021, 5, 737-748.	11.6	309
1773	Self-Powered Wearable Biosensors. Accounts of Materials Research, 2021, 2, 184-197.	5.9	118
1774	Colloidal Photonic Crystals for Biomedical Applications. Small Structures, 2021, 2, 2000110.	6.9	47
1775	Selfâ€Healing Soft Sensors: From Material Design to Implementation. Advanced Materials, 2021, 33, e2004190.	11.1	106
1776	Array Integration and Farâ€Field Detection of Biocompatible Wireless LC Pressure Sensors. Small Methods, 2021, 5, e2001055.	4.6	18
1777	From Diagnosis to Treatment: Recent Advances in Patient-Friendly Biosensors and Implantable Devices. ACS Nano, 2021, 15, 1960-2004.	7.3	171
1778	Gold nanostructure-programmed flexible electrochemical biosensor for detection of glucose and lactate in sweat. Journal of Electroanalytical Chemistry, 2021, 882, 115029.	1.9	38
1779	Recent developments in self-powered smart chemical sensors for wearable electronics. Nano Research, 2021, 14, 3669-3689.	5.8	78
1780	From Fiber to Fabric: Progress Towards Photovoltaic Energy Textile. Advanced Fiber Materials, 2021, 3, 76-106.	7.9	36
1781	Wearable Osmotic-Capillary Patch for Prolonged Sweat Harvesting and Sensing. ACS Applied Materials & Interfaces, 2021, 13, 8071-8081.	4.0	39
1782	Reliable sensors based on graphene textile with negative resistance variation in three dimensions. Nano Research, 2021, 14, 2810-2818.	5.8	9
1783	A capacitive humidity sensor based on all-protein embedded with gold nanoparticles @ carbon composite for human respiration detection. Nanotechnology, 2021, 32, 19LT01.	1.3	12
1784	Rapid Processing of Holocellulose-Based Nanopaper toward an Electrode Material. ACS Sustainable Chemistry and Engineering, 2021, 9, 3337-3346.	3.2	9
1785	Durable and Flexible Bio-assembled RGO-BC/BC Bilayer Electrodes for Pressure Sensing. Advanced Fiber Materials, 2021, 3, 128-137.	7.9	33
1786	Printable and Stretchable Giant Magnetoresistive Sensors for Highly Compliant and Skinâ€Conformal Electronics. Advanced Materials, 2021, 33, e2005521.	11.1	37
1787	Skin Electronics: Nextâ€Generation Device Platform for Virtual and Augmented Reality. Advanced Functional Materials, 2021, 31, 2009602.	7.8	100
1788	Fully Printed Wearable Microfluidic Devices for High-Throughput Sweat Sampling and Multiplexed Electrochemical Analysis. ACS Sensors, 2021, 6, 1174-1186.	4.0	101

#	Article	IF	Citations
1789	Multitasking MXene Inks Enable Highâ€Performance Printable Microelectrochemical Energy Storage Devices for Allâ€Flexible Selfâ€Powered Integrated Systems. Advanced Materials, 2021, 33, e2005449.	11.1	182
1790	Recent developments of point-of-care (POC) testing platform for biomolecules. TrAC - Trends in Analytical Chemistry, 2021, 135, 116160.	5.8	44
1791	Bio-based Materials for Microwave Devices: A Review. Journal of Electronic Materials, 2021, 50, 1893-1921.	1.0	8
1792	A rime ice-inspired bismuth-based flexible sensor for zinc ion detection in human perspiration. Mikrochimica Acta, 2021, 188, 97.	2.5	10
1793	Status and Future Prospect of Sweat Lactate Monitoring System (Review). IEEJ Transactions on Sensors and Micromachines, 2021, 141, 83-87.	0.0	0
1794	Multi-frequency impedance sensing for detection and sizing of DNA fragments. Scientific Reports, 2021, 11, 6490.	1.6	17
1795	Monitoring Patients to Prevent Myocardial Infarction using Internet of Things Technology. Journal of Community Health Research, 0, , .	0.0	3
1796	ANTIGONE: A Programmable Energy-Efficient Current Digitizer for an ISFET Wearable Sweat Sensing System. Sensors, 2021, 21, 2074.	2.1	4
1798	Towards Bio-Hybrid Energy Harvesting in the Real-World: Pushing the Boundaries of Technologies and Strategies Using Bio-Electrochemical and Bio-Mechanical Processes. Applied Sciences (Switzerland), 2021, 11, 2220.	1.3	10
1799	Textile Chemical Sensors Based on Conductive Polymers for the Analysis of Sweat. Polymers, 2021, 13, 894.	2.0	43
1800	Paper-based lactate biofuel cell array with high power output. Journal of Power Sources, 2021, 489, 229533.	4.0	34
1801	The Jahn-Teller Effect for Amorphization of Molybdenum Trioxide towards High-Performance Fiber Supercapacitor. Research, 2021, 2021, 6742715.	2.8	14
1802	An on-skin platform for wireless monitoring of flow rate, cumulative loss and temperature of sweat in real time. Nature Electronics, 2021, 4, 302-312.	13.1	110
1803	Transdermal Electrochemical Monitoring of Glucose via Highâ€Density Silicon Microneedle Array Patch. Advanced Functional Materials, 2022, 32, 2009850.	7.8	66
1804	Fluidâ€Dynamicsâ€Processed Highly Stretchable, Conductive, and Printable Graphene Inks for Realâ€Time Monitoring Sweat during Stretching Exercise. Advanced Functional Materials, 2021, 31, 2011059.	7.8	44
1805	Advances in the development paradigm of biosampleâ€based biosensors for early ultrasensitive detection of alzheimerâ€™s disease. Journal of Nanobiotechnology, 2021, 19, 72.	4.2	18
1806	Wearable sensors: At the frontier of personalised health monitoring, smart prosthetics and assistive technologies. Biosensors and Bioelectronics, 2021, 176, 112946.	5.3	100
1807	A self-sustainable wearable multi-modular E-textile bioenergy microgrid system. Nature Communications, 2021, 12, 1542.	5.8	164

#	Article	IF	Citations
1808	Skin-deep experiences. Nature Materials, 2021, 20, 450-450.	13.3	0
1809	Systematic Review on Human Skin-Compatible Wearable Photoplethysmography Sensors. Applied Sciences (Switzerland), 2021, 11, 2313.	1.3	27
1810	Multiple-Cell Microfluidic Dielectric Resonator for Liquid Sensing Applications. IEEE Sensors Journal, 2021, 21, 6094-6104.	2.4	45
1812	Self-powered multifunctional sensing based on super-elastic fibers by soluble-core thermal drawing. Nature Communications, 2021, 12, 1416.	5.8	68
1813	Outdoorâ€Useable, Wireless/Batteryâ€Free Patchâ€Type Tissue Oximeter with Radiative Cooling. Advanced Science, 2021, 8, 2004885.	5.6	50
1814	Role of Wearables in Sports based on Activity recognition and biometric parameters: A Survey. , 2021, , .		13
1815	Flexible and wearable piezoelectric nanogenerators based on P(VDF-TrFE)/SnS nanocomposite micropillar array. Journal of Applied Physics, 2021, 129, .	1.1	14
1816	Organic single crystal phototransistors: Recent approaches and achievements. Frontiers of Physics, 2021, 16, 1.	2.4	7
1817	A novel device for detecting anaerobic threshold using sweat lactate during exercise. Scientific Reports, 2021, 11, 4929.	1.6	31
1818	Highly Concentrated, Conductive, Defect-free Graphene Ink for Screen-Printed Sensor Application. Nano-Micro Letters, 2021, 13, 87.	14.4	36
1819	Reactant/polymer hybrid films on p-n junction photodetectors for self-powered, non-invasive glucose biosensors. Biosensors and Bioelectronics, 2021, 175, 112855.	5.3	15
1820	Use of Connected Technologies to Assess Barriers and Stressors for Age and Disability-Friendly Communities. Frontiers in Public Health, 2021, 9, 578832.	1.3	12
1821	Visualising the knowledge structure and evolution of wearable device research. Journal of Medical Engineering and Technology, 2021, 45, 207-222.	0.8	3
1822	Neonatal wearable device for colorimetry-based real-time detection of jaundice with simultaneous sensing of vitals. Science Advances, 2021, 7, .	4.7	32
1823	Printed Iontophoreticâ€Integrated Wearable Microfluidic Sweatâ€Sensing Patch for Onâ€Demand Pointâ€Ofâ€Care Sweat Analysis. Advanced Materials Technologies, 2021, 6, 2000910.	3.0	32
1824	Cellulose Nanofiber Coatings on Cu Electrodes for Cohesive Protection against Water-Induced Short-Circuit Failures. ACS Applied Nano Materials, 2021, 4, 3861-3868.	2.4	8
1826	Soft, wireless and subdermally implantable recording and neuromodulation tools. Journal of Neural Engineering, 2021, 18, 041001.	1.8	13
1827	Reagentless biomolecular analysis using a molecular pendulum. Nature Chemistry, 2021, 13, 428-434.	6.6	70

#	Article	IF	Citations
1828	The Principle and Architectures of Optical Stress Sensors and the Progress on the Development of Microbend Optical Sensors. Advanced Optical Materials, 2021, 9, 2001693.	3.6	13
1829	Fusing Stretchable Sensing Technology with Machine Learning for Humanâ€“Machine Interfaces. Advanced Functional Materials, 2021, 31, 2008807.	7.8	84
1830	Recent Progress on Flexible Capacitive Pressure Sensors: From Design and Materials to Applications. Advanced Materials Technologies, 2021, 6, 2001023.	3.0	131
1831	Triboelectric Yarns with Electrospun Functional Polymer Coatings for Highly Durable and Washable Smart Textile Applications. ACS Applied Materials & Interfaces, 2021, 13, 16876-16886.	4.0	59
1832	Smart contact lens and transparent heat patch for remote monitoring and therapy of chronic ocular surface inflammation using mobiles. Science Advances, 2021, 7, .	4.7	71
1833	A Wearable Body Condition Sensor System with Wireless Feedback Alarm Functions. Advanced Materials, 2021, 33, e2008701.	11.1	104
1834	Embracing Self-Powered Wireless Wearables for Smart Healthcare. , 2021, , .		10
1835	A novel biosensor based on graphene/platinum nanoparticles/Nafion composites for determination of glucose. Journal of Solid State Electrochemistry, 2021, 25, 1601-1610.	1.2	12
1836	Real-Time Capable Sensor Data Analysis-Framework for Intelligent Assistance Systems. , 0, , .		0
1837	Toward self-powered real-time health monitoring of body fluid components based on improved enzymatic biofuel cells. JPhys Energy, 2021, 3, 032002.	2.3	11
1838	Nanoâ€silica embedded polydimethylsiloxane on interdigitated sensor as adhesive polymer for detecting lung cancer mutation. Biotechnology and Applied Biochemistry, 2022, 69, 451-460.	1.4	3
1839	Electrochemically active materials and wearable biosensors for the in situ analysis of body fluids for human healthcare. NPG Asia Materials, 2021, 13, .	3.8	46
1840	Wearable Devices in Health Monitoring from the Environmental towards Multiple Domains: A Survey. Sensors, 2021, 21, 2130.	2.1	30
1841	Highly anisotropic and flexible piezoceramic kirigami for preventing joint disorders. Science Advances, 2021, 7, .	4.7	88
1842	Rational design of direct electron transfer type l-lactate dehydrogenase for the development of multiplexed biosensor. Biosensors and Bioelectronics, 2021, 176, 112933.	5.3	40
1843	Solution process manufacture of a simple, multifunctional flexible sensor based on capacitance measurement. Nanotechnology, 2021, 32, 265503.	1.3	0
1844	A review of biosensor technology and algorithms for glucose monitoring. Journal of Diabetes and Its Complications, 2021, 35, 107929.	1.2	21
1845	Wearable Glucose Monitoring and Implantable Drug Delivery Systems for Diabetes Management. Advanced Healthcare Materials, 2021, 10, e2100194.	3.9	38

#	Article	IF	Citations
1846	Batteryâ€Free and Wireless Smart Wound Dressing for Wound Infection Monitoring and Electrically Controlled Onâ€Demand Drug Delivery. Advanced Functional Materials, 2021, 31, 2100852.	7.8	135
1847	Sampling of fluid through skin with magnetohydrodynamics for noninvasive glucose monitoring. Scientific Reports, 2021, 11, 7609.	1.6	19
1848	Noninterference Wearable Strain Sensor: Near-Zero Temperature Coefficient of Resistance Nanoparticle Arrays with Thermal Expansion and Transport Engineering. ACS Nano, 2021, 15, 8120-8129.	7.3	25
1849	The effect of short and continuous absorbent patch application on local skin temperature underneath. Physiological Measurement, 2021, 42, 045006.	1.2	1
1850	Wearable Sweat Glucose Detection System Based on Cloud Platform. , 2021, , .		1
1851	An Inkjet-Printed PEDOT:PSS-Based Stretchable Conductor for Wearable Health Monitoring Device Applications. ACS Applied Materials & Interfaces, 2021, 13, 21693-21702.	4.0	91
1852	A High-Resolution Self-powered Flexible Pressure Sensor Matrix Based on ZnO Nanowires. , 2021, , .		0
1853	Multimodal Wearable Sensor Sheet for Health-Related Chemical and Physical Monitoring. ACS Sensors, 2021, 6, 1918-1924.	4.0	38
1854	Integration of an Aerosol-Assisted Deposition Technique for the Deposition of Functional Biomaterials Applied to the Fabrication of Miniaturised Ion Sensors. Nanomaterials, 2021, 11, 938.	1.9	4
1855	Flexible Selfâ€Powered Integrated Sensing System with 3D Periodic Ordered Black Phosphorus@MXene Thinâ€Films. Advanced Materials, 2021, 33, e2007890.	11.1	127
1856	Stretchable and Transparent Electrochemical Sensor Based on Nanostructured Au on Carbon Nanotube Networks for Real-Time Analysis of H₂O₂ Release from Cells. Analytical Chemistry, 2021, 93, 6723-6730.	3.2	45
1857	Hybrid liquid-metal heat dissipation structure enabled by phase transition for flexible electronics. Semiconductor Science and Technology, 2021, 36, 055007.	1.0	2
1858	Recent Progress in Flexible Tactile Sensors for Humanâ€Interactive Systems: From Sensors to Advanced Applications. Advanced Materials, 2021, 33, e2005902.	11.1	216
1859	Ethical Considerations of Wearable Technologies in Human Research. Advanced Healthcare Materials, 2021, 10, e2100127.	3.9	19
1860	Advances in Wearable Chemosensors. Chemosensors, 2021, 9, 99.	1.8	6
1861	Study of Wearable IoT devices in 2021: Analysis & Future Prospects. , 2021, , .		15
1862	Microfluidics for flexible electronics. Materials Today, 2021, 44, 105-135.	8.3	65
1863	Wearable Devices for Physical Activity and Healthcare Monitoring in Elderly People: A Critical Review. Geriatrics (Switzerland), 2021, 6, 38.	0.6	53

#	Article	IF	Citations
1864	Nonlinear multi-mode electromagnetic insole energy harvester for human-powered body monitoring sensors: Design, modeling, and characterization. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 6415-6426.	1.1	5
1865	Electrochemical Detection of Electrolytes Using a Solid-State Ion-Selective Electrode of Single-Piece Type Membrane. Biosensors, 2021, 11, 109.	2.3	12
1867	Biosensing platform on ferrite magnetic nanoparticles: Synthesis, functionalization, mechanism and applications. Advances in Colloid and Interface Science, 2021, 290, 102380.	7.0	32
1868	Biaxially-Stretchable Kirigami-Patterned Mesh Structures for Motion Artifact-Free Wearable Devices. , 2021, , .		0
1869	Molecular Orientations at Buried Conducting Polymer/Graphene Interfaces. Macromolecules, 2021, 54, 4050-4060.	2.2	6
1870	The composite hydrogel with â€œ<scp>2D</scp> flexible crosslinking pointâ€•of <scp>reduced graphene oxide</scp> for strain sensor. Journal of Applied Polymer Science, 2021, 138, 50801.	1.3	16
1871	Glucose biosensors for clinical and personal use. Electrochemistry Communications, 2021, 125, 106973.	2.3	26
1872	An Integrated Stretchable Sensing Patch for Simultaneously Monitoring of Physiological and Biochemical Parameters. , 2021, , .		0
1873	Wireless Battery-Free Broad-Band Sensor for Wearable Multiple Physiological Measurement. ACS Applied Electronic Materials, 2021, 3, 1681-1690.	2.0	7
1874	Potentiometric Performance of a Highly Flexible-Shaped Trifunctional Sensor Based on ZnO/V2O5 Microrods. Sensors, 2021, 21, 2559.	2.1	4
1876	Investigation of Flexible Sweat Sensor for Sodium-Ion Concentration with a Combination of Two Sensing Mechanisms. , 2021, , .		0
1877	Big data and machine learning for materials science. Discover Materials, 2021, 1, 12.	1.0	49
1878	Wireless and battery-free platforms for collection of biosignals. Biosensors and Bioelectronics, 2021, 178, 113007.	5.3	40
1879	Psychological Allostatic Load: the Cost of Persistence in STEM Disciplines. Research in Science Education, 2022, 52, 1187-1206.	1.4	5
1880	Properties of Surface Heating Textile for Functional Warm Clothing Based on a Composite Heating Element with a Positive Temperature Coefficient. Nanomaterials, 2021, 11, 904.	1.9	8
1881	Self-powered wearable biosensors. , 2021, , .		0
1882	Using Transparent Adhesive Tape as New Substrate for Integrated Flexible Enzymatic Sensor: Good Adhesion and Better Printability. Electroanalysis, 2021, 33, 1668-1677.	1.5	0
1883	Noninvasive blood glucose monitor via multi-sensor fusion and its clinical evaluation. Sensors and Actuators B: Chemical, 2021, 332, 129445.	4.0	12

#	Article	IF	Citations
1884	Metal-organic frameworks as functional materials for implantable flexible biochemical sensors. Nano Research, 2021, 14, 2981-3009.	5.8	26
1885	Recent advances in electrode development for biomedical applications. Biomedical Engineering Letters, 2021, 11, 107-115.	2.1	10
1886	Multistimuliâ€Responsive Artificial Skin with Dual Output of Photoelectric Signals. Macromolecular Materials and Engineering, 2021, 306, 2100017.	1.7	4
1887	Optimizing MOX sensor array performances with a reconfigurable self-adaptive temperature modulation interface. Sensors and Actuators B: Chemical, 2021, 333, 129509.	4.0	19
1888	Design of the Magnetic Stamp Film for Electromagnetic-Assisted Transfer Printing. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	1.1	9
1889	Strategies for Biomolecular Analysis and Continuous Physiological Monitoring. Journal of the American Chemical Society, 2021, 143, 5281-5294.	6.6	54
1890	Oriented Growth of Inâ€Oxo Chain Based Metalâ€Porphyrin Framework Thin Film for Highâ€Sensitive Photodetector. Advanced Science, 2021, 8, 2100548.	5.6	23
1891	Directivity-reconfigurable antenna actuated by liquid-gas phase transition. Mechanics of Advanced Materials and Structures, 2022, 29, 3903-3910.	1.5	1
1892	Stretchable Inorganic GaN-Nanowire Photosensor with High Photocurrent and Photoresponsivity. ACS Applied Materials & Interfaces, 2021, 13, 22728-22737.	4.0	15
1893	Low-Temperature printable and stretchable circuit board and its application to flexible hybrid electronics. , 2021, , .		3
1894	A soft and transparent contact lens for the wireless quantitative monitoring of intraocular pressure. Nature Biomedical Engineering, 2021, 5, 772-782.	11.6	100
1895	Flexible Wearable Sensors for Cardiovascular Health Monitoring. Advanced Healthcare Materials, 2021, 10, e2100116.	3.9	170
1896	Numerical investigation of a biomimetic elastic valve for microfluidic pumping. Journal of Fluids and Structures, 2021, 103, 103265.	1.5	3
1897	Smart Contact Lenses for Biosensing Applications. Advanced Intelligent Systems, 2021, 3, 2000263.	3.3	50
1898	Construction of Bioâ€Piezoelectric Platforms: From Structures and Synthesis to Applications. Advanced Materials, 2021, 33, e2008452.	11.1	114
1899	Tissue-like skin-device interface for wearable bioelectronics by using ultrasoft, mass-permeable, and low-impedance hydrogels. Science Advances, 2021, 7, .	4.7	144
1900	55â€2: Invited Paper: Nanomesh Based on Skin Electronics. Digest of Technical Papers SID International Symposium, 2021, 52, 768-771.	0.1	0
1901	Ultrastretchable Thermoâ€and Mechanochromic Fiber with Healable Metallic Conductivity. Advanced Electronic Materials, 2021, 7, 2100146.	2.6	21

#	Article	IF	Citations
1902	Scalable Fabrication of Kevlar/Ti₃C₂T_x MXene Intelligent Wearable Fabrics with Multiple Sensory Capabilities. ACS Nano, 2021, 15, 8676-8685.	7.3	125
1903	Adaptive Extreme Edge Computing for Wearable Devices. Frontiers in Neuroscience, 2021, 15, 611300.	1.4	67
1904	Liquid Metal Enabled Biodevices. Advanced Intelligent Systems, 2021, 3, 2000275.	3.3	40
1905	Reviewâ€"Recent Advances in Sensor Arrays for the Simultaneous Electrochemical Detection of Multiple Analytes. Journal of the Electrochemical Society, 2021, 168, 057507.	1.3	25
1906	Energy Solutions for Wearable Sensors: A Review. Sensors, 2021, 21, 3806.	2.1	47
1907	Stretchable and Superwettable Colorimetric Sensing Patch for Epidermal Collection and Analysis of Sweat. ACS Sensors, 2021, 6, 2261-2269.	4.0	61
1908	Effect of electrochemical functionalization of single-walled carbon nanotube electrodes in flexible enzymatic biofuel cells. Japanese Journal of Applied Physics, 0, , .	0.8	0
1909	Soft Wearable Healthcare Materials and Devices. Advanced Healthcare Materials, 2021, 10, e2100577.	3.9	71
1910	A Flexible Two-Sensor System for Temperature and Bending Angle Monitoring. Materials, 2021, 14, 2962.	1.3	7
1911	Development of Fluorineâ€Free Tantalum Carbide MXene Hybrid Structure as a Biocompatible Material for Supercapacitor Electrodes. Advanced Functional Materials, 2021, 31, 2100015.	7.8	58
1912	Tissue Regeneration through Cyberâ€Physical Systems and Microbots. Advanced Functional Materials, 2021, 31, 2009663.	7.8	9
1913	A Low-Cost Multi-Parameter Water Quality Monitoring System. Sensors, 2021, 21, 3775.	2.1	17
1914	Recent Advances in High-Throughput Nanomaterial Manufacturing for Hybrid Flexible Bioelectronics. Materials, 2021, 14, 2973.	1.3	13
1915	Current development in wearable glucose meters. Chinese Chemical Letters, 2021, 32, 3705-3717.	4.8	15
1916	Thin film organic electrochemical transistors based on hybrid PANI/PEDOT:PSS active layers for enhanced pH sensing. Biosensors and Bioelectronics: X, 2021, 7, 100065.	0.9	9
1917	Photothermal-pyroelectric-plasmonic coupling for high performance and tunable band-selective photodetector. Nano Energy, 2021, 83, 105801.	8.2	24
1918	Preparation of Laserâ€Induced Graphene Fabric from Silk and Its Application Examples for Flexible Sensor. Advanced Engineering Materials, 2021, 23, 2100195.	1.6	24
1919	Wireless Qi-Powered, Multinodal and Multisensory Body Area Network for Mobile Health. IEEE Internet of Things Journal, 2021, 8, 7600-7609.	5.5	16

#	Article	IF	Citations
1920	Microneedle-Based Potentiometric Sensing System for Continuous Monitoring of Multiple Electrolytes in Skin Interstitial Fluids. ACS Sensors, 2021, 6, 2181-2190.	4.0	45
1921	Nanoscale engineering of conducting polymers for emerging applications in soft electronics. Nano Research, 2021, 14, 3112-3125.	5.8	12
1922	Integration of interstitial fluid extraction and glucose detection in one device for wearable non-invasive blood glucose sensors. Biosensors and Bioelectronics, 2021, 179, 113078.	5.3	116
1923	Wearable, Implantable, and Interventional Medical Devices Based on Smart Electronic Skins. Advanced Materials Technologies, 2021, 6, 2100107.	3.0	81
1924	A flexible multiplexed immunosensor for point-of-care in situ wound monitoring. Science Advances, 2021, 7, .	4.7	106
1926	Production of elastomer-based highly conductive hybrid nanocomposites and treatment with sulfuric acid. Journal of Polymer Engineering, 2021, 41, 467-479.	0.6	3
1927	Stick-and-play system based on interfacial adhesion control enhanced by micro/nanostructures. Nano Research, 2021, 14, 3143-3158.	5.8	10
1928	Research on Human Motion Monitoring Method Based on Multi-Joint Constraint Filter Model. IEEE Sensors Journal, 2021, 21, 10989-10999.	2.4	4
1929	Ultra-Thin Chips with Current-Mode ISFET Array for Continuous Monitoring of Body Fluids pH. , 2021, , .		5
1930	Wearable and Mobile Sensors for Personalized Nutrition. ACS Sensors, 2021, 6, 1745-1760.	4.0	106
1931	Carbon Nanotube-Based Ion-Sensitive Field-Effect Transistors with an On-Chip Reference Electrode Toward Wearable Sodium Sensing. ACS Applied Electronic Materials, 2021, 3, 2580-2588.	2.0	16
1932	Differential cardiopulmonary monitoring system for artifact-canceled physiological tracking of athletes, workers, and COVID-19 patients. Science Advances, 2021, 7, .	4.7	55
1933	An Intelligent Grapheneâ€Based Biosensing Device for Cytokine Storm Syndrome Biomarkers Detection in Human Biofluids. Small, 2021, 17, e2101508.	5.2	44
1934	Review of flexible microelectromechanical system sensors and devices. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2021, 4, 025001.	1.7	23
1935	Self-Packaged, Flexible, Bendable MEMS Sensors and Energy Harvesters. IEEE Sensors Journal, 2021, 21, 12606-12617.	2.4	8
1936	Liquid-bridge flow between two slender plates: Formation and fluid mechanics. Chemical Engineering Research and Design, 2021, 170, 304-313.	2.7	4
1937	Gold coated electrospun polymeric fibres as new electrode platform for glucose oxidase immobilization. Microchemical Journal, 2021, 165, 106108.	2.3	13
1938	Wireless Communication and Power Harvesting in Wearable Contact Lens Sensors. IEEE Sensors Journal, 2021, 21, 12484-12497.	2.4	18

#	Article	IF	Citations
1939	Catalytic effects of magnetic and conductive nanoparticles on immobilized glucose oxidase in skin sensors. Nanotechnology, 2021, 32, 375101.	1.3	3
1940	Screen-Printed Nickelâ€“Zinc Batteries: A Review of Additive Manufacturing and Evaluation Methods. 3D Printing and Additive Manufacturing, 2021, 8, 176-192.	1.4	4
1941	Body-coupled power transmission and energy harvesting. Nature Electronics, 2021, 4, 530-538.	13.1	61
1942	Highly selective and robust nanocomposite-based sensors for potassium ions detection. Applied Materials Today, 2021, 23, 101008.	2.3	2
1943	Thin, soft, <scp>garmentâ€integrated</scp> triboelectric nanogenerators for energy harvesting and human machine interfaces. EcoMat, 2021, 3, e12123.	6.8	15
1944	Textile UHF-RFID antenna sensor for measurements of sucrose solutions in different levels of concentration. Measurement Science and Technology, 0, , .	1.4	5
1945	Development strategies of conducting polymer-based electrochemical biosensors for virus biomarkers: Potential for rapid COVID-19 detection. Biosensors and Bioelectronics, 2021, 182, 113192.	5.3	62
1946	Soft Gel-free ECG electrodes based on Biocompatible Coconut-Oil and Carbon Black. , 2021, , .		1
1947	Digital biomarkers from sweat analysis for therapeutic drug monitoring in soft tissue infections. , 2021, , .		0
1948	A Fully Integrated Closedâ€Loop System Based on Mesoporous Microneedlesâ€Iontophoresis for Diabetes Treatment. Advanced Science, 2021, 8, e2100827.	5.6	91
1949	Recent progress of triboelectrification-induced electroluminescence: from fundaments to applications. JPhys Materials, 2021, 4, 042001.	1.8	4
1950	Flexible Graphene-Channel Memory Devices: A Review. ACS Applied Nano Materials, 2021, 4, 6542-6556.	2.4	10
1951	Home Detection Technique for Na⁺ and K⁺ in Urine Using a Self-Calibrated all-Solid-State Ion-Selective Electrode Array Based on Polystyreneâ€“Au Ion-Sensing Nanocomposites. Analytical Chemistry, 2021, 93, 8318-8325.	3.2	18
1952	Textile-based wearable solid-contact flexible fluoride sensor: Toward biodetection of G-type nerve agents. Biosensors and Bioelectronics, 2021, 182, 113172.	5.3	29
1953	Highly reproducible solid contact ion selective electrodes: Emerging opportunities for potentiometry â€“ A review. Analytica Chimica Acta, 2021, 1162, 338304.	2.6	57
1954	Fabrication of Conductive, Adhesive, and Stretchable Agarose-Based Hydrogels for a Wearable Biosensor. ACS Applied Bio Materials, 2021, 4, 6148-6156.	2.3	11
1955	Continuous health monitoring: An opportunity for precision health. Science Translational Medicine, 2021, 13, .	5.8	39
1956	Long-term reliable physical health monitoring by sweat poreâ€“inspired perforated electronic skins. Science Advances, 2021, 7, .	4.7	89

#	Article	IF	Citations
1957	Flexible organic photodetectors and their use in wearable systems. , 2022, 125, 103145.		13
1958	Noninvasive Estimation of Hydration Status in Athletes Using Wearable Sensors and a Data-Driven Approach Based on Orthostatic Changes. Sensors, 2021, 21, 4469.	2.1	3
1959	OREMâ€™Ä°N Ã–Z BAKIM EKSÄ°KLÄ°ÄžÄ° KURAMINA GÃ–RE DÄ°YABET TEKNOLOJÄ°LERÄ°. , 0, , .		1
1960	Wireless Battery-Free Generation of Electric Fields on One-Dimensional Asymmetric Au/ZnO Nanorods for Enhanced Raman Sensing. Analytical Chemistry, 2021, 93, 9286-9295.	3.2	22
1961	Digital electronics in fibres enable fabric-based machine-learning inference. Nature Communications, 2021, 12, 3317.	5.8	81
1962	Assemblies and composites of gold nanostructures for functional devices. Aggregate, 2022, 3, e57.	5.2	10
1963	Sensation and Perception of a Bioinspired Flexible Smart Sensor System. ACS Nano, 2021, 15, 9238-9243.	7.3	17
1964	Flexible Hybrid Electronics for Monitoring Hypoxia. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 559-567.	2.7	2
1965	Flexible Vertical Photogating Transistor Network with an Ultrashort Channel for Inâ€Sensor Visual Nociceptor. Advanced Functional Materials, 2021, 31, 2104327.	7.8	85
1966	Toward Flexible Zincâ€“Air Batteries with Selfâ€Supported Air Electrodes. Small, 2021, 17, e2006773.	5.2	28
1967	Fabrication and broadband ferromagnetic resonance studies of freestanding polycrystalline yttrium iron garnet thin films. APL Materials, 2021, 9, 061105.	2.2	3
1968	Advanced Devices for Tumor Diagnosis and Therapy. Small, 2021, 17, 2100003.	5.2	14
1969	Facile fabrication of sensitivity-tunable strain sensors based on laser-patterned micro-nano structures. Journal of Micromechanics and Microengineering, 2021, 31, 085003.	1.5	5
1970	Review-Enzymatic and Non-Enzymatic Electrochemical Sensor for Lactate Detection in Human Biofluids. Journal of the Electrochemical Society, 2021, 168, 067502.	1.3	21
1971	Wearable electrochemical flexible biosensors: With the focus on affinity biosensors. Sensing and Bio-Sensing Research, 2021, 32, 100403.	2.2	29
1972	3D Heterogeneous Integration Strategy for Physically Flexible CMOS Electronic Systems. , 2021, , .		3
1973	Selfâ€Powered Stretchable Mechanoluminescent Optical Fiber Strain Sensor. Advanced Intelligent Systems, 2021, 3, 2100035.	3.3	28
1974	Smart-watch-programmed green-light-operated percutaneous control of therapeutic transgenes. Nature Communications, 2021, 12, 3388.	5.8	29

#	Article	IF	Citations
1975	INTERNET OF THINGS: ALEXA APPLICATION IN DENTISTRY: A FUTURISTIC REVIEW. , 2021, , 44-46.		0
1976	Construction of flexible and wearable 3D TiO2 NTs@Ti mesh for physiological detection based on sweat. Jcis Open, 2021, 2, 100007.	1.5	2
1977	3-Dimensional Logic Motion Sensing of Polyvinylidene Fluoride for Self-Powered Flexible Interactive Electronics. , 2021, , .		0
1978	Instant, multiscale dry transfer printing by atomic diffusion control at heterogeneous interfaces. Science Advances, 2021, 7, .	4.7	22
1979	A Design Strategy for Intrinsically Stretchable High-Performance Polymer Semiconductors: Incorporating Conjugated Rigid Fused-Rings with Bulky Side Groups. Journal of the American Chemical Society, 2021, 143, 11679-11689.	6.6	65
1980	Nonâ€Invasive Sweatâ€Based Tracking of Lâ€Dopa Pharmacokinetic Profiles Following an Oral Tablet Administration. Angewandte Chemie - International Edition, 2021, 60, 19074-19078.	7.2	36
1981	Integrated non-invasive biochemical and biophysical sensing systems for health and performance monitoring: A systems perspective. Biosensors and Bioelectronics, 2021, 184, 113249.	5.3	27
1982	Mechanical reliability of self-similar serpentine interconnect for fracture-free stretchable electronic devices. Journal of Applied Physics, 2021, 130, .	1.1	4
1983	Flexible triphase enzyme electrode based on hydrophobic porous PVDF membrane for high-performance bioassays. Biosensors and Bioelectronics, 2021, 183, 113201.	5.3	12
1984	State of the art in development of molecularly imprinted biosensors. View, 2022, 3, 20200170.	2.7	17
1985	Wearable Biosensors for Non-Invasive Sweat Diagnostics. Biosensors, 2021, 11, 245.	2.3	75
1986	Continuous monitoring of deep-tissue haemodynamics with stretchable ultrasonic phased arrays. Nature Biomedical Engineering, 2021, 5, 749-758.	11.6	100
1987	Microfluidic devices with simplified signal readout. Sensors and Actuators B: Chemical, 2021, 339, 129730.	4.0	16
1988	Electrodeposition Study of Silver: Nucleation Process and Theoretical Analysis. Journal of Electronic Materials, 2021, 50, 5507-5513.	1.0	6
1989	The Exposome in the Era of the Quantified Self. Annual Review of Biomedical Data Science, 2021, 4, 255-277.	2.8	10
1990	Low-Concentration NO_x Gas Analysis Using Single Bimodular ZnO Nanorod Sensor. ACS Sensors, 2021, 6, 2979-2987.	4.0	19
1991	Recent Advances in the Use of Biomassâ€Derived Activated Carbon as an Electrode Material for Electroanalysis. ChemistrySelect, 2021, 6, 6714-6732.	0.7	7
1992	Wearable Devices for Environmental Monitoring in the Built Environment: A Systematic Review. Sensors, 2021, 21, 4727.	2.1	32

#	Article	IF	Citations
1993	Conductive Polymerâ€Based Bioelectronic Platforms toward Sustainable and Biointegrated Devices: A Journey from Skin to Brain across Human Body Interfaces. Advanced Materials Technologies, 2022, 7, 2100293.	3.0	36
1994	Trilayer MXene Fabric for Integrated Ultrasensitive Pressure Sensor and Wearable Heater. Advanced Materials Technologies, 2021, 6, 2100574.	3.0	25
1995	A new variant of deep belief network assisted with optimal feature selection for heart disease diagnosis using IoT wearable medical devices. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 387-411.	0.9	9
1996	Novel Portable Sensing System with Integrated Multifunctionality for Accurate Detection of Salivary Uric Acid. Biosensors, 2021, 11, 242.	2.3	6
1997	Epidermal self-powered sweat sensors for glucose and lactate monitoring. Bio-Design and Manufacturing, 2022, 5, 201-209.	3.9	53
1998	Simple and cost-effective microfabrication of flexible and stretchable electronics for wearable multi-functional electrophysiological monitoring. Scientific Reports, 2021, 11, 14823.	1.6	12
1999	Wearable biosensor for sensitive detection of uric acid in artificial sweat enabled by a fiber structured sensing interface. Nano Energy, 2021, 85, 106031.	8.2	82
2000	Lactate Biosensing for Reliable On-Body Sweat Analysis. ACS Sensors, 2021, 6, 2763-2771.	4.0	98
2001	Soft, tough, and fast polyacrylate dielectric elastomer for non-magnetic motor. Nature Communications, 2021, 12, 4517.	5.8	82
2002	Recent Advances in Carbon Materialâ€Based Multifunctional Sensors and Their Applications in Electronic Skin Systems. Advanced Functional Materials, 2021, 31, 2104288.	7.8	116
2003	Stretchable, Stable, and Degradable Silk Fibroin Enabled by Mesoscopic Doping for Finger Motion Triggered Color/Transmittance Adjustment. ACS Nano, 2021, 15, 12429-12437.	7.3	42
2004	Printable elastomeric electrodes with sweat-enhanced conductivity for wearables. Science Advances, 2021, 7, .	4.7	50
2005	Innovative IoT Solutions and Wearable Sensing Systems for Monitoring Human Biophysical Parameters: A Review. Electronics (Switzerland), 2021, 10, 1660.	1.8	26
2006	A novel, flexible dual-mode power generator adapted for wide dynamic range of the aqueous salinity. Nano Energy, 2021, 85, 105970.	8.2	41
2007	Advancing sensing technology with CRISPR: From the detection of nucleic acids to a broad range of analytes â€“ A review. Analytica Chimica Acta, 2021, 1185, 338848.	2.6	45
2008	Design of non-dimensional parameters in stretchable microstrip antennas with coupled mechanics-electromagnetics. Materials and Design, 2021, 205, 109721.	3.3	10
2009	A Conformable, Gasâ€Permeable, and Transparent Skinâ€Like Micromesh Architecture for Glucose Monitoring. Advanced Healthcare Materials, 2021, 10, e2100046.	3.9	13
2010	Smartphoneâ€Flashlightâ€Mediated Remote Control of Rapid Insulin Secretion Restores Glucose Homeostasis in Experimental Typeâ€1 Diabetes. Small, 2021, 17, e2101939.	5.2	18

#	Article	IF	Citations
2011	Wearable Biosupercapacitor: Harvesting and Storing Energy from Sweat. Advanced Functional Materials, 2021, 31, 2102915.	7.8	47
2012	Artificial Intelligence-Enabled Caregiving Walking Stick Powered by Ultra-Low-Frequency Human Motion. ACS Nano, 2021, 15, 19054-19069.	7.3	98
2013	Elasticâ€Connection and Softâ€Contact Triboelectric Nanogenerator with Superior Durability and Efficiency. Advanced Functional Materials, 2021, 31, 2105237.	7.8	68
2014	Flexible Enzymatic Glucose Electrochemical Sensor Based on Polystyrene-Gold Electrodes. Micromachines, 2021, 12, 805.	1.4	28
2015	Impedimetric and Plasmonic Sensing of Collagen I Using a Half-Antibody-Supported, Au-Modified, Self-Assembled Monolayer System. Biosensors, 2021, 11, 227.	2.3	6
2016	Monitoring of Lactate in Interstitial Fluid, Saliva and Sweat by Electrochemical Biosensor: The Uncertainties of Biological Interpretation. Chemosensors, 2021, 9, 195.	1.8	14
2018	Nonâ€Invasive Sweatâ€Based Tracking of Lâ€Dopa Pharmacokinetic Profiles Following an Oral Tablet Administration. Angewandte Chemie, 2021, 133, 19222-19226.	1.6	10
2019	Simultaneous multi-location wireless monitoring of sweat lactate trends. Flexible and Printed Electronics, 2021, 6, 034003.	1.5	11
2020	Non-enzymatic andÂrapid detection of glucose on PVA-CuO thin film using ARDUINO UNO based capacitance measurement unit. Biomedical Microdevices, 2021, 23, 36.	1.4	9
2021	Allâ€Organic Flexible Ferroelectret Nanogenerator with Fabricâ€Based Electrodes for Selfâ€Powered Body Area Networks. Small, 2021, 17, e2103161.	5.2	24
2022	Scaling Metalâ€Elastomer Composites toward Stretchable Multiâ€Helical Conductive Paths for Robust Responsive Wearable Health Devices. Advanced Healthcare Materials, 2021, 10, e2100221.	3.9	18
2023	Energy Autonomous Sweatâ€Based Wearable Systems. Advanced Materials, 2021, 33, e2100899.	11.1	85
2024	Selfâ€Shaping Soft Electronics Based on Patterned Hydrogel with Stencilâ€Printed Liquid Metal. Advanced Functional Materials, 2021, 31, 2105481.	7.8	83
2025	Wearable Internet of Things enabled precision livestock farming in smart farms: A review of technical solutions for precise perception, biocompatibility, and sustainability monitoring. Journal of Cleaner Production, 2021, 312, 127712.	4.6	55
2026	Self-healing Ionic Liquid-based Electronics and Beyond. Chinese Journal of Polymer Science (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.0	10
2027	Smart Fibers and Textiles for Personal Health Management. ACS Nano, 2021, 15, 12497-12508.	7.3	124
2028	Highly stretchable and rehealable wearable strain sensor based on dynamic covalent thermoset and liquid metal. Smart Materials and Structures, 2021, 30, 105001.	1.8	9
2029	UVâ€Curable Adhesive Tapeâ€Assisted Patterning of Metal Nanowires for Ultrasimple Fabrication of Stretchable Pressure Sensor. Advanced Materials Technologies, 2021, 6, 2100776.	3.0	6

#	Article	IF	Citations
2030	Monitor for lactate in perspiration. Journal of Physiological Sciences, 2021, 71, 26.	0.9	7
2031	TiO₂ Nanotubes Alginate Hydrogel Scaffold for Rapid Sensing of Sweat Biomarkers: Lactate and Glucose. ACS Applied Materials & Interfaces, 2021, 13, 37734-37745.	4.0	50
2032	Recent advances in flexible sweat glucose biosensors. Journal Physics D: Applied Physics, 2021, 54, 423001.	1.3	22
2033	Smart Materials Enabled with Artificial Intelligence for Healthcare Wearables. Advanced Functional Materials, 2021, 31, 2105482.	7.8	56
2034	Next-Generation Digital Biomarkers for Tuberculosis and Antibiotic Stewardship: Perspective on Novel Molecular Digital Biomarkers in Sweat, Saliva, and Exhaled Breath. Journal of Medical Internet Research, 2021, 23, e25907.	2.1	6
2035	Cactusâ€Spineâ€Inspired Sweatâ€Collecting Patch for Fast and Continuous Monitoring of Sweat. Advanced Materials, 2021, 33, e2102740.	11.1	72
2036	Stretchable and self-healable hydrogel artificial skin. National Science Review, 2022, 9, .	4.6	40
2037	Porous spongy FexCo1â^'xP nanostructure and MXene infused self-powered flexible textile based personal thermoregulatory device. Nano Energy, 2021, 86, 106042.	8.2	18
2038	Thermoplasmonic effect onto Toad physiology signals by plasmonic microchip structure. Scientific Reports, 2021, 11, 17287.	1.6	1
2039	Wearable Biofuel Cells: Advances from Fabrication to Application. Advanced Functional Materials, 2021, 31, 2103976.	7.8	38
2040	Electrochemical Biosensors Based on Microâ€fabricated Devices for Pointâ€ofâ€Care Testing: A Review. Electroanalysis, 2022, 34, 168-183.	1.5	11
2041	A long-term stable and flexible glucose sensor coated with poly(ethylene glycol)-modified polyurethane. Journal of Electroanalytical Chemistry, 2021, 895, 115518.	1.9	9
2042	Printable Smart Materials and Devices: Strategies and Applications. Chemical Reviews, 2022, 122, 5144-5164.	23.0	121
2043	Atomic layer deposition-assisted fabrication of 3D Co-doped carbon framework for sensitive enzyme-free lactic acid sensor. Chemical Engineering Journal, 2021, 417, 129285.	6.6	24
2044	Skin-electrode iontronic interface for mechanosensing. Nature Communications, 2021, 12, 4731.	5.8	72
2045	Flexible self-powered piezoelectric pressure sensor based on GaN/p-GaN coaxial nanowires. Journal of Alloys and Compounds, 2021, 872, 159661.	2.8	23
2046	A non-printed integrated-circuit textile for wireless theranostics. Nature Communications, 2021, 12, 4876.	5.8	76
2047	Optical glucose biosensor built-in disposable strips and wearable electronic devices. Biosensors and Bioelectronics, 2021, 185, 113237.	5.3	33

#	Article	IF	Citations
2048	Integrated Multiplex Sensing Bandage for In Situ Monitoring of Early Infected Wounds. ACS Sensors, 2021, 6, 3112-3124.	4.0	28
2049	Potentiometric ion-selective sensors based on UV-ozone irradiated laser-induced graphene electrode. Electrochimica Acta, 2021, 387, 138341.	2.6	16
2050	Carbon nanotube-based van der Waals heterojunction electrodes for high-performance intrinsically stretchable organic photoelectric transistors. Giant, 2021, 7, 100060.	2.5	7
2051	An Overview of Wearable and Implantable Electrochemical Glucose Sensors. Electroanalysis, 2022, 34, 237-245.	1.5	37
2052	Strain Sensing by Electrical Capacitive Variation: From Stretchable Materials to Electronic Interfaces. Advanced Electronic Materials, 2021, 7, 2100190.	2.6	17
2053	Onâ€Skin Stimulation Devices for Haptic Feedback and Humanâ€“Machine Interfaces. Advanced Materials Technologies, 2022, 7, 2100452.	3.0	7
2054	Epidermal Sensor for Potentiometric Analysis of Metabolite and Electrolyte. Analytical Chemistry, 2021, 93, 11525-11531.	3.2	32
2055	Self-healing, stretchable, and highly adhesive hydrogels for epidermal patch electrodes. Acta Biomaterialia, 2022, 139, 296-306.	4.1	63
2056	Rheological conductor from liquid metal-polymer composites. Matter, 2021, 4, 3001-3014.	5.0	33
2057	Derivation of analytical expressions for the stress/strain distributions, bending plane and curvature radius in multilayer thin-film composites. Journal of Micromechanics and Microengineering, 2021, 31, 113003.	1.5	5
2058	Microâ€Crack Assisted Wrinkled PEDOT: PSS to Detect and Distinguish Tensile Strain and Pressure Based on a Triboelectric Nanogenerator. Advanced Materials Technologies, 2022, 7, 2100423.	3.0	14
2059	Flexible Temperature Sensors. Frontiers in Chemistry, 2021, 9, 539678.	1.8	32
2060	A paradigm shift fully self-powered long-distance wireless sensing solution enabled by discharge-induced displacement current. Science Advances, 2021, 7, eabi6751.	4.7	50
2061	Heterogeneous Functional Dielectric Patterns for Chargeâ€Carrier Modulation in Ultraflexible Organic Integrated Circuits. Advanced Materials, 2021, 33, e2104446.	11.1	10
2062	Multi-target electrochemical malaria aptasensor on flexible multielectrode arrays for detection in malaria parasite blood samples. Sensors and Actuators B: Chemical, 2021, 349, 130812.	4.0	17
2063	Skin-like hydrogel devices for wearable sensing, soft robotics and beyond. IScience, 2021, 24, 103174.	1.9	103
2064	Laser-engraved graphene for flexible and wearable electronics. Trends in Chemistry, 2021, 3, 969-981.	4.4	34
2065	Waterproof, flexible field-effect transistors with submicron monocrystalline Si nanomembrane derived encapsulation for continuous pH sensing. Biosensors and Bioelectronics, 2022, 195, 113683.	5.3	6

#	Article	IF	Citations
2066	Scalable production of high-performing woven lithium-ion fibre batteries. Nature, 2021, 597, 57-63.	13.7	270
2067	Highly flexible and recyclable Fâ€“SiO2/MPU composites for self-powered active motion sensors. Composites Science and Technology, 2021, 216, 109068.	3.8	6
2068	Advanced materials used in wearable health care devices and medical textiles in the battle against coronavirus (COVID-19): A review. Journal of Industrial Textiles, 2022, 51, 246S-271S.	1.1	16
2069	The multi-channel potentiostat: Development and evaluation of a scalable mini-potentiostat array for investigating electrochemical reaction mechanisms. PLoS ONE, 2021, 16, e0257167.	1.1	16
2070	Feature Extraction and Data Analysis of Basketball Motion Postures: Acquisition With an Inertial Sensor. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2021, 4, .	0.3	0
2071	Realizing Highâ€Energy and Stable Wireâ€Type Batteries with Flexible Lithiumâ€“Metal Composite Yarns. Advanced Energy Materials, 2021, 11, 2101809.	10.2	32
2072	Sample Preparation and Diagnostic Methods for a Variety of Settings: A Comprehensive Review. Molecules, 2021, 26, 5666.	1.7	10
2073	Hybrid film for liquidâ€solid contactâ€based energy harvesting systems. International Journal of Energy Research, 2022, 46, 1672-1682.	2.2	3
2074	Point of care testing of sports biomarkers: Potential applications, recent advances and future outlook. TrAC - Trends in Analytical Chemistry, 2021, 142, 116327.	5.8	25
2075	Non-invasive wearable chemical sensors in real-life applications. Analytica Chimica Acta, 2021, 1179, 338643.	2.6	68
2076	Wireless technologies, medical applications and future challenges in WBAN: a survey. Wireless Networks, 2021, 27, 5271-5295.	2.0	44
2077	Wearable Thermoelectric Materials and Devices for Selfâ€Powered Electronic Systems. Advanced Materials, 2021, 33, e2102990.	11.1	221
2078	Triboelectric Nanogenerators for Self-Powered Breath Monitoring. ACS Applied Energy Materials, 2022, 5, 3952-3965.	2.5	39
2079	Conformal 3D printing of non-planar antennas on wrinkled and folded kapton films using point cloud data. Flexible and Printed Electronics, 2021, 6, 044002.	1.5	6
2080	Skinâ€Integrated Devices with Soft, Holey Architectures for Wireless Physiological Monitoring, With Applications in the Neonatal Intensive Care Unit. Advanced Materials, 2021, 33, e2103974.	11.1	35
2081	Harnessing of real-world data and real-world evidence using digital tools: utility and potential models in rheumatology practice. Rheumatology, 2022, 61, 502-513.	0.9	5
2082	Hand-drawn electrode based disposable paper chip for artificial sweat analysis using impedance spectroscopy. Biomedical Microdevices, 2021, 23, 42.	1.4	10
2083	Hydrogen Peroxide Detection Using Prussian Blueâ€Modified 3D Pyrolytic Carbon Microelectrodes. Electroanalysis, 0, , .	1.5	4

#	Article	IF	Citations
2084	Conformal electrodes for onâ€skin digitalization. SmartMat, 2021, 2, 252-262.	6.4	28
2085	E-Skin: The Dawn of a New Era of On-Body Monitoring Systems. Micromachines, 2021, 12, 1091.	1.4	23
2086	3D Printing of Hydrogels for Stretchable Ionotronic Devices. Advanced Functional Materials, 2021, 31, 2107437.	7.8	70
2087	A Conductive Hydrogel Based on GaIn and PVA/PAA/Fe³⁺ for Strain Sensor and Physiological Signal Detection. ACS Applied Polymer Materials, 2021, 3, 5268-5276.	2.0	13
2088	A Punctureâ€Resistant and Selfâ€Healing Conductive Gel for Multifunctional Electronic Skin. Advanced Functional Materials, 2021, 31, 2107006.	7.8	82
2089	AI enabled sign language recognition and VR space bidirectional communication using triboelectric smart glove. Nature Communications, 2021, 12, 5378.	5.8	208
2090	Wearable Selfâ€Powered Electrochemical Devices for Continuous Health Management. Advanced Functional Materials, 2021, 31, 2107042.	7.8	58
2091	A Shapeâ€Variable, Lowâ€Temperature Liquid Metalâ€“Conductive Polymer Aqueous Secondary Battery. Advanced Functional Materials, 2021, 31, 2107062.	7.8	17
2092	A thread-based wearable sweat nanobiosensor. Biosensors and Bioelectronics, 2021, 188, 113270.	5.3	58
2093	Communicationâ€”An Epidermal Electrochemical Energy Source with a Replaceable Glucose Power Supply Membrane. Journal of the Electrochemical Society, 0, , .	1.3	1
2094	Magnetoelectrical Clothing Generator for Highâ€Performance Transduction from Biomechanical Energy to Electricity. Advanced Functional Materials, 2022, 32, 2107682.	7.8	21
2095	Electrochemical immunosensor for the determination of prolactin in saliva and breast milk. Microchemical Journal, 2021, 169, 106589.	2.3	7
2096	An integrated wearable strain, temperature and humidity sensor for multifunctional monitoring. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106504.	3.8	21
2097	Organic electrochemical transistors in bioelectronic circuits. Biosensors and Bioelectronics, 2021, 190, 113461.	5.3	63
2098	Electrochemical sensors: From the bench to the skin. Sensors and Actuators B: Chemical, 2021, 344, 130178.	4.0	71
2099	Modeling electromechanical coupling of liquid metal embedded elastomers while accounting stochasticity in 3D percolation. Extreme Mechanics Letters, 2021, 48, 101443.	2.0	18
2100	Continuous capillary-flow sensing of glucose and lactate in sweat with an electrochemical sensor based on functionalized graphene oxide. Sensors and Actuators B: Chemical, 2021, 344, 130253.	4.0	45
2101	Biosensors and Bioelectronics on Smartphone. , 2022, , 627-655.		0

#	Article	IF	Citations
2102	Approaches to deformable physical sensors: Electronic versus iontronic. Materials Science and Engineering Reports, 2021, 146, 100640.	14.8	29
2103	Flexible electrochemical uric acid and glucose biosensor. Bioelectrochemistry, 2021, 141, 107870.	2.4	29
2104	Wearable patch delivery system for artificial pancreas health diagnostic-therapeutic application: A review. Biosensors and Bioelectronics, 2021, 189, 113384.	5.3	9
2105	All-solid state ion-selective carbon black-modified printed electrode for sodium detection in sweat. Electrochimica Acta, 2021, 394, 139050.	2.6	29
2106	Tailoring the defects of two-dimensional borocarbonitride nanomesh for high energy density micro-supercapacitor. Energy Storage Materials, 2021, 42, 430-437.	9.5	25
2107	A fully 3D printed electronic skin with bionic high resolution and air permeable porous structure. Journal of Colloid and Interface Science, 2021, 602, 452-458.	5.0	19
2108	Human body-based self-powered wearable electronics for promoting wound healing driven by biomechanical motions. Nano Energy, 2021, 89, 106465.	8.2	55
2109	Designing bimetallic Ni-based layered double hydroxides for enzyme-free electrochemical lactate biosensors. Sensors and Actuators B: Chemical, 2021, 346, 130505.	4.0	22
2110	Luminescent wearable biosensors based on gold nanocluster networks for â€œturn-onâ€•detection of Uric acid, glucose and alcohol in sweat. Biosensors and Bioelectronics, 2021, 192, 113530.	5.3	45
2111	A highly stretchable and breathable polyurethane fibrous membrane sensor for human motion monitoring and voice signal recognition. Sensors and Actuators A: Physical, 2021, 331, 112974.	2.0	11
2112	Design of flexible curved sensor array for wind pressure monitoring of train bogie. Sensors and Actuators A: Physical, 2021, 331, 112873.	2.0	0
2113	A cost-effective and solderability stretchable circuit boards for wearable devices. Sensors and Actuators A: Physical, 2021, 331, 112924.	2.0	4
2114	A disposable, wearable, flexible, stitched textile electrochemical biosensing platform. Biosensors and Bioelectronics, 2021, 194, 113604.	5.3	24
2115	Organic-transistor-based biosensors interfaced with human skin for non-invasive perspiration analysis. Sensors and Actuators B: Chemical, 2021, 349, 130778.	4.0	15
2116	Quantum dots-based hydrogel microspheres for visual determination of lactate and simultaneous detection coupled with microfluidic device. Microchemical Journal, 2021, 171, 106801.	2.3	15
2117	Fully integrated flexible long-term electrocardiogram recording patch with gel-less adhesive electrodes for arrhythmia detection. Sensors and Actuators A: Physical, 2021, 332, 113063.	2.0	12
2118	Core-sheath fibers composed of F-doped nickel hydroxide nanorods and graphene fibers for effective fiber-shaped nonenzymatic glucose sensors. Journal of Alloys and Compounds, 2021, 889, 161608.	2.8	7
2119	High-strength, highly conductive and woven organic hydrogel fibers for flexible electronics. Chemical Engineering Journal, 2022, 428, 131172.	6.6	40

#	Article	IF	Citations
2120	Multi-Ion-Sensing Emulator and Multivariate Calibration Optimization by Machine Learning Models. IEEE Access, 2021, 9, 46821-46836.	2.6	4
2121	Soft mechanical and biochemical sensors. , 2021, , 107-132.		0
2122	Ultrahigh compressibility and superior elasticity carbon framework derived from shaddock peel for high-performance pressure sensing. RSC Advances, 2021, 11, 28621-28631.	1.7	5
2123	Antifouling hydrogel film based on a sandwich array for salivary glucose monitoring. RSC Advances, 2021, 11, 27561-27569.	1.7	10
2124	Multilayered electronic transfer tattoo that can enable the crease amplification effect. Science Advances, 2021, 7, .	4.7	112
2125	Flexible, self-healable, adhesive and wearable hydrogel patch for colorimetric sweat detection. Journal of Materials Chemistry C, 2021, 9, 14938-14945.	2.7	65
2126	Wearable and Implantable Intraocular Pressure Biosensors: Recent Progress and Future Prospects. Advanced Science, 2021, 8, 2002971.	5.6	28
2127	Wearable strain sensor for real-time sweat volume monitoring. IScience, 2021, 24, 102028.	1.9	41
2128	Integrated Devices for Nonâ€Invasive Diagnostics. Advanced Functional Materials, 2021, 31, 2010388.	7.8	51
2129	Materials, Devices, and Applications for Wearable and Implantable Electronics. ACS Applied Electronic Materials, 2021, 3, 485-503.	2.0	37
2130	Improving the Accuracy of Pdot-Based Continuous Glucose Monitoring by Using External Ratiometric Calibration. Analytical Chemistry, 2021, 93, 2359-2366.	3.2	11
2131	Self-powered ultrasensitive and highly stretchable temperatureâ€“strain sensing composite yarns. Materials Horizons, 2021, 8, 2513-2519.	6.4	21
2132	A Wearable Surface-Enhanced Raman Scattering Sensor for Label-Free Molecular Detection. ACS Applied Materials & Interfaces, 2021, 13, 3024-3032.	4.0	70
2133	Lightâ€Boosting Highly Sensitive Pressure Sensors Based on Bioinspired Multiscale Surface Structures. Advanced Functional Materials, 2020, 30, 1907091.	7.8	97
2134	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
2135	Wearable Sensorsâ€Enabled Humanâ€“Machine Interaction Systems: From Design to Application. Advanced Functional Materials, 2021, 31, 2008936.	7.8	322
2136	Flexible Difunctional (Pressure and Light) Sensors Based on ZnO Nanowires/Graphene Heterostructures. Advanced Materials Interfaces, 2020, 7, 1901932.	1.9	16
2137	Highâ€Performance Flexible Bioelectrocatalysis Bioassay System Based on a Triphase Interface. Advanced Materials Interfaces, 2020, 7, 1902172.	1.9	6

#	Article	IF	Citations
2138	Multiâ€Functional Hydrogelâ€Interlayer RF/NFC Resonators as a Versatile Platform for Passive and Wireless Biosensing. Advanced Electronic Materials, 2020, 6, 1901311.	2.6	33
2139	Skinâ€Like Electronics for Perception and Interaction: Materials, Structural Designs, and Applications. Advanced Intelligent Systems, 2021, 3, 2000108.	3.3	10
2141	The (in)dependency of blood and sweat sodium, chloride, potassium, ammonia, lactate and glucose concentrations during submaximal exercise. European Journal of Applied Physiology, 2021, 121, 803-816.	1.2	35
2142	Optoelectronic sensing of biophysical and biochemical signals based on photon recycling of a micro-LED. Nano Research, 2021, 14, 3208-3213.	5.8	9
2143	Wearable electrochemical sensors for noninvasive monitoring of healthâ€"a perspective. Current Opinion in Electrochemistry, 2020, 23, 42-46.	2.5	24
2144	Sensors for internet of medical things: State-of-the-art, security and privacy issues, challenges and future directions. Computer Communications, 2020, 160, 111-131.	3.1	68
2145	Wearable electrochemical biosensor based on molecularly imprinted Ag nanowires for noninvasive monitoring lactate in human sweat. Sensors and Actuators B: Chemical, 2020, 320, 128325.	4.0	96
2146	The role of sampling in wearable sweat sensors. Talanta, 2020, 212, 120801.	2.9	97
2147	Microbial nanocellulose adherent to human skin used in electrochemical sensors to detect metal ions and biomarkers in sweat. Talanta, 2020, 218, 121153.	2.9	76
2148	Bioinspired, Superhydrophobic, and Paper-Based Strain Sensors for Wearable and Underwater Applications. ACS Applied Materials & Interfaces, 2021, 13, 1967-1978.	4.0	85
2149	High-Efficiency Transfer Printing Using Droplet Stamps for Robust Hybrid Integration of Flexible Devices. ACS Applied Materials & Interfaces, 2021, 13, 1612-1619.	4.0	19
2150	A Bendable Biofuel Cell-Based Fully Integrated Biomedical Nanodevice for Point-of-Care Diagnosis of Scurvy. ACS Sensors, 2021, 6, 275-284.	4.0	34
2151	Rapid and sensitive detection of drugs of abuse in sweat by multiplexed capillary based immuno-biosensors. Analyst, The, 2020, 145, 1346-1354.	1.7	29
2152	Highly tough supramolecular double network hydrogel electrolytes for an artificial flexible and low-temperature tolerant sensor. Journal of Materials Chemistry A, 2020, 8, 6776-6784.	5.2	220
2153	Control of pH in bioelectronics and applications. APL Materials, 2020, 8, .	2.2	9
2154	Design and applications of graphene-based flexible and wearable physical sensing devices. 2D Materials, 2021, 8, 022001.	2.0	16
2155	Inkjet-printed Ti₃C₂T_x MXene electrodes for multimodal cutaneous biosensing. JPhys Materials, 2020, 3, 044004.	1.8	30
2156	Totally organic electrical skin patch powered by flexible biobattery. JPhys Energy, 2020, 2, 044004.	2.3	7

#	Article	IF	Citations
2158	NFC-enabled, tattoo-like stretchable biosensor manufactured by â€œcut-and-pasteâ€•method. , 2017, 2017, 4094-4097.		19
2159	Mechanics of Buckled Kirigami Membranes for Stretchable Interconnects in Island-Bridge Structures. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	14
2160	Internet of Thingsâ€”A Novel Innovation in Dentistry. Journal of Advanced Oral Research, 2021, 12, 42-48.	0.3	4
2161	Flexible and stretchable inorganic optoelectronics. Optical Materials Express, 2019, 9, 4023.	1.6	35
2162	3D integrated photonics platform with deterministic geometry control. Photonics Research, 2020, 8, 194.	3.4	10
2163	Ion concentration measurement using synthetic microfluidic papers. PLoS ONE, 2020, 15, e0242188.	1.1	3
2164	Implementation of Smart Dressing Systems Based on Flexible pH Sensors Using PET Films. IEICE Transactions on Information and Systems, 2019, E102.D, 1572-1575.	0.4	3
2165	E-health-IoT Universe: A Review. International Journal on Advanced Science, Engineering and Information Technology, 2017, 7, 2328.	0.2	46
2166	Counting Bites With Bits: Expert Workshop Addressing Calorie and Macronutrient Intake Monitoring. Journal of Medical Internet Research, 2019, 21, e14904.	2.1	19
2167	Consumer Perceptions of Wearable Technology Devices: Retrospective Review and Analysis. JMIR MHealth and UHealth, 2020, 8, e17544.	1.8	36
2168	Using Google Glass in Surgical Settings: Systematic Review. JMIR MHealth and UHealth, 2018, 6, e54.	1.8	74
2169	Wearables and the medical revolution. Personalized Medicine, 2018, 15, 429-448.	0.8	361
2170	Evaluation of mobile applications for fitness training and physical activity in healthy low-trained people - A modular interdisciplinary framework. International Journal of Computer Science in Sport, 2019, 18, 12-43.	0.6	7
2172	Introducing Engineered Science. Engineered Science, 2018, , .	1.2	6
2173	Glycemic Monitoring and Prediction With Response Improvement via Psyllium. Advances in Medical Technologies and Clinical Practice Book Series, 2019, , 185-203.	0.3	2
2174	A Five-Step Strategy to Combine Data Sources from Multiple Wearable Sensors. Technology and Investment, 2017, 08, 33-43.	0.4	6
2175	Trends in Epidermal Stretchable Electronics for Noninvasive Long-term Healthcare Applications. International Journal of Automation and Smart Technology, 2017, 7, 37-52.	0.4	10
2176	Real-Time Multi-Ion-Monitoring Front-End With Interference Compensation by Multi-Output Support Vector Regressor. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1093-1106.	2.7	1

#	Article	IF	Citations
2177	Wearable chem-biosensing devices: from basic research to commercial market. Lab on A Chip, 2021, 21, 4285-4310.	3.1	29
2178	Flexible Hybrid Integration Enabled xsOn-Skin Electronics for Wireless Monitoring of Electrophysiology and Motion. IEEE Transactions on Biomedical Engineering, 2022, 69, 1340-1348.	2.5	6
2179	Can Wearable Sweat Lactate Sensors Contribute to Sports Physiology?. ACS Sensors, 2021, 6, 3496-3508.	4.0	45
2180	Noninvasive Blood Glucose Concentration Measurement Based on Conservation of Energy Metabolism and Machine Learning. Sensors, 2021, 21, 6989.	2.1	3
2181	Tendon-Inspired Piezoelectric Sensor for Biometric Application. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2538-2547.	3.7	9
2182	Integrating Highly Porous and Flexible Au Hydrogels with Soft-MEMS Technologies for High-Performance Wearable Biosensing. Analytical Chemistry, 2021, 93, 14068-14075.	3.2	28
2184	Organic Bioelectronic Devices for Metabolite Sensing. Chemical Reviews, 2022, 122, 4581-4635.	23.0	55
2185	Ultrasoft, mass-permeable, and low-impedance hydrogels for tissue-like skin-device interfaces. Science Bulletin, 2021, 67, 114-114.	4.3	0
2186	Accelerated Electron Transfer in Nanostructured Electrodes Improves the Sensitivity of Electrochemical Biosensors. Advanced Science, 2021, 8, e2102495.	5.6	32
2187	Biospired Janus Silk E-Textiles with Wetâ€“Thermal Comfort for Highly Efficient Biofluid Monitoring. Nano Letters, 2021, 21, 8880-8887.	4.5	71
2188	Highly Durable and Stretchable Ti₃C₂T_x/PPyâ€Fabricâ€Based Strain Sensor for Humanâ€Motion Detection. Advanced Materials Technologies, 2022, 7, 2100675.	3.0	8
2189	Carbonâ€Based Nanomaterials and Sensing Tools for Wearable Health Monitoring Devices. Advanced Materials Technologies, 2022, 7, 2100572.	3.0	38
2190	A perspective on flexible sensors in developing diagnostic devices. Applied Physics Letters, 2021, 119, .	1.5	23
2191	Lattice Proton Intercalation to Regulate WO₃â€Based Solidâ€Contact Wearable pH Sensor for Sweat Analysis. Advanced Functional Materials, 2022, 32, 2107653.	7.8	40
2192	Flexible and recyclable bio-based transient resistive memory enabled by self-healing polyimine membrane. Journal of Colloid and Interface Science, 2022, 608, 1126-1134.	5.0	15
2193	Largeâ€Area Piezoresistive Tactile Sensor Developed by Training a Superâ€Simple Singleâ€Layer Carbon Nanotubeâ€Dispersed Polydimethylsiloxane Pad. Advanced Intelligent Systems, 2022, 4, 2100123.	3.3	6
2194	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
2195	Smart Chemical Engineeringâ€Based Lightweight and Miniaturized Attachable Systems for Advanced Drug Delivery and Diagnostics. Advanced Materials, 2022, 34, e2106701.	11.1	13

#	Article	IF	Citations
2196	Machine-learned, waterproof MXene fiber-based glove platform for underwater interactivities. Nano Energy, 2022, 91, 106650.	8.2	37
2197	Fabrication of a Wearable Flexible Sweat pH Sensor Based on SERS-Active Au/TPU Electrospun Nanofibers. ACS Applied Materials & Interfaces, 2021, 13, 51504-51518.	4.0	50
2198	Low-Threshold and Wavelength-Tunable InGaN Tubular WGM Laser Embedded in a Flexible Substrate. Crystals, 2021, 11, 1251.	1.0	2
2199	Biosymbiotic, personalized, and digitally manufactured wireless devices for indefinite collection of high-fidelity biosignals. Science Advances, 2021, 7, eabj3269.	4.7	22
2200	Flexible energy storage devices for wearable bioelectronics. Journal of Semiconductors, 2021, 42, 101602.	2.0	26
2201	Sensors for Context-Aware Smart Healthcare: A Security Perspective. Sensors, 2021, 21, 6886.	2.1	23
2202	IoT device fabrication using roll-to-roll printing process. Scientific Reports, 2021, 11, 19982.	1.6	16
2203	Ionâ€Conducting Hydrogels and Their Applications in Bioelectronics. Advanced Sustainable Systems, 2022, 6, 2100173.	2.7	41
2204	Flexible organic electrochemical transistors for chemical and biological sensing. Nano Research, 2022, 15, 2433-2464.	5.8	29
2205	Large-scale preparation of ultra-long ZnSe-PbSe heterojunction nanowires for flexible broadband photodetectors. Journal of Science: Advanced Materials and Devices, 2021, 7, 100396-100396.	1.5	1
2206	Nacre-inspired tunable strain sensor with synergistic interfacial interaction for sign language interpretation. Nano Energy, 2021, 90, 106606.	8.2	39
2207	Toward closed-loop drug delivery: Integrating wearable technologies with transdermal drug delivery systems. Advanced Drug Delivery Reviews, 2021, 179, 113997.	6.6	35
2208	Lithographically patterned stretchable metallic microwiring on electrospun nanofiber mats. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	0.6	2
2209	FLEXIBLE SYSTEMS FOR WEARABLE PHYSIOLOGICAL MONITORING APPLICATIONS. , 2016, , .		0
2210	ç†±ä¸ç—‡ç—ãªæ–°æŠ€è¡“â€”å®Ÿç”¨å¿—å‘ã•æœªæ¥å¿—å‘â€”. Journal of Occupational Safety and Health, 2017, 10, 63-63.	0.1	0
2211	Potenziale fÃ¼r POCT im Internet of Things (IoT). , 2017, , 423-434.		0
2213	Experimental and theoretical analysis of integrated circuit (IC) chips on flexible substrates subjected to bending. Journal of Applied Physics, 2017, 122, .	1.1	2
2216	Recommendation System. Advances in Medical Technologies and Clinical Practice Book Series, 2018, , 111-127.	0.3	1

#	Article	IF	Citations
2217	The potential for POCT in the Internet of Things (IoT). , 2018, , 421-431.		0
2218	Arterial pulses assessed with FBG based films: a smart skin approach. , 2018, , .		4
2219	Emerging wearable technologies for personalized health and performance monitoring. , 2018, , .		0
2220	Research trends on prevention of heat stroke using clothing: Focusing on practical research in Japan. Family and Environment Research, 2018, 56, 473-491.	0.1	0
2221	Wearables Security and Privacy. Studies in Systems, Decision and Control, 2019, , 351-380.	0.8	2
2222	Pt Nanoparticles/Carbonized Silk Fabric Composites for Flexible Electrochemical Glucose Sensor. Material Sciences, 2019, 09, 984-992.	0.0	1
2223	Improved Transfer Process for the Fully Additive Manufacturing of a Conductive Layer-Stacked Polymeric Cantilever. Materials Sciences and Applications, 2019, 10, 45-52.	0.3	0
2226	2ï¼Žä½“æ¶²æ˜†ã®è‡ªå·±é§†å‹•ãƒªã‚¢ãƒ«ã‚¿ã‚¤ãƒ ã‚¤ãƒ¡ãƒ¼ã‚¸ãƒ³ã‚°. Denki Kagaku, 2019, 87, 299-305.	0.0	0
2227	Antrenman YÃ¼kÃ¼. CBÃœ Beden EÄŸitimi Ve Spor Bilimleri Dergisi, 2019, 14, 152-175.	0.1	3
2228	A Comprehensive Review of Wearable Applications and Material Construction. Open Journal of Applied Sciences, 2020, 10, 364-408.	0.2	2
2229	Electromigration Damage of Flexible Electronic Lines Printed With Ag Nanoparticle Ink. Journal of Electronic Packaging, Transactions of the ASME, 2020, 142, .	1.2	5
2230	Wearable Devices for Monitoring Work related Musculoskeletal and Gait Disorders. , 2020, , .		1
2231	Flexible Potentiostat Readout Circuit Patch for Electrochemical and Biosensor Applications. , 2020, , .		0
2232	Design and Evaluation of Three-Dimensional Zigzag Chaotic Micromixers for Biochemical Applications. Industrial & Engineering Chemistry Research, 2021, 60, 16116-16125.	1.8	3
2233	Artificial IntelligenceÂBased Body Sensor Network Frameworkâ€”Narrative Review: Proposing an End-to-End Framework using Wearable Sensors, Real-Time Location Systems and Artificial Intelligence/Machine Learning Algorithms for Data Collection, Data Mining and Knowledge Discovery in Sports and Healthcare. Sports Medicine - Open, 2021, 7, 79.	1.3	19
2234	Highly sensing and transducing materials for potentiometric ion sensors with versatile applicability. Progress in Materials Science, 2022, 125, 100885.	16.0	26
2235	Electrical Double Layer-based Iontronic Sensor for Detection of Electrolytes Concentration. Chinese Journal of Analytical Chemistry, 2021, 50, 13-13.	0.9	1
2236	Wearable Sweat Loss Measuring Devices: From the Role of Sweat Loss to Advanced Mechanisms and Designs. Advanced Science, 2022, 9, e2103257.	5.6	69

#	Article	IF	Citations
2237	Dynamic Monitoring of Systemic Biomarkers with Gastric Sensors. Advanced Science, 2021, 8, e2102861.	5.6	5
2238	From new materials to advanced biomedical applications of solid-state biosensor: A review. Sensors and Actuators B: Chemical, 2022, 352, 131033.	4.0	11
2239	Recent Progress in Intelligent Wearable Sensors for Health Monitoring and Wound Healing Based on Biofluids. Frontiers in Bioengineering and Biotechnology, 2021, 9, 765987.	2.0	24
2240	Fully integrated flexible biosensor for wearable continuous glucose monitoring. Biosensors and Bioelectronics, 2022, 196, 113760.	5.3	74
2241	A Colorimetric Dermal Tattoo Biosensor Fabricated by Microneedle Patch for Multiplexed Detection of Healthâ€Related Biomarkers. Advanced Science, 2021, 8, e2103030.	5.6	65
2242	Glucose Sensing for Diabetes Monitoring: From Invasive to Wearable Device. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 350-364.	0.3	2
2243	Diagnosis and prognosis for exercise-induced muscle injuries: from conventional imaging to emerging point-of-care testing. RSC Advances, 2020, 10, 38847-38860.	1.7	1
2244	Molecular Diagnostics in Personalized Medicine. , 2021, , 39-101.		2
2245	Conducting polymers in wearable devices. Medical Devices & Sensors, 2021, 4, e10160.	2.7	20
2246	Multifunctional hybrid skin patch for wearable smart healthcare applications. Biosensors and Bioelectronics, 2022, 196, 113685.	5.3	36
2247	Beyond liquid biopsy: Toward non-invasive assays for distanced cancer diagnostics in pandemics. Biosensors and Bioelectronics, 2022, 196, 113698.	5.3	23
2248	Fiber Sensors. , 2020, , 291-326.		0
2249	Internet of Things in Healthcare. Advances in Medical Technologies and Clinical Practice Book Series, 2020, , 23-39.	0.3	3
2250	Measurement in biological fluids. , 2020, , 223-246.		0
2251	Military Medical Enhancement and Autonomous AI Systems: Requirements, Implications, Concerns. Military and Humanitarian Health Ethics, 2020, , 175-194.	0.7	0
2252	Biosensors and Bioelectronics on Smartphone. , 2020, , 1-29.		0
2253	Intelligent Wearable IOT Continuous Monitoring System for Elderly Based on Deep Learning Algorithm. EAI/Springer Innovations in Communication and Computing, 2020, , 275-292.	0.9	0
2254	Surface Engineering in Wearable Sensors for Medical Diagnostic Applications. , 2020, , 101-122.		0

#	Article	IF	Citations
2255	Minimally Invasive Technologies for Biosensing. , 2020, , 193-223.		0
2256	Printed Electronics-Enabled Wearable/Portable Physical and Chemical Sensors for Personal Digital Healthcare Usage. , 2021, , .		0
2257	Investigation of Shear Stress between Roll Interfaces in a High-accuracy Roll-Type Stamping Transfer System. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 79-83.	0.0	0
2258	Health Care Device to Detect Various Diseases. International Journal of Scientific Research in Science and Technology, 2020, , 353-355.	0.1	0
2259	Recent advances of flexible sensors for biomedical applications. Progress in Natural Science: Materials International, 2021, 31, 872-882.	1.8	42
2260	Wearable Sweat Biosensors Refresh Personalized Health/Medical Diagnostics. Research, 2021, 2021, 9757126.	2.8	29
2261	Ion-Selective Membrane-Coated Grapheneâ€“Hexagonal Boron Nitride Heterostructures for Field-Effect Ion Sensing. ACS Omega, 2021, 6, 30281-30291.	1.6	5
2262	A Skinâ€Interfaced, Miniaturized Microfluidic Analysis and Delivery System for Colorimetric Measurements of Nutrients in Sweat and Supply of Vitamins Through the Skin. Advanced Science, 2022, 9, e2103331.	5.6	53
2263	Hand-Held and Integrated Tubular Tip-like Sensing Platform Series: Point-of-care Device for Semi-automated Multiplexed Assay. Analytical Chemistry, 2021, 93, 15534-15542.	3.2	1
2264	Scalably Nanomanufactured Atomically Thin Materialsâ€Based Wearable Health Sensors. Small Structures, 2022, 3, 2100120.	6.9	16
2265	Quantitative Correlation of Droplets on Galvanic-Coupled Arrays with Response Current by Image Processing. ACS Omega, 2021, 6, 30818-30825.	1.6	6
2266	Miniature sono-electrochemical platform enabling effective and gentle electrode biofouling removal for continuous sweat measurements. Chemical Engineering Journal, 2022, 431, 133354.	6.6	9
2267	Moistureâ€Wicking, Breathable, and Intrinsically Antibacterial Electronic Skin Based on Dualâ€Gradient Poly(ionic liquid) Nanofiber Membranes. Advanced Materials, 2022, 34, e2106570.	11.1	110
2268	Liquid metal-polymer conductor-based wireless, battery-free epidermal patch. Biosensors and Bioelectronics, 2022, 197, 113765.	5.3	13
2269	Conducting Polymer-Reinforced Laser-Irradiated Graphene as a Heterostructured 3D Transducer for Flexible Skin Patch Biosensors. ACS Applied Materials & Interfaces, 2021, 13, 54456-54465.	4.0	26
2270	Integrated solid-state wearable sweat sensor system for sodium and potassium ion concentration detection. Sensor Review, 2022, 42, 76-88.	1.0	7
2271	Research Progress of Microtransfer Printing Technology for Flexible Electronic Integrated Manufacturing. Micromachines, 2021, 12, 1358.	1.4	9
2272	Wearable Electronic Tongue for Non-Invasive Assessment of Human Sweat. Sensors, 2021, 21, 7311.	2.1	4

#	Article	IF	Citations
2275	Effect of substrate nano-SiO₂ hybridization on edge stress distribution of two-dimensional horseshoe-shaped interconnect under thermal load. Japanese Journal of Applied Physics, 2020, 59, 110902.	0.8	0
2276	Solving Sensor Reading Drifting Using Denoising Data Processing Algorithm (DDPA) for Long-Term Continuous and Accurate Monitoring of Ammonium in Wastewater. ACS ES&T Water, 2021, 1, 530-541.	2.3	12
2277	Working Up a Good Sweat - The Challenges of Standardising Sweat Collection for Metabolomics Analysis. Clinical Biochemist Reviews, 2017, 38, 13-34.	3.3	42
2278	A facile structural strategy for a wearable strain sensor based on carbon nanotube modified helical yarns. Nanoscale Advances, 2021, 4, 250-257.	2.2	6
2279	Bandage based energy generators activated by sweat in wireless skin electronics for continuous physiological monitoring. Nano Energy, 2022, 92, 106755.	8.2	19
2280	Self-powered stretchable strain sensors for motion monitoring and wireless control. Nano Energy, 2022, 92, 106754.	8.2	27
2281	3D-printed low-cost fabrication and facile integration of flexible epidermal microfluidics platform. Sensors and Actuators B: Chemical, 2022, 353, 131085.	4.0	25
2282	Metal-organic framework-based materials for flexible supercapacitor application. Coordination Chemistry Reviews, 2022, 452, 214300.	9.5	112
2283	A fully integrated graphene-polymer field-effect transistor biosensing device for on-site detection of glucose in human urine. Materials Today Chemistry, 2022, 23, 100635.	1.7	8
2284	A 5.75nARMS Resolution Sigma-Delta-based Sinusoidal Current Generator for in-situ Calibration of Electrochemical Bio-sensors. , 2021, , .		1
2285	Synthesis of hierarchical hetero-composite of graphene foam/Î±-Fe2O3 nanowires and its application on glucose biosensors. Journal of Alloys and Compounds, 2022, 895, 162688.	2.8	20
2286	Emergence of high-performing and ultra-fast 2D-graphene nano-biosensing system. Materials Letters, 2022, 308, 131241.	1.3	18
2287	Light-induced thermal convection for collection and removal of carbon nanotubes. Fundamental Research, 2022, 2, 59-65.	1.6	13
2288	Comprehensive Model for the Transformation of Zinc Nitride Metastable Layers. ACS Applied Materials & Interfaces, 2021, 13, 56655-56662.	4.0	2
2289	Recent Advances and Future Trends in Bioanalytical Chemistry. , 2022, , 543-558.		3
2290	Control method of applied voltage for fabricating micro-pattern using near-field electrohydrodynamic direct-writing technology. AIP Advances, 2021, 11, 115120.	0.6	1
2291	Wearable, Breathable and Waterproof Triboelectric Nanogenerators for Harvesting Human Motion and Raindrop Energy. Advanced Materials Technologies, 2022, 7, .	3.0	30
2292	Fully Photonic Integrated Wearable Optical Interrogator. ACS Photonics, 2021, 8, 3607-3618.	3.2	5

#	Article	IF	Citations
2293	Ion-Selective Potentiometric Sensors with Silicone Sensing Membranes: A Review. Current Opinion in Electrochemistry, 2021, 32, 100896.	2.5	8
2294	Flexible Copper Nanowire Electronics for Wireless Dynamic Pressure Sensing. ACS Applied Electronic Materials, 2021, 3, 5468-5474.	2.0	12
2295	Progress of Wearable and Flexible Electrochemical Biosensors With the Aid of Conductive Nanomaterials. Frontiers in Bioengineering and Biotechnology, 2021, 9, 761020.	2.0	9
2296	Progress in wearable sweat sensors and their applications. Chinese Journal of Analytical Chemistry, 2022, 50, 87-96.	0.9	17
2297	Flexible Photodetectors Based on Allâ€Solutionâ€Processed Cu Electrodes and InSe Nanoflakes with High Stabilities. Advanced Functional Materials, 2022, 32, 2108261.	7.8	18
2298	Printed circuit board integrated wearable ion-selective electrode with potential treatment for highly repeatable sweat monitoring. Sensors and Actuators B: Chemical, 2022, 355, 131102.	4.0	19
2299	Self-powered and wearable biosensors for healthcare. Materials Today Energy, 2022, 23, 100900.	2.5	39
2300	Flexible and Wearable Ultrasound Device for Medical Applications: A Review on Materials, Structural Designs, and Current Challenges. Advanced Materials Technologies, 2022, 7, 2100798.	3.0	26
2301	Flexible Plasmonic Biosensors for Healthcare Monitoring: Progress and Prospects. ACS Nano, 2021, 15, 18822-18847.	7.3	78
2302	Consumer Wearables for Patient Monitoring in Otolaryngology: A State of the Art Review. Otolaryngology - Head and Neck Surgery, 2021, , 019459982110616.	1.1	1
2303	Highly Stretchable Wearable Electrochemical Sensor Based on Ni-Co MOF Nanosheet-Decorated Ag/rGO/PU Fiber for Continuous Sweat Glucose Detection. Analytical Chemistry, 2021, 93, 16222-16230.	3.2	96
2304	Atomicâ€Level Insight into the Formation of Subsurface Dislocation Layer and Its Effect on Mechanical Properties During Ultrafast Laser Micro/Nano Fabrication. Advanced Functional Materials, 2022, 32, 2108802.	7.8	18
2305	Risk Stratification for Subjects Suffering from Lung Carcinoma: Healthcare 4.0 Approach with Medical Diagnosis Using Computational Intelligence. EAI/Springer Innovations in Communication and Computing, 2022, , 171-193.	0.9	2
2306	Superâ€Hydrophilic Zwitterionic Polymer Surface Modification Facilitates Liquid Transportation of Microfluidic Sweat Sensors. Macromolecular Rapid Communications, 2022, 43, e2100776.	2.0	11
2307	Superior Non-Invasive Glucose Sensor Using Bimetallic CuNi Nanospecies Coated Mesoporous Carbon. Biosensors, 2021, 11, 463.	2.3	8
2308	Conformable microneedle pH sensors via the integration of two different siloxane polymers for mapping peripheral artery disease. Science Advances, 2021, 7, eabi6290.	4.7	36
2309	A Passive, Skin-Attachable Multi-Sensing Patch Based on Semi-Liquid Alloy Ni-GaIn for Wireless Epidermal Signal Monitoring and Body Motion Capturing. Electronics (Switzerland), 2021, 10, 2778.	1.8	1
2310	Piezoelectric Nanogenerator for Highly Sensitive and Synchronous Multi-Stimuli Sensing. ACS Nano, 2021, 15, 19783-19792.	7.3	44

#	Article	IF	Citations
2311	Ten Years Progress of Electrical Detection of Heavy Metal Ions (HMIs) Using Various Field-Effect Transistor (FET) Nanosensors: A Review. Biosensors, 2021, 11, 478.	2.3	21
2312	Smartphone-based electrochemical system with multi-walled carbon nanotubes/thionine/gold nanoparticles modified screen-printed immunosensor for cancer antigen 125 detection. Microchemical Journal, 2022, 174, 107044.	2.3	22
2313	Programmable Sensitivity Screening of Strain Sensors by Local Electrical and Mechanical Properties Coupling. ACS Nano, 2021, 15, 20590-20599.	7.3	13
2315	Emerging wearable flexible sensors for sweat analysis. Bio-Design and Manufacturing, 2022, 5, 64-84.	3.9	29
2316	Ion sensing with single charge resolution using subâ€“10-nm electrical double layerâ€“gated silicon nanowire transistors. Science Advances, 2021, 7, eabj6711.	4.7	10
2318	Role of portable and wearable sensors in era of electronic healthcare and medical internet of things. Clinical EHealth, 2021, 4, 62-66.	4.1	2
2319	Simultaneous Wireless Power Transfer and Data Telemetry Using Dual-Band Smart Contact Lens. IEEE Transactions on Antennas and Propagation, 2022, 70, 2990-3001.	3.1	15
2320	The Influence of Climate Conditions and On-Skin Positioning on InGaZnO Thin-Film Transistor Performance. Frontiers in Electronics, 2022, 2, .	2.0	3
2321	Elasticâ€“Electric Coefficient-Sensitive Hydrogel Sensors toward Sweat Detection. Analytical Chemistry, 2022, 94, 1910-1917.	3.2	19
2322	All-Inkjet-Printed Graphene-Gated Organic Electrochemical Transistors on Polymeric Foil as Highly Sensitive Enzymatic Biosensors. ACS Applied Nano Materials, 2022, 5, 1664-1673.	2.4	22
2323	Ultra-Thin Chips With ISFET Array for Continuous Monitoring of Body Fluids Ph. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1174-1185.	2.7	7
2324	Self-assembled peptides-modified flexible field-effect transistors for tyrosinase detection. IScience, 2022, 25, 103673.	1.9	11
2325	All-solid-state potassium-selective sensor based on carbon black modified thermoplastic electrode. Electrochimica Acta, 2022, 404, 139762.	2.6	12
2326	Fabric-rebound triboelectric nanogenerators with loops and layered structures for energy harvesting and intelligent wireless monitoring of human motions. Nano Energy, 2022, 93, 106807.	8.2	28
2327	Highly wearable, machine-washable, and self-cleaning fabric-based triboelectric nanogenerator for wireless drowning sensors. Nano Energy, 2022, 93, 106835.	8.2	55
2328	A PEDOT:PSS conductive hydrogel incorporated with Prussian blue nanoparticles for wearable and noninvasive monitoring of glucose. Chemical Engineering Journal, 2022, 431, 134109.	6.6	49
2329	Air-permeable electrode for highly sensitive and noninvasive glucose monitoring enabled by graphene fiber fabrics. Nano Energy, 2022, 93, 106904.	8.2	63
2330	Multi-node potentiostat device and multiplatform mobile application for on-field measurements. , 2020, , .		1

#	Article	IF	Citations
2331	Soft body sensor networks: Architectures and Applications. , 2020, , .		0
2332	3D Coin Integration for Realizing Next-Generation Flexible Electronic Systems. , 2020, , .		1
2334	A Survey on Patchable Sensors. , 2020, , .		1
2335	Effectiveness of a Smartwatch App in Detecting Induced Falls: Observational Study. JMIR Formative Research, 2022, 6, e30121.	0.7	2
2336	Weighted SPSA-based Consensus Algorithm for Distributed Cooperative Target Tracking. , 2021, , .		1
2337	An Integrated Flexible Multi-sensing Device for Daily Urine Analysis at Home. , 2021, , .		1
2338	Fully Printed pH Sensor Based in Carbon Black/Polyaniline Nanocomposite. , 2021, , .		3
2339	Preliminary Evaluation of a Solar-Powered Wristband for Continuous Multi-Modal Electrochemical Monitoring. , 2021, 2021, 7316-7319.		0
2340	Augmenting Sensor Performance with Machine Learning Towards Smart Wearable Sensing Electronic Systems. Advanced Intelligent Systems, 2022, 4, .	3.3	20
2341	Biomarkers and Detection Platforms for Human Health and Performance Monitoring: A Review. Advanced Science, 2022, 9, e2104426.	5.6	48
2342	Porous carbon-based robust, durable, and flexible electrochemical device for K⁺ detection in sweat. Analyst, The, 2022, 147, 1144-1151.	1.7	7
2344	A highly accurate flexible sensor system for human blood pressure and heart rate monitoring based on graphene/sponge. RSC Advances, 2022, 12, 2391-2398.	1.7	24
2345	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
2346	Fe³⁺-Coordination mediated synergistic dual-network conductive hydrogel as a sensitive and highly-stretchable strain sensor with adjustable mechanical properties. Journal of Materials Chemistry B, 2022, 10, 1442-1452.	2.9	14
2347	Glucose biosensors in clinical practice: principles, limits and perspectives of currently used devices. Theranostics, 2022, 12, 493-511.	4.6	52
2348	A Flexible Microfluidic Chip-Based Universal Fully Integrated Nanoelectronic System with Point-of-Care Raw Sweat, Tears, or Saliva Glucose Monitoring for Potential Noninvasive Glucose Management. Analytical Chemistry, 2022, 94, 1890-1900.	3.2	38
2349	Twin-Wire Networks for Zero Interconnect, High-Density 4-Wire Electrical Characterizations of Materials. Research, 2022, 2022, 9874249.	2.8	3
2350	Smartphone-based chemical sensors and biosensors for biomedical applications. , 2022, , 307-332.		0

#	Article	IF	Citations
2351	Stretchable Sweatâ€Activated Battery in Skinâ€Integrated Electronics for Continuous Wireless Sweat Monitoring. Advanced Science, 2022, 9, e2104635.	5.6	29
2352	Wearable Self-Powered Smart Sensors for Portable Nutrition Monitoring. Analytical Chemistry, 2022, 94, 2333-2340.	3.2	27
2353	The effect of side chain engineering on conjugated polymers in organic electrochemical transistors for bioelectronic applications. Journal of Materials Chemistry C, 2022, 10, 2314-2332.	2.7	39
2354	Printed microfluidic sweat sensing platform for cortisol and glucose detection. Lab on A Chip, 2021, 22, 156-169.	3.1	37
2355	Kinetic changes in sweat lactate following fatigue during constant workload exercise. Physiological Reports, 2022, 10, e15169.	0.7	7
2356	Flexible and stretchable printed conducting polymer devices for electrodermal activity measurements. Flexible and Printed Electronics, 2022, 7, 014008.	1.5	7
2357	Wearable aptamer-field-effect transistor sensing system for noninvasive cortisol monitoring. Science Advances, 2022, 8, eabk0967.	4.7	118
2358	Substrateâ€Free Chemical Vapor Deposition of Largeâ€Scale IIIâ€“V Nanowires for Highâ€Performance Transistors and Broadâ€Spectrum Photodetectors. Advanced Optical Materials, 2022, 10, .	3.6	20
2359	A Mechanically Interlocking Strategy Based on Conductive Microbridges for Stretchable Electronics. Advanced Materials, 2022, 34, e2101339.	11.1	35
2360	Wearable biosensors for monitoring of disease-related biomarkers. , 2022, , 487-502.		0
2361	Recent Advances in Intelligent Wearable Medical Devices Integrating Biosensing and Drug Delivery. Advanced Materials, 2022, 34, e2108491.	11.1	64
2362	Comprehensive Review on Wearable Sweat-Glucose Sensors for Continuous Glucose Monitoring. Sensors, 2022, 22, 638.	2.1	86
2363	Designing wearable microgrids: towards autonomous sustainable on-body energy management. Energy and Environmental Science, 2022, 15, 82-101.	15.6	48
2364	Microfluidic sensors based on two-dimensional materials for chemical and biological assessments. Materials Advances, 2022, 3, 1874-1904.	2.6	24
2365	Flexible and stretchable indium-fallium-zinc oxide-based electronic devices for sweat pH sensor application. , 2022, , 525-543.		1
2366	Functionalized carbon nanomaterial-based electrochemical sensors: Quick look on the future of fitness. , 2022, , 557-578.		0
2367	Heteroâ€Integration of Silicon Nanomembranes with 2D Materials for Bioresorbable, Wireless Neurochemical System. Advanced Materials, 2022, 34, e2108203.	11.1	28
2368	Challenges and Strategies in Developing an Enzymatic Wearable Sweat Glucose Biosensor as a Practical Point-Of-Care Monitoring Tool for Type II Diabetes. Nanomaterials, 2022, 12, 221.	1.9	54

#	Article	IF	Citations
2369	Electrohydrodynamically Printed Flexible Organic Memristor for Leaky Integrate and Fire Neuron. IEEE Electron Device Letters, 2022, 43, 116-119.	2.2	16
2370	Electrochemical Devices to Monitor Ionic Analytes for Healthcare and Industrial Applications. Chemosensors, 2022, 10, 22.	1.8	4
2371	Nanomaterials for IoT Sensing Platforms and Point-of-Care Applications in South Korea. Sensors, 2022, 22, 610.	2.1	5
2372	Recent advances in flexible and wearable sensors for monitoring chemical molecules. Nanoscale, 2022, 14, 1653-1669.	2.8	48
2373	A Flexible Tactile Sensor With Dual-Interlocked Structure for Broad Range Force Sensing and Gaming Applications. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	2.4	12
2374	Conductive Materials with Elaborate Micro/Nanostructures for Bioelectronics. Advanced Materials, 2022, 34, e2110024.	11.1	12
2375	Thin, soft, 3D printing enabled crosstalk minimized triboelectric nanogenerator arrays for tactile sensing. Fundamental Research, 2023, 3, 111-117.	1.6	6
2376	Recent advancements in sampling, power management strategies and development in applications for non-invasive wearable electrochemical sensors. Journal of Electroanalytical Chemistry, 2022, 907, 116064.	1.9	17
2377	Simultaneous monitoring of sweat lactate content and sweat secretion rate by wearable remote biosensors. Biosensors and Bioelectronics, 2022, 202, 113970.	5.3	38
2378	Wearable hydrogel patch with noninvasive, electrochemical glucose sensor for natural sweat detection. Talanta, 2022, 241, 123187.	2.9	75
2379	Nanoporous Carbon-Based Wearable Hybrid Biosensing Patch for Real-Time and in Vitro Healthcare Monitoring. , 2022, , .		1
2380	Wristwatch Biosensor For Sweat Lactic Acid Monitoring. , 2022, , .		0
2382	Blood glucose sensors and recent advances: A review. Journal of Innovative Optical Health Sciences, 2022, 15, .	0.5	30
2383	Garment embedded sweat-activated batteries in wearable electronics for continuous sweat monitoring. Npj Flexible Electronics, 2022, 6, .	5.1	24
2384	Hybrid Janus Membrane with Dual-Asymmetry Integration of Wettability and Conductivity for Ultra-Low-Volume Sweat Sensing. ACS Applied Materials & Interfaces, 2022, 14, 9644-9654.	4.0	15
2385	Flexible, wearable biosensors for digital health. Medicine in Novel Technology and Devices, 2022, 14, 100118.	0.9	25
2386	Inkjet-printed flexible sensors: From function materials, manufacture process, and applications perspective. Materials Today Communications, 2022, 31, 103263.	0.9	49
2387	Recent progress and growth in biosensors technology: A critical review. Journal of Industrial and Engineering Chemistry, 2022, 109, 21-51.	2.9	94

#	Article	IF	Citations
2388	Ti₃C₂T_x MXene-Based Flexible Piezoresistive Physical Sensors. ACS Nano, 2022, 16, 1734-1758.	7.3	177
2389	Bioinspired sweat-resistant wearable triboelectric nanogenerator for movement monitoring during exercise. Nano Energy, 2022, 95, 107018.	8.2	50
2390	A dual-functional polyaniline film-based flexible electrochemical sensor for the detection of pH and lactate in sweat of the human body. Talanta, 2022, 242, 123289.	2.9	28
2391	Stretchable Thermoelectrics: Strategies, Performances, and Applications. Advanced Functional Materials, 2022, 32, .	7.8	40
2392	Electronic Textiles for Wearable Point-of-Care Systems. Chemical Reviews, 2022, 122, 3259-3291.	23.0	316
2393	High-frequency and intrinsically stretchable polymer diodes. Nature, 2021, 600, 246-252.	13.7	138
2394	Biorecognition elements. , 2022, , 41-70.		2
2395	Materials for wearable sensors. , 2022, , 5-40.		3
2396	Sweat-Based Glucose Sensor Based on a Graphene/Au Composite Electrode. Science of Advanced Materials, 2022, 14, 55-61.	0.1	2
2397	Wearable hybrid sensors. , 2022, , 255-274.		0
2399	Internet of wearable things. , 2022, , 295-310.		2
2400	Piezoelectric nanogenerators for personalized healthcare. Chemical Society Reviews, 2022, 51, 3380-3435.	18.7	145
2401	A dual-responsive nanozyme sensor with ultra-high sensitivity and ultra-low cross-interference towards metabolic biomarker monitoring. Journal of Materials Chemistry B, 2022, 10, 3023-3031.	2.9	10
2402	Wearable chemosensors. , 2022, , 219-234.		0
2403	Boron-Doped Graphene Quantum Dots Anchored Carbon Nanotubes as a Noble Metal-Free Electrocatalyst of Uric Acid for Wearable Sweat Sensor. SSRN Electronic Journal, 0, , .	0.4	0
2404	Mos2 Nanosheet Loaded Fe2o3 @ Carbon Cloth Flexible Composite Electrode Material for High Performance Quasi-Solid Asymmetric Supercapacitors. SSRN Electronic Journal, 0, , .	0.4	0
2405	An epidermal wearable microfluidic patch for simultaneous sampling, storage, and analysis of biofluids with counterion monitoring. Lab on A Chip, 2022, 22, 1793-1804.	3.1	18
2406	Signal detection techniques. , 2022, , 71-122.		1

#	Article	IF	Citations
2407	Electrodes and electrocatalysts for electrochemical hydrogen peroxide sensors: a review of design strategies. Nanoscale Horizons, 2022, 7, 463-479.	4.1	25
2408	Facile Fabrication of All-Solid-State Ion-Selective Electrodes ForÂMulti-Sensor with Wireless System. SSRN Electronic Journal, 0, , .	0.4	0
2409	On-chip high ion sensitivity electrochromic nanophotonic light modulator. Nanoscale, 2022, 14, 6526-6534.	2.8	2
2410	Wearable microfluidic-based e-skin sweat sensors. RSC Advances, 2022, 12, 8691-8707.	1.7	30
2411	Cotrollable growth of monolayer MoS2 films and the application in devices. Wuli Xuebao/Acta Physica Sinica, 2022, .	0.2	0
2412	Boron-Doped Graphene Quantum Dots Anchored Carbon Nanotubes as a Noble Metal-Free Electrocatalyst of Uric Acid for Wearable Sweat Sensor. SSRN Electronic Journal, 0, , .	0.4	0
2413	Screen-Printed Carbon Black/Recycled Sericin@Fabrics for Wearable Sensors to Monitor Sweat Loss. ACS Applied Materials & Interfaces, 2022, 14, 11813-11819.	4.0	13
2414	From Molecular-Scale Cavities to Nanoscale Dielectric Breakdown in Polydimethylsiloxane Induced by Local Electric Field. Macromolecules, 2022, 55, 1690-1699.	2.2	2
2415	Artificial Intelligence-Based Real-Time Signal Sample and Analysis of Multiperson Dragon Boat Race in Complex Networks. Complexity, 2022, 2022, 1-8.	0.9	0
2416	A New PEDOT Derivative for Efficient Organic Solar Cell with a Fill Factor of 0.80. Advanced Energy Materials, 2022, 12, .	10.2	52
2417	Flexible Electronics and Devices as Humanâ€“Machine Interfaces for Medical Robotics. Advanced Materials, 2022, 34, e2107902.	11.1	211
2418	Recent Advances in Electronic Skins with Multiple-Stimuli-Responsive and Self-Healing Abilities. Materials, 2022, 15, 1661.	1.3	8
2419	Integrated microfluidic devices for in vitro diagnostics at point of care. Aggregate, 2022, 3, .	5.2	11
2420	Smart Bandage with Inductorâ€Capacitor Resonant Tank Based Printed Wireless Pressure Sensor on Electrospun Polyâ€Lâ€Lactide Nanofibers. Advanced Electronic Materials, 2022, 8, .	2.6	47
2421	Ionâ€Selective Organic Electrochemical Transistors: Recent Progress and Challenges. Small, 2022, 18, e2107413.	5.2	18
2422	Flexible and Stretchable Bioelectronics. Materials, 2022, 15, 1664.	1.3	24
2423	Metal-Nanoparticle-Supported Nanozyme-Based Colorimetric Sensor Array for Precise Identification of Proteins and Oral Bacteria. ACS Applied Materials & Interfaces, 2022, 14, 11156-11166.	4.0	37
2424	Edge-Topological Regulation for in Situ Fabrication of Bridging Nanosensors. Nano Letters, 2022, 22, 2569-2577.	4.5	3

#	Article	IF	Citations
2425	Revolution in Flexible Wearable Electronics for Temperature and Pressure Monitoringâ€"A Review. Electronics (Switzerland), 2022, 11, 716.	1.8	29
2426	A machine learning-based on-demand sweat glucose reporting platform. Scientific Reports, 2022, 12, 2442.	1.6	25
2427	Artificial Multisensory Neurons with Fused Haptic and Temperature Perception for Multimodal Inâ€Sensor Computing. Advanced Intelligent Systems, 2022, 4, .	3.3	25
2428	Noncontact human-machine interaction based on hand-responsive infrared structural color. Nature Communications, 2022, 13, 1446.	5.8	33
2429	The Need to Pair Molecular Monitoring Devices with Molecular Imaging to Personalize Health. Molecular Imaging and Biology, 2022, , 1.	1.3	2
2430	Symmetrically Ionâ€Gated Inâ€Plane Metalâ€Oxide Transistors for Highly Sensitive and Lowâ€Voltage Driven Bioelectronics. Advanced Science, 2022, 9, e2103275.	5.6	6
2431	Photothermal Silk-based Textiles. Fibers and Polymers, 2022, 23, 644-650.	1.1	0
2433	Biosensors and Chemical Sensors for Healthcare Monitoring: A Review. IEEJ Transactions on Electrical and Electronic Engineering, 2022, 17, 626-636.	0.8	43
2434	Smart Clothing Framework for Health Monitoring Applications. Signals, 2022, 3, 113-145.	1.2	19
2435	Bendable Polycrystalline and Magnetic CoFe₂O₄ Membranes by Chemical Methods. ACS Applied Materials & Interfaces, 2022, 14, 12845-12854.	4.0	17
2436	A Three-Dimensional-Printed Recyclable, Flexible, and Wearable Device for Visualized UV, Temperature, and Sweat pH Sensing. ACS Omega, 2022, 7, 9834-9845.	1.6	10
2437	Recent Progress in Bioâ€Integrated Intelligent Sensing System. Advanced Intelligent Systems, 2022, 4, .	3.3	12
2438	Bimetallic Nanocatalysts Immobilized in Nanoporous Hydrogels for Longâ€Term Robust Continuous Glucose Monitoring of Smart Contact Lens. Advanced Materials, 2022, 34, e2110536.	11.1	48
2439	Advanced Electronics and Artificial Intelligence: Mustâ€Have Technologies Toward Human Body Digital Twins. Advanced Intelligent Systems, 2022, 4, .	3.3	11
2440	Editorial: Integrated Point-of-Care Testing (POCT) Systems: Recent Progress and Applications. Frontiers in Bioengineering and Biotechnology, 2022, 10, 851675.	2.0	1
2441	Breathable, Self-Adhesive Dry Electrodes for Stable Electrophysiological Signal Monitoring During Exercise. ACS Applied Materials & Interfaces, 2022, 14, 12812-12823.	4.0	16
2442	A One-Dollar, Disposable, Paper-Based Microfluidic Chip for Real-Time Monitoring of Sweat Rate. Micromachines, 2022, 13, 414.	1.4	6
2443	IR-Based Novel Device for Real-Time Online Acquisition of Fish Heart ECG Signals. Environmental Science & Technology, 2022, 56, 4262-4271.	4.6	7

#	Article	IF	Citations
2444	5G Embedded Sensor Network System for Sports Information Service Hotspot Recommendation. Wireless Communications and Mobile Computing, 2022, 2022, 1-12.	0.8	1
2445	Photosensitive-Stamp-Inspired Scalable Fabrication Strategy of Wearable Sensing Arrays for Noninvasive Real-Time Sweat Analysis. Analytical Chemistry, 2022, 94, 4547-4555.	3.2	14
2446	Island Effect in Stretchable Inorganic Electronics. Small, 2022, 18, e2107879.	5.2	13
2447	Ultralight Iontronic Triboelectric Mechanoreceptor with High Specific Outputs for Epidermal Electronics. Nano-Micro Letters, 2022, 14, 86.	14.4	27
2448	Inkjet Printing: A Viable Technology for Biosensor Fabrication. Chemosensors, 2022, 10, 103.	1.8	24
2449	Wearable plasmonic paperâ€“based microfluidics for continuous sweat analysis. Science Advances, 2022, 8, eabn1736.	4.7	91
2450	Early Pilot Deployment of a Decision-Making Framework to Select Wearable Internet of Things Devices for Safety on Construction Sites. , 2022, , .		0
2451	Ultraâ€Robust and Extensible Fibrous Mechanical Sensors for Wearable Smart Healthcare. Advanced Materials, 2022, 34, e2107511.	11.1	83
2452	Perspectiveâ€”Electrochemical Sensors for Neurotransmitters and Psychiatrics: Steps toward Physiological Mental Health Monitoring. Journal of the Electrochemical Society, 2022, 169, 047513.	1.3	8
2453	Non-invasive human skin transcriptome analysis using mRNA in skin surface lipids. Communications Biology, 2022, 5, 215.	2.0	9
2454	How to Assess the Measurement Performance of Mobile/Wearable Point-of-Care Testing Devices? A Systematic Review Addressing Sweat Analysis. Electronics (Switzerland), 2022, 11, 761.	1.8	6
2455	Bioinspired Perspirationâ€Wicking Electronic Skins for Comfortable and Reliable Multimodal Health Monitoring. Advanced Functional Materials, 2022, 32, .	7.8	39
2456	Stretchable Triboelectric Selfâ€Powered Sweat Sensor Fabricated from Selfâ€Healing Nanocellulose Hydrogels. Advanced Functional Materials, 2022, 32, .	7.8	171
2457	The Potential of Current Noninvasive Wearable Technology for the Monitoring of Physiological Signals in the Management of Type 1 Diabetes: Literature Survey. Journal of Medical Internet Research, 2022, 24, e28901.	2.1	5
2458	Human sweat-based wearable glucose sensor on cotton fabric for real-time monitoring. Journal of Analytical Science and Technology, 2022, 13, .	1.0	22
2459	Wearable Microfluidic Sensor for the Simultaneous and Continuous Monitoring of Local Sweat Rates and Electrolyte Concentrations. Micromachines, 2022, 13, 575.	1.4	12
2460	Wearable Smart Contact Lenses for Continual Glucose Monitoring: A Review. Frontiers in Medicine, 2022, 9, 858784.	1.2	8
2461	Pushing OECTs toward Wearable:â€Development of a Miniaturized Analytical Control Unit for Wireless Device Characterization. Analytical Chemistry, 2022, 94, 6156-6162.	3.2	10

#	Article	IF	Citations
2462	Batch-producible fibrous microelectrodes for enzyme-free electrochemical detection of glucose. Journal of Materials Science: Materials in Electronics, 2022, 33, 11511-11522.	1.1	2
2463	Self-adhesive and printable tanninâ€“graphene supramolecular aggregates for wearable potentiometric pH sensing. Electrochemistry Communications, 2022, 137, 107261.	2.3	10
2464	An Integrated Nanocomposite Proximity Sensor: Machine Learning-Based Optimization, Simulation, and Experiment. Nanomaterials, 2022, 12, 1269.	1.9	7
2465	Ultrasensitive Graphene-Based Nanobiosensor for Rapid Detection of Hemoglobin in Undiluted Biofluids. ACS Applied Bio Materials, 2022, 5, 1624-1632.	2.3	2
2466	Wearable electrochemical sensors for monitoring of inorganic ions and pH in sweat. International Journal of Electrochemical Science, 0, , ArticleID:220452.	0.5	1
2467	Constructing MXene-PANI@MWCNTs heterojunction with high specific capacitance towards flexible micro-supercapacitor. Nanotechnology, 2022, 33, 295401.	1.3	11
2468	Strategies for body-conformable electronics. Matter, 2022, 5, 1104-1136.	5.0	90
2469	Antibacterial, Antifreezing, Stretchable, and Selfâ€Healing Organohydrogel Electrode Based Triboelectric Nanogenerator for Selfâ€Powered Biomechanical Sensing. Advanced Materials Interfaces, 2022, 9, .	1.9	15
2470	An electrochemical wearable sensor for levodopa quantification in sweat based on a metalâ€“Organic framework/graphene oxide composite with integrated enzymes. Sensors and Actuators B: Chemical, 2022, 359, 131586.	4.0	48
2471	An intrinsically stretchable aqueous Zn-MnO2 battery based on microcracked electrodes for self-powering wearable electronics. Energy Storage Materials, 2022, 47, 386-393.	9.5	15
2472	Water splitting-assisted electrocatalysis based on dendrimer-encapsulated Au nanoparticles for perspiration glucose analysis. Journal of Electroanalytical Chemistry, 2022, 912, 116254.	1.9	3
2473	Oral wearable sensors: Health management based on the oral cavity. Biosensors and Bioelectronics: X, 2022, 10, 100135.	0.9	6
2474	High-reliability all-fiber FIR temperature sensor using LiGd(WO4)2:Er3+/Yb3+ phosphors. Optik, 2022, 258, 168871.	1.4	4
2475	Using machine learning and an electronic tongue for discriminating saliva samples from oral cavity cancer patients and healthy individuals. Talanta, 2022, 243, 123327.	2.9	19
2476	Nanofiber-reinforced transparent, tough, and self-healing substrate for an electronic skin with damage detection and program-controlled autonomic repair. Nano Energy, 2022, 96, 107108.	8.2	9
2477	Three-dimensional highway-like graphite flakes/carbon fiber hybrid electrode for electrochemical biosensor. Materials Today Advances, 2022, 14, 100238.	2.5	5
2478	Tribophotonics: An emerging self-powered wireless solution toward smart city. Nano Energy, 2022, 97, 107196.	8.2	22
2479	Preparation of PAA/PAM/MXene/TA hydrogel with antioxidant, healable ability as strain sensor. Colloids and Surfaces B: Biointerfaces, 2022, 214, 112482.	2.5	36

#	Article	IF	Citations
2480	Ultra-efficient thermo-convective solution-growth of vertically aligned ZnO nanowires. Nano Energy, 2022, 97, 107167.	8.2	8
2481	Borophene pressure sensing for electronic skin and human-machine interface. Nano Energy, 2022, 97, 107189.	8.2	49
2482	An electrochemical biosensor for the assessment of tumor immunotherapy based on the detection of immune checkpoint protein programmed death ligand-1. Biosensors and Bioelectronics, 2022, 207, 114166.	5.3	14
2483	A Wearable Autonomous Colorimetric Sweat Induction System for Sweat Analysis. , 2021, 2021, 6763-6766.		0
2484	Practical and Efficient: A Pocket-Sized Device Enabling Detection of Formaldehyde Adulteration in Vegetables. ACS Omega, 2022, 7, 160-167.	1.6	5
2485	Recent progress in aircraft smart skin for structural health monitoring. Structural Health Monitoring, 2022, 21, 2453-2480.	4.3	26
2486	Flexible and Stretchable Strategies for Electronic Skins: Materials, Structure, and Integration. ACS Applied Electronic Materials, 2022, 4, 1-26.	2.0	20
2487	Recent Advances of Prussian Blue-Based Wearable Biosensors for Healthcare. Analytical Chemistry, 2022, 94, 297-311.	3.2	22
2488	Wearable Bioelectronics for Chronic Wound Management. Advanced Functional Materials, 2022, 32, .	7.8	64
2489	Wearable Motion Smartsensors Self-Powered by Coreâ€“Shell Au@Pt Methanol Fuel Cells. ACS Sensors, 2021, 6, 4526-4534.	4.0	5
2490	Dry Spun, Bulkâ€Functionalized rGO Fibers for Textile Integrated Potentiometric Sensors. Advanced Materials Technologies, 2022, 7, .	3.0	6
2492	Origins of strain localization in a silver-based flexible ink under tensile load. Flexible and Printed Electronics, 2021, 6, 045017.	1.5	0
2493	Smart E-Textile Systems: A Review for Healthcare Applications. Electronics (Switzerland), 2022, 11, 99.	1.8	36
2495	Laser-Processed Stretchable-Gradient Interconnection-Based Temperature Sensor for a Real-Time Monitoring System. ACS Applied Electronic Materials, 2021, 3, 5601-5607.	2.0	5
2496	Recent Advances in 1D Nanomaterialâ€Based Bioelectronics for Healthcare Applications. Advanced NanoBiomed Research, 2022, 2, .	1.7	8
2497	Integration of Self-Assembled BaZrO₃-Co Vertically Aligned Nanocomposites on Mica Substrates toward Flexible Spintronics. Crystal Growth and Design, 2022, 22, 718-725.	1.4	4
2498	Highly Sensitive MXene Helical Yarn/Fabric Tactile Sensors Enabling Full Scale Movement Detection of Human Motions. Advanced Electronic Materials, 2022, 8, .	2.6	10
2499	Integrated Wearable Sensors for Sensing Physiological Pressure Signals and Î²-Hydroxybutyrate in Physiological Fluids. Analytical Chemistry, 2022, 94, 993-1002.	3.2	20

#	Article	IF	Citations
2500	Osmotically Enabled Wearable Patch for Sweat Harvesting and Lactate Quantification. Micromachines, 2021, 12, 1513.	1.4	18
2501	Self-Healable, Malleable, and Flexible Ionic Polyimine as an Environmental Sensor for Portable Exogenous Pollutant Detection. , 2022, 4, 136-144.		30
2502	Stretchable Thermoelectric-Based Self-Powered Dual-Parameter Sensors with Decoupled Temperature and Strain Sensing. ACS Applied Materials & Interfaces, 2021, 13, 60498-60507.	4.0	59
2503	Skin bioelectronics towards long-term, continuous health monitoring. Chemical Society Reviews, 2022, 51, 3759-3793.	18.7	85
2504	Validation of the Application of Solid Contact Ion-Selective Electrode for Off-Body Sweat Ion Monitoring. Biosensors, 2022, 12, 229.	2.3	4
2505	Smart Diaper Based on Integrated Multiplex Carbon Nanotube-Coated Electrode Array Sensors for In Situ Urine Monitoring. ACS Applied Nano Materials, 2022, 5, 4767-4778.	2.4	16
2506	The influence of deposition time on electrochemical performance of Prussian blue-modified submicron-structured gold electrodes for hydrogen peroxide sensing. Chemical Papers, 0, , 1.	1.0	0
2507	A Multitasking Flexible Sensor via Reservoir Computing. Advanced Materials, 2022, 34, e2201663.	11.1	21
2508	Prospects and Challenges of Flexible Stretchable Electrodes for Electronics. Coatings, 2022, 12, 558.	1.2	28
2509	Lotus seedpods biochar decorated molybdenum disulfide for portable, flexible, outdoor and inexpensive sensing of hyperin. Chemosphere, 2022, 301, 134595.	4.2	44
2510	Stiffness Engineering of Ti₃C₂T_X MXeneâ€Based Skinâ€Inspired Pressure Sensor with Broadâ€Range Ultrasensitivity, Low Detection Limit, and Gas Permeability. Advanced Materials Interfaces, 2022, 9, .	1.9	15
2511	Organic electrochemical transistors toward synaptic electronics. Journal Physics D: Applied Physics, 2022, 55, 304006.	1.3	10
2512	Liquidâ€“solid co-printing of multi-material 3D fluidic devices via material jetting. Additive Manufacturing, 2022, 55, 102785.	1.7	4
2513	Resettable Microfluidics for Broad-Range and Prolonged Sweat Rate Sensing. ACS Sensors, 2022, 7, 1156-1164.	4.0	23
2514	Wearable Electrochemical Sensors for the Detection of Organic Metabolites and Drugs in Sweat. International Journal of Electrochemical Science, 2022, 17, 220534.	0.5	3
2515	Wearable devices for continuous monitoring of biosignals: Challenges and opportunities. APL Bioengineering, 2022, 6, 021502.	3.3	36
2516	Self-powered environmental monitoring via a triboelectric nanogenerator. Nano Energy, 2022, 98, 107282.	8.2	56
2517	Sensitive non-invasive electrochemical sensing of glucose in saliva using amorphous SnOx decorated one-dimensional CuO nanorods rich in oxygen vacancy defects. Applied Surface Science, 2022, 592, 153349.	3.1	21

#	Article	IF	Citations
2522	Ultralight Heat-Insulating, Electrically Conductive Carbon Fibrous Sponges for Wearable Mechanosensing Devices with Advanced Warming Function. ACS Applied Materials & Interfaces, 2022, 14, 19918-19927.	4.0	9
2523	Biosensors in Point-of-Care: Molecular Analysis, Strategies and Perspectives to Health Care. , 2022, , 169-198.		2
2525	Miniaturized Electrochemical (Bio)sensing Devices Going Wearable. , 2022, , 51-90.		1
2526	Continuous Glucose Monitoring for Diabetes Management Based on Miniaturized Biosensors. , 2022, , 149-175.		6
2528	A Wearable Paper-Integrated Microfluidic Device for Sequential Analysis of Sweat Based on Capillary Action. Sensors & Diagnostics, 0, , .	1.9	7
2529	Structural Engineering Approach for Designing Foil-Based Flexible Capacitive Pressure Sensors. IEEE Sensors Journal, 2022, 22, 11543-11551.	2.4	5
2530	Role of microfluidics in accelerating new space missions. Biomicrofluidics, 2022, 16, 021503.	1.2	4
2532	Gas-Sensing Properties and Preparation of Waste Mask Fibers/ZnS Composites. Journal of Electronic Materials, 2022, 51, 3843-3850.	1.0	6
2533	High strength and antiâ€freezing piezoresistive pressure sensor based on a composite gel. Polymers for Advanced Technologies, 2022, 33, 2448-2458.	1.6	3
2534	Surface Wettability for Skinâ€Interfaced Sensors and Devices. Advanced Functional Materials, 2022, 32, .	7.8	67
2535	Enzyme-Free Electrochemical Sensors for in situ Quantification of Reducing Sugars Based on Carboxylated Grapheneâ€“Carboxylated Multiwalled Carbon Nanotubesâ€“Gold Nanoparticleâ€“Modified Electrode. Frontiers in Plant Science, 2022, 13, 872190.	1.7	4
2536	äº¤é€“çš®è‚”ä½“å–å‡ŒâŒ€å‡ºæ±—æ¨¡æ‹Ÿè£…ç½®çš„å¯¹ç”µç©. Zhongguo Kexue Jishu Kexue/Scientia Sinica		0
2537	Low-Cost Wearable Fluidic Sweat Collection Patch for Continuous Analyte Monitoring and Offline Analysis. Analytical Chemistry, 2022, 94, 6893-6901.	3.2	10
2538	Real-Time Monitoring of Blood Parameters in the Intensive Care Unit: State-of-the-Art and Perspectives. Journal of Clinical Medicine, 2022, 11, 2408.	1.0	6
2539	An ultralight, flexible, and biocompatible all-fiber motion sensor for artificial intelligence wearable electronics. Npj Flexible Electronics, 2022, 6, .	5.1	26
2540	Harnessing hostâ€“guest chemistry for electrochemical sensing in complex matrices. Current Opinion in Electrochemistry, 2022, 34, 101029.	2.5	3
2541	Wires with Continuous Sabal Leafâ€Patterned Micropores Constructed by Freeze Printing for a Wearable Sensor Responsible to Multiple Deformations. Small, 2022, 18, e2201091.	5.2	5
2542	Femtosecond Laser Ablation Assisted NFC Antenna Fabrication for Smart Contact Lenses. Advanced Materials Technologies, 2022, 7, .	3.0	6

#	Article	IF	Citations
2543	Stretchable hybrid electronics: combining rigid electronic devices with stretchable interconnects into high-performance on-skin electronics. Journal of Information Display, 2022, 23, 163-184.	2.1	17
2544	An integrated wearable microneedle array for the continuous monitoring of multiple biomarkers in interstitial fluid. Nature Biomedical Engineering, 2022, 6, 1214-1224.	11.6	186
2545	Sweat-Resistant Silk Fibroin-Based Double Network Hydrogel Adhesives. ACS Applied Materials & Interfaces, 2022, 14, 21945-21953.	4.0	17
2546	Chemical-Based Surface Plasmon Resonance Imaging of Fingerprints. Analytical Chemistry, 2022, 94, 7238-7245.	3.2	7
2547	Recent Advances in Wearable Potentiometric pH Sensors. Membranes, 2022, 12, 504.	1.4	18
2548	The era of nano-bionic: 2D materials for wearable and implantable body sensors. Advanced Drug Delivery Reviews, 2022, 186, 114315.	6.6	18
2549	Fabrication and quantitative performance analysis of a low-cost, flexible CNT network-based DNA sensors using ink-jet printing. Sensing and Bio-Sensing Research, 2022, 36, 100498.	2.2	1
2550	In-situ preparation of lactate-sensing membrane for the noninvasive and wearable analysis of sweat. Biosensors and Bioelectronics, 2022, 210, 114303.	5.3	30
2551	Low-cost Internet of Things (IoT)-enabled a wireless wearable device for detecting potassium ions at the point of care. Sensors and Actuators B: Chemical, 2022, 365, 131961.	4.0	18
2552	Internet of things (IoT) in nano-integrated wearable biosensor devices for healthcare applications. Biosensors and Bioelectronics: X, 2022, 11, 100153.	0.9	38
2553	The marriage of biochemistry and nanotechnology for non-invasive real-time health monitoring. Materials Science and Engineering Reports, 2022, 149, 100681.	14.8	7
2554	Mechanistic characterization of an oxygen reduction reaction-driven, fully enzymatic and self-calibrating pH biosensor based on wired bilirubin oxidase. Sensors and Actuators B: Chemical, 2022, 367, 132054.	4.0	1
2555	Highly Stretchable MoS₂â€Based Transistors with Optoâ€Synaptic Functionalities. Advanced Electronic Materials, 2022, 8, .	2.6	8
2556	Materials and design strategies for stretchable electroluminescent devices. Nanoscale Horizons, 2022, 7, 801-821.	4.1	22
2558	Triboelectrification-Induced Electricity in Self-Healing Hydrogel for Mechanical Energy Harvesting and Ultra-sensitive Pressure Monitoring. ACS Omega, 2022, 7, 18816-18825.	1.6	5
2559	Integrated Aptasensor Array for Sweat Drug Analysis. Analytical Chemistry, 2022, 94, 7936-7943.	3.2	17
2560	Flexible all-biomass gas sensor based on doped carbon quantum dots/nonwoven cotton with discriminative function. Cellulose, 2022, 29, 5817-5832.	2.4	3
2561	Mechanical tuning of room temperature magnetism in flexible manganite/mica heterostructures. Journal of Magnetism and Magnetic Materials, 2022, 557, 169526.	1.0	1

#	Article	IF	Citations
2562	Flexible self-powered integrated sensing system based on a rechargeable zinc-ion battery by using a multifunctional polyacrylamide/carboxymethyl chitosan/LiCl ionic hydrogel. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 648, 129254.	2.3	17
2563	Facile Fabrication of All-solid-state Ion-selective Electrodes by Laminating and Drop-casting for Multi-sensing. Electrochemistry, 2022, 90, 077001-077001.	0.6	4
2564	Ultrasensitive Capacitive Tactile Sensor with Heterostructured Active Layers for Tiny Signal Perception. SSRN Electronic Journal, 0, , .	0.4	0
2565	Bioinspired Strain Sensor Using Multiwalled Carbon Nanotube/Polyvinyl Butyral/Nylon Cloth for Wireless Sensing Applications. IEEE Sensors Journal, 2022, 22, 12664-12672.	2.4	5
2566	Flexible Pressure Sensor Array with Multi-Channel Wireless Readout Chip. Sensors, 2022, 22, 3934.	2.1	0
2567	Active Matrix Flexible Sensory Systems: Materials, Design, Fabrication, and Integration. Advanced Intelligent Systems, 2022, 4, .	3.3	9
2568	Coulometric ion sensing with Li+-selective LiMn2O4 electrodes. Electrochemistry Communications, 2022, 139, 107302.	2.3	5
2569	Fluorescence Sensing Technologies for Ophthalmic Diagnosis. ACS Sensors, 2022, 7, 1615-1633.	4.0	23
2570	Wearable Near-Field Communication Sensors for Healthcare: Materials, Fabrication and Application. Micromachines, 2022, 13, 784.	1.4	9
2571	An ultra-compact and wireless tag for battery-free sweat glucose monitoring. Biosensors and Bioelectronics, 2022, 213, 114450.	5.3	16
2572	Soft, stretchable thermal protective substrates for wearable electronics. Npj Flexible Electronics, 2022, 6, .	5.1	16
2573	Transducer Technologies for Biosensors and Their Wearable Applications. Biosensors, 2022, 12, 385.	2.3	38
2574	A review of sampling, energy supply and intelligent monitoring for long-term sweat sensors. Npj Flexible Electronics, 2022, 6, .	5.1	33
2575	Flexible and highlyâ€sensitive pressure sensor based on controllably oxidized MXene. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	74
2576	All-printed soft human-machine interface for robotic physicochemical sensing. Science Robotics, 2022, 7, .	9.9	105
2577	Long/Short chain Crosslinkers-optimized and PEDOT:PSS-enhanced covalent double network hydrogels rapidly prepared under green LED irradiation as flexible strain sensor. European Polymer Journal, 2022, 174, 111327.	2.6	12
2578	Heat-shedding with photonic structures: radiative cooling and its potential. Journal of Materials Chemistry C, 2022, 10, 9915-9937.	2.7	15
2579	Sensors on the Wrist. , 2022, , .		0

#	Article	IF	Citations
2580	Point-of-care and self-testing for potassium: recent advances. Sensors & Diagnostics, 2022, 1, 614-626.	1.9	6
2581	Recent advances in skin-like wearable sensors: sensor design, health monitoring, and intelligent auxiliary. Sensors & Diagnostics, 2022, 1, 686-708.	1.9	15
2584	Advanced triboelectric nanogenerator-driven drug delivery systems for targeted therapies. Drug Delivery and Translational Research, 2023, 13, 54-78.	3.0	4
2585	Bioinspired Materials for Wearable Devices and Point-of-Care Testing of Cancer. ACS Biomaterials Science and Engineering, 2023, 9, 2103-2128.	2.6	16
2586	Enhanced Flexibility and Stability of Emissive Layer Enable Highâ€Performance Flexible Lightâ€Emitting Diodes by Crossâ€Linking of Biomass Material. Advanced Functional Materials, 2022, 32, .	7.8	19
2587	Electrochemical Transparency of Graphene. ACS Nano, 2022, 16, 9278-9286.	7.3	5
2588	Stretchable Nonâ€Enzymatic Fuel Cellâ€Based Sensor Patch Integrated with Threadâ€Embedded Microfluidics for Selfâ€Powered Wearable Glucose Monitoring. Advanced Materials Interfaces, 2022, 9, .	1.9	10
2589	Laser-Induced Graphene-Based Wearable Epidermal Ion-Selective Sensors for Noninvasive Multiplexed Sweat Analysis. Biosensors, 2022, 12, 397.	2.3	18
2590	Selective Ion Sensing in Artificial Sweat Using Lowâ€Cost Reduced Graphene Oxide Liquidâ€Gated Plastic Transistors. Small, 2022, 18, .	5.2	10
2591	Inkjetâ€Printed Xerogel Scaffolds Enabled Roomâ€Temperature Fabrication of Highâ€Quality Metal Electrodes for Flexible Electronics. Advanced Functional Materials, 2022, 32, .	7.8	9
2592	Ultraâ€Lowâ€Cost, Crosstalkâ€Free, Fastâ€Responding, Wideâ€Sensingâ€Range Tactile Fingertip Sensor for Smart Gloves. Advanced Materials Interfaces, 2022, 9, .	1.9	30
2593	Surface Engineering of Laser-Induced Graphene Enables Long-Term Monitoring of On-Body Uric Acid and pH Simultaneously. Nano Letters, 2022, 22, 5451-5458.	4.5	25
2594	In Vivo Sensing of pH in Tomato Plants Using a Low-Cost and Open-Source Device for Precision Agriculture. Biosensors, 2022, 12, 447.	2.3	5
2595	Wearable battery-free theranostic dental patch for wireless intraoral sensing and drug delivery. Npj Flexible Electronics, 2022, 6, .	5.1	28
2596	Closing the loop for patients with Parkinson disease: where are we?. Nature Reviews Neurology, 2022, 18, 497-507.	4.9	19
2597	Recent status and future perspectives of ultracompact and customizable micro-supercapacitors. , 2022, 1, e9120018.		60
2598	Minimally-invasive and non-invasive flexible devices for robust characterizations of deep tissues. Scientia Sinica Chimica, 2022, , .	0.2	0
2599	3D Printed Flexible Photoplethysmography Sensor Array for Tissue Oximetry. , 2022, , .		0

#	Article	IF	Citations
2600	A universal theoretical model for hybrid structure sensor with proximity and large-range contact force sensing. Sensors and Actuators A: Physical, 2022, 343, 113676.	2.0	5
2601	A breathable flexible glucose biosensor with embedded electrodes for long-term and accurate wearable monitoring. Microchemical Journal, 2022, 181, 107707.	2.3	13
2602	A low-cost and simple-fabricated epidermal sweat patch based on â€œcut-and-pasteâ€•manufacture. Sensors and Actuators B: Chemical, 2022, 368, 132184.	4.0	17
2603	Bio-Inspired Design of Biosensor Networks. , 2022, , .		0
2605	The continuous fabrication of a high-performance triboelectric nanogenerator by a roll-to-roll process. Journal of Materials Chemistry A, 2022, 10, 16547-16554.	5.2	9
2606	Nanomaterials-based flexible electrochemical sensors for health care monitoring. , 2022, , 245-273.		0
2607	Commercial Non-invasive Glucose Sensor Devices for Monitoring Diabetes. Springer Series on Bio- and Neurosystems, 2022, , 273-292.	0.2	1
2608	Cell proliferation effect of deep-penetrating microcavity tandem NIR OLEDs with therapeutic trend analysis. Scientific Reports, 2022, 12, .	1.6	8
2609	Optimizing Photodetectors in Two-Dimensional Metal-Metalloporphyrinic Framework Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 33548-33554.	4.0	13
2610	Upcycling Compact Discs for Flexible and Stretchable Bioelectronic Applications. Nature Communications, 2022, 13, .	5.8	16
2611	Large Scale Exchange Coupled Metallic Multilayers by Rollâ€toâ€Roll (R2R) Process for Advanced Printed Magnetoelectronics. Advanced Materials Technologies, 2022, 7, .	3.0	2
2612	Skin Electronics from Biocompatible In Situ Welding Enabled By Intrinsically Sticky Conductors. Advanced Science, 2022, 9, .	5.6	36
2613	Repeatable detection of Ag+ ions using a DNA aptamer-linked hydrogel biochemical sensor integrated with microfluidic heating system. Scientific Reports, 2022, 12, .	1.6	7
2614	Resettable sweat-powered wearable electrochromic biosensor. Biosensors and Bioelectronics, 2022, 215, 114565.	5.3	23
2615	Wireless Wearable Electrochemical Sensing Platform with Zero-Power Osmotic Sweat Extraction for Continuous Lactate Monitoring. ACS Sensors, 2022, 7, 2037-2048.	4.0	44
2616	Laser Processing of Flexible In-Plane Micro-supercapacitors: Progresses in Advanced Manufacturing of Nanostructured Electrodes. ACS Nano, 2022, 16, 10088-10129.	7.3	31
2617	Tactile Nearâ€Sensor Analogue Computing for Ultrafast Responsive Artificial Skin. Advanced Materials, 2022, 34, .	11.1	42
2618	Review of point-of-care platforms for diabetes: (1) sensing. Sensors and Actuators Reports, 2022, 4, 100113.	2.3	8

#	Article	IF	Citations
2619	Skinâ€Interfaced Microfluidic System with Machine Learningâ€Enabled Image Processing of Sweat Biomarkers in Remote Settings. Advanced Materials Technologies, 2022, 7, .	3.0	20
2620	NEEDLE FREE MONITORING OF BLOOD GLUCOSE THROUGH REVERSE IONTOPHORESIS. International Journal of Applied Pharmaceutics, 0, , 26-34.	0.3	2
2621	Flexible microfluidic nanoplasmonic sensors for refreshable and portable recognition of sweat biochemical fingerprint. Npj Flexible Electronics, 2022, 6, .	5.1	40
2622	Towards Multiplexed and Multimodal Biosensor Platforms in Real-Time Monitoring of Metabolic Disorders. Sensors, 2022, 22, 5200.	2.1	5
2623	A miniaturized low frequency direct-current magnetic-bias-integrated magnetoelectric wireless power transfer system with enhanced energy conversion efficiency. AIP Advances, 2022, 12, 075012.	0.6	1
2624	Recent Advances toward Wearable Sweat Monitoring Systems. Advanced Materials Technologies, 2023, 8, .	3.0	6
2625	Wearable SERS Sensor Based on Omnidirectional Plasmonic Nanovoids Array with Ultraâ€High Sensitivity and Stability. Small, 2022, 18, .	5.2	36
2626	Wireless accessing of salivary biomarkers based wearable electrochemical sensors: A mini-review. Electrochemistry Communications, 2022, 140, 107314.	2.3	10
2627	Multifunctional hydrogels of polyvinyl alcohol/polydopamine functionalized with carbon nanomaterials as flexible sensors. Materials Today Communications, 2022, 32, 103906.	0.9	6
2628	Wearable Electrochemical Sensors for Monitoring of Glucose and Electroactive Drugs. International Journal of Electrochemical Science, 2022, 17, 220841.	0.5	4
2629	A comprehensive review on the prospects of next-generation wearable electronics for individualized health monitoring, assistive robotics, and communication. Sensors and Actuators A: Physical, 2022, 344, 113715.	2.0	30
2630	A programmable multiscale assembly strategy of carbon nanotubes for honeycomb-like networks. Carbon, 2022, 198, 110-118.	5.4	4
2631	Cascaded enzymatic reaction-mediated multicolor pixelated quantitative system integrated microfluidic wearable analytical device (McPiQ-Î¼WAD) for non-invasive and sensitive glucose diagnostics. Sensors and Actuators B: Chemical, 2022, 369, 132345.	4.0	5
2632	Stretchable Sponge Electrodes for Long-Term and Motion-Artifact-Tolerant Recording of High-Quality Electrophysiologic Signals. ACS Nano, 2022, 16, 11792-11801.	7.3	32
2633	Battery-free, tuning circuitâ€“inspired wireless sensor systems for detection of multiple biomarkers in bodily fluids. Science Advances, 2022, 8, .	4.7	14
2634	End-to-end design of wearable sensors. Nature Reviews Materials, 2022, 7, 887-907.	23.3	311
2635	Nanocellulose as a promising substrate for advanced sensors and their applications. International Journal of Biological Macromolecules, 2022, 218, 473-487.	3.6	19
2636	Ultrasensitive capacitive tactile sensor with heterostructured active layers for tiny signal perception. Chemical Engineering Journal, 2022, 450, 138258.	6.6	24

#	Article	IF	Citations
2639	Sodium lactate solutions characterization using Electrochemical Impedance Spectroscopy. , 2022, , .		0
2640	Single-input single-output multi-touch soft sensor systems using band-pass filters. Npj Flexible Electronics, 2022, 6, .	5.1	9
2641	Smartphone-Based Multiplexed Biosensing Tools for Health Monitoring. Biosensors, 2022, 12, 583.	2.3	32
2642	Bioadhesive ultrasound for long-term continuous imaging of diverse organs. Science, 2022, 377, 517-523.	6.0	168
2643	Comparative assessment of blood glucose monitoring techniques: a review. Journal of Medical Engineering and Technology, 2023, 47, 121-130.	0.8	5
2644	Ultraâ€Lightweight, Highly Permeable, and Waterproof Fibrous Organic Electrochemical Transistors for Onâ€Skin Bioelectronics. Advanced Materials Technologies, 2023, 8, .	3.0	12
2645	Intrinsically Stretchable Organic Electrochemical Transistors with Rigidâ€Deviceâ€Benchmarkable Performance. Advanced Science, 2022, 9, .	5.6	12
2646	Realtime Monitoring of Local Sweat Rate Kinetics during Constant-Load Exercise Using Perspiration-Meter with Airflow Compensation System. Sensors, 2022, 22, 5473.	2.1	1
2647	Wearable Optical Sensing in the Medical Internet of Things (MIoT) for Pervasive Medicine: Opportunities and Challenges. ACS Photonics, 2022, 9, 2579-2599.	3.2	16
2648	Scorpion-inspired dual-bionic, microcrack-assisted wrinkle based laser induced graphene-silver strain sensor with high sensitivity and broad working range for wireless health monitoring system. Nano Research, 2023, 16, 1228-1241.	5.8	13
2649	Functional Fiber Materials to Smart Fiber Devices. Chemical Reviews, 2023, 123, 613-662.	23.0	69
2650	A Wearable Biosensor for Sweat Lactate as a Proxy for Sport Performance Monitoring. Analysis & Sensing, 2023, 3, .	1.1	1
2651	Chip-less wireless electronic skins by remote epitaxial freestanding compound semiconductors. Science, 2022, 377, 859-864.	6.0	91
2652	A Machineâ€Learningâ€Enhanced Simultaneous and Multimodal Sensor Based on Moistâ€Electric Powered Graphene Oxide. Advanced Materials, 2022, 34, .	11.1	28
2653	A Focused Review on the Flexible Wearable Sensors for Sports: From Kinematics to Physiologies. Micromachines, 2022, 13, 1356.	1.4	10
2654	Highlyâ€Bendable MoS₂/SnS Flexible Photodetector with Broadband Infrared Response. Advanced Materials Interfaces, 2022, 9, .	1.9	7
2655	Intrinsically stretchable neuromorphic devices for on-body processing of health data with artificial intelligence. Matter, 2022, 5, 3375-3390.	5.0	29
2656	A wearable electrochemical biosensor for the monitoring of metabolites and nutrients. Nature Biomedical Engineering, 2022, 6, 1225-1235.	11.6	236

#	Article	IF	Citations
2657	Utilizing Gradient Porous Graphene Substrate as the Solid-Contact Layer To Enhance Wearable Electrochemical Sweat Sensor Sensitivity. Nano Letters, 2022, 22, 6647-6654.	4.5	16
2658	Recent Advances in Stretchable and Wearable Capacitive Electrophysiological Sensors for Long-Term Health Monitoring. Biosensors, 2022, 12, 630.	2.3	26
2659	Hierarchical Grapheneâ€Dye Bilayers for Multimodal Optoelectronic Sensing and Decoupling of Complex Stimuli. Advanced Materials Technologies, 2023, 8, .	3.0	4
2660	A Solid-Contact Reference Electrode Based on Silver/Silver Organic Insoluble Salt for Potentiometric Ion Sensing. ACS Measurement Science Au, 2022, 2, 568-575.	1.9	3
2661	Silk-Based Electrochemical Sensor for the Detection of Glucose in Sweat. Biomacromolecules, 2022, 23, 3928-3935.	2.6	20
2662	Boron-Doped Graphene Quantum Dots Anchored to Carbon Nanotubes as Noble Metal-Free Electrocatalysts of Uric Acid for a Wearable Sweat Sensor. ACS Applied Nano Materials, 2022, 5, 11100-11110.	2.4	26
2663	Flexible organic integrated electronics for self-powered multiplexed ocular monitoring. Npj Flexible Electronics, 2022, 6, .	5.1	16
2664	Laminated Triboelectric Nanogenerator for Enhanced Self-Powered Pressure-Sensing Performance by Charge Regulation. ACS Applied Materials & Interfaces, 2022, 14, 40014-40020.	4.0	13
2665	Label-free photoelectric sensor for lactic acid determination in human sweat. Chinese Chemical Letters, 2023, 34, 107722.	4.8	7
2666	Highly Reproducible Flexible Ionâ€Selective Electrodes for the Detection of Sodium and Potassium in Artificial Sweat. Electroanalysis, 0, , .	1.5	3
2667	Controllable Fabrication of Flexible and Foldable Carbon Nanofiber Films. Advanced Materials Interfaces, 2022, 9, .	1.9	2
2668	Flexible thermoelectrics based on ductile semiconductors. Science, 2022, 377, 854-858.	6.0	134
2669	Photo-responsive and recyclable graphene/thermosetting polyurethane shape memory composites for self-powered mechanosensor. Journal of Polymer Research, 2022, 29, .	1.2	1
2670	4D Printing of Freestanding Liquid Crystal Elastomers via Hybrid Additive Manufacturing. Advanced Materials, 2022, 34, .	11.1	40
2671	Continuously Quantifying Oral Chemicals Based on Flexible Hybrid Electronics for Clinical Diagnosis and Pathogenetic Study. Research, 2022, 2022, .	2.8	2
2672	PEDOT Composite with Ionic Liquid and Its Application to Deformable Electrochemical Transistors. Gels, 2022, 8, 534.	2.1	4
2673	Biocompatible Ionic Liquids in High-Performing Organic Electrochemical Transistors for Ion Detection and Electrophysiological Monitoring. ACS Nano, 2022, 16, 12049-12060.	7.3	23
2674	Multiferroic Self-Assembled BaTiO₃â€“Fe Vertically Aligned Nanocomposites on Mica Substrates toward Flexible Electronics. ACS Applied Electronic Materials, 2022, 4, 4077-4084.	2.0	4

#	Article	IF	Citations
2675	Gold nanowire electrodes for flexible organic thin-film transistors. Applied Physics Express, 2022, 15, 096501.	1.1	2
2676	Atomistic processes of diffusion-induced unusual compression fracture in metallic nanocrystals. Materials Research Letters, 2022, 10, 805-812.	4.1	3
2677	Nanoinspired Biocompatible Chemosensors: Progress toward Efficient Prognosis of Arsenic Poisoning. ACS Applied Bio Materials, 2022, 5, 3850-3858.	2.3	1
2678	3D Kirigami antennas with robust frequency for stretchable wireless communication. Extreme Mechanics Letters, 2022, 56, 101841.	2.0	1
2679	Magnetostrictive biomechanical energy harvester with a hybrid force amplifier. International Journal of Mechanical Sciences, 2022, 233, 107652.	3.6	13
2680	Evolution of MXene and its 2D heterostructure in electrochemical sensor applications. Coordination Chemistry Reviews, 2022, 471, 214755.	9.5	29
2681	Ultrasensitive and miniaturized ion sensors using ionically imprinted nanostructured films. Applied Materials Today, 2022, 29, 101600.	2.3	1
2682	Directional sweat transport window based on hydrophobic/hydrophilic Janus fabric enables continuous transfer and monitoring of sweat. Applied Materials Today, 2022, 29, 101623.	2.3	5
2683	A responsive hydrogel-based microneedle system for minimally invasive glucose monitoring. Smart Materials in Medicine, 2023, 4, 69-77.	3.7	12
2684	Trends and Validation in Impedimetric Immunosensors in the Application of Routine Analysis. , 2023, , 1-35.		0
2685	Wearable Devices Toward Medical and Healthcare Applications. Journal of the Institute of Electrical Engineers of Japan, 2022, 142, 560-563.	0.0	0
2686	Recent Developments and Implementations of Conductive Polymer-Based Flexible Devices in Sensing Applications. Polymers, 2022, 14, 3730.	2.0	17
2687	Flexible strategy of epitaxial oxide thin films. IScience, 2022, 25, 105041.	1.9	3
2688	Novel design of a planar flow-through potentiometric sensor. Journal of Electroanalytical Chemistry, 2022, 923, 116785.	1.9	2
2689	Paper-based sensors for rapid important biomarkers detection. Biosensors and Bioelectronics: X, 2022, 12, 100246.	0.9	15
2690	A performance improvement of enzyme-based electrochemical lactate sensor fabricated by electroplating novel PdCu mediator on a laser induced graphene electrode. Bioelectrochemistry, 2022, 148, 108259.	2.4	13
2691	Wearable microneedle-integrated sensors for household health monitoring. Engineered Regeneration, 2022, 3, 420-426.	3.0	7
2692	Washable and stretchable fiber with heat and ultraviolet color conversion. RSC Advances, 2022, 12, 22351-22359.	1.7	3

#	Article	IF	Citations
2693	Inkjet printing of two-dimensional van der Waals materials: a new route towards emerging electronic device applications. Nanoscale Horizons, 2022, 7, 1161-1176.	4.1	7
2694	Multi-analyte sensing strategies towards wearable and intelligent devices. Chemical Science, 2022, 13, 12309-12325.	3.7	13
2695	Minimally Invasive Implant Type Electromagnetic Biosensor for Continuous Glucose Monitoring System: In Vivo Evaluation. IEEE Transactions on Biomedical Engineering, 2023, 70, 1000-1011.	2.5	5
2696	An Electrochemical Nonenzymatic Microsensor Modified by CuCo₂O₄ Nanoparticles for Glucose Sensing. IEEE Sensors Journal, 2022, 22, 21462-21469.	2.4	3
2697	A review of inkjet printing technology for personalized-healthcare wearable devices. Journal of Materials Chemistry C, 2022, 10, 14091-14115.	2.7	14
2698	Progress of Flexible Wearable Electrochemical Sensors for Human Sweat Detection. Advances in Analytical Chemistry, 2022, 12, 272-280.	0.1	0
2699	Transition metal hexacyanoferrates as catalysts for (bio)sensors. , 2022, , .		0
2700	Balancing the trade-off between the mechanical and electrical properties of conjugated polymer blend films for organic field-effect transistors. Journal of Materials Chemistry C, 2022, 10, 14921-14928.	2.7	4
2701	Advances in constructing silver nanowire-based conductive pathways for flexible and stretchable electronics. Nanoscale, 2022, 14, 11484-11511.	2.8	26
2702	Printed Electronics Applications: Sensors, Actuators and Biosensors. , 2022, , 516-598.		0
2703	A Novel Acoustic Manipulation Chip with V-shaped Reflector for Effective Aggregation of Micro-objects. Lecture Notes in Computer Science, 2022, , 590-599.	1.0	0
2704	Graphene-Based Wearable Sensors. , 2022, , 1-15.		0
2705	A Threshold-Based Bioluminescence Detector With a CMOS-Integrated Photodiode Array in 65 nm for a Multi-Diagnostic Ingestible Capsule. IEEE Journal of Solid-State Circuits, 2023, 58, 838-851.	3.5	6
2706	Influence of surface functionalization on the contact electrification of fabrics. New Journal of Chemistry, 2022, 46, 15645-15656.	1.4	1
2707	A 17.7ÂµW CDS-CTIA for Wireless-powered Wearable Electrochemical Sweat Sensors. , 2022, , .		0
2708	Integrated biosensor platform based on graphene transistor arrays for real-time high-accuracy ion sensing. Nature Communications, 2022, 13, .	5.8	28
2709	Ultraâ€Thin Flexible Encapsulating Materials for Soft Bioâ€Integrated Electronics. Advanced Science, 2022, 9, .	5.6	37
2710	Triboelectric Nanogenerator Based on PTFE Plastic Waste Bottle and Aluminum Foil. , 2022, 2, 203-213.		1

#	Article	IF	Citations
2711	Adoption of Wearable Devices by Older People: Changes in Use Behaviors and User Experiences. International Journal of Human-Computer Interaction, 2023, 39, 964-987.	3.3	6
2712	æŸ”æ€§å¯ç©¿æˆ´ä¼ æ„Ÿå™¨èƒ½è¯†åˆ«æŠ€æœ¯ç”¨ç©¶è¿›å±•. Scientia Sinica Chimica, 2022, , .	0.2	0
2713	Double-Sided Wearable Multifunctional Sensing System with Anti-interference Design for Humanâ€“Ambience Interface. ACS Nano, 2022, 16, 14679-14692.	7.3	16
2714	A GFET Nitrile Sensor Using a Grapheneâ€Binding Fusion Protein. Advanced Functional Materials, 0, , 2207669.	7.8	2
2715	Nanoparticle assembled structures for matter assays in human flowing systems. Matter, 2022, 5, 2760-2786.	5.0	2
2716	Stretchable and Self-Healable Grapheneâ€“Polymer Conductive Composite for Wearable EMG Sensor. Polymers, 2022, 14, 3766.	2.0	8
2717	Integration of body-mounted ultrasoft organic solar cell on cyborg insects with intact mobility. Npj Flexible Electronics, 2022, 6, .	5.1	16
2718	The development of wearable technologies and their potential for measuring nutrient intake: Towards precision nutrition. Nutrition Bulletin, 2022, 47, 388-406.	0.8	9
2720	Development of Nucleic Acidâ€based Electrochemical Biosensors for Clinical Applications. Angewandte Chemie, 0, , .	1.6	1
2721	The Wireless Communication of the Embedded Microprocessor Contributes to the Industrialization of Intangible Cultural Heritage Products. Mobile Information Systems, 2022, 2022, 1-11.	0.4	0
2722	A Review of Stimuli-Responsive Smart Materials for Wearable Technology in Healthcare: Retrospective, Perspective, and Prospective. Molecules, 2022, 27, 5709.	1.7	24
2723	Wetâ€Adhesive Onâ€Skin Sensors Based on Metalâ€“Organic Frameworks for Wireless Monitoring of Metabolites in Sweat. Advanced Materials, 2022, 34, .	11.1	50
2724	A Selfâ€Powered Wearable Sensor for Continuous Wireless Sweat Monitoring. Small Methods, 2022, 6, .	4.6	51
2725	Graphdiyne-Based Nanofilms for Compliant On-Skin Sensing. ACS Nano, 2022, 16, 16677-16689.	7.3	8
2726	Sensor Technology and Intelligent Systems in Anorexia Nervosa: Providing Smarter Healthcare Delivery Systems. BioMed Research International, 2022, 2022, 1-13.	0.9	1
2727	Plasmonic/magnetic nanoarchitectures: From controllable design to biosensing and bioelectronic interfaces. Biosensors and Bioelectronics, 2022, , 114744.	5.3	3
2728	Microfluidic wearable electrochemical sweat sensors for health monitoring. Biomicrofluidics, 2022, 16, .	1.2	9
2729	Flexible Biofuel Cellâ€Inâ€Aâ€Tube (i<i>ez</i>Tube): An Entirely Selfâ€Contained Biofuel Cell for Wearable Green Bioâ€energy Harvesting. Advanced Functional Materials, 2022, 32, .	7.8	14

#	Article	IF	Citations
2730	A flexible wearable e-skin sensing system for robotic teleoperation. Robotica, 2023, 41, 1025-1038.	1.3	3
2731	Recent Advances in the Development of Flexible Sensors: Mechanisms, Materials, Performance Optimization, and Applications. Journal of Electronic Materials, 2022, 51, 6735-6769.	1.0	11
2732	Temperature Self-Calibration of Always-On, Field-Deployed Ion-Selective Electrodes Based on Differential Voltage Measurement. ACS Sensors, 2022, 7, 2661-2670.	4.0	9
2733	Two-dimensional nanostructures based â€˜onicsâ€™ and â€˜omicsâ€™ in personalized medicine. Nanophotonics, 2022, .	2.9	3
2734	Flexible biochemical sensors for point-of-care management of diseases: a review. Mikrochimica Acta, 2022, 189, .	2.5	2
2735	A Bifunctional Fully Integrated Wearable Tracker for Epidermal Sweat and Wound Exudate Multiple Biomarkers Monitoring. Small, 2022, 18, .	5.2	29
2736	Alert Patches Embedding Conjugated Polymeric Lamellar and Metal Nanoparticles Generating Optoelectronic Responses against Thermal Stresses. Macromolecular Research, 0, , .	1.0	3
2737	Sweat gland morphology and physiology in diabetes, neuropathy, and nephropathy: a review. Archives of Physiology and Biochemistry, 0, , 1-15.	1.0	1
2738	A Nanoporous Carbonâ€MXene Heterostructured Nanocompositeâ€Based Epidermal Patch for Realâ€Time Biopotentials and Sweat Glucose Monitoring. Advanced Functional Materials, 2022, 32, .	7.8	25
2739	Advances in layered double hydroxide based labels for signal amplification in ultrasensitive electrochemical and optical affinity biosensors of glucose. Chemosphere, 2022, 309, 136633.	4.2	8
2740	Development of Nucleicâ€Acidâ€Based Electrochemical Biosensors for Clinical Applications. Angewandte Chemie - International Edition, 2022, 61, .	7.2	22
2742	Recent Progress of Smart Nano-Based Biosensors and their Applications in Biomedicine. Nano, 2022, 17, .	0.5	2
2743	Intrinsically stretchable and self-healable tribotronic transistor for bioinspired e-skin. Materials Today Physics, 2022, 28, 100877.	2.9	6
2744	Multilayered MoS₂ Sphere-Based Triboelectricâ€“Flexoelectric Nanogenerators as Self-Powered Mechanical Sensors for Human Motion Detection. ACS Applied Nano Materials, 2022, 5, 15192-15200.	2.4	10
2745	Sensors and â€œThe internet of biochemical thingsâ€. Frontiers in Sensors, 0, 3, .	1.7	1
2746	Real-Time Position Detecting of Large-Area CNT-based Tactile Sensors based on Artificial Intelligence. Journal of Korean Institute of Metals and Materials, 2022, 60, 793-799.	0.4	1
2747	Uncovering the Sweat Biofouling Components and Distributions in Electrochemical Sensors. Analytical Chemistry, 2022, 94, 14402-14409.	3.2	6
2748	Selfâ€Powered Wearable Micropyramid Piezoelectric Film Sensor for Realâ€Time Monitoring of Blood Pressure. Advanced Engineering Materials, 2023, 25, .	1.6	14

#	Article	IF	Citations
2749	Ultrathin crystalline-silicon-based strain gauges with deep learning algorithms for silent speech interfaces. Nature Communications, 2022, 13, .	5.8	27
2750	A stretchable epidermal sweat sensing platform with an integrated printed battery and electrochromic display. Nature Electronics, 2022, 5, 694-705.	13.1	105
2751	Lowâ€Temperature Plasma Sintering of Inkjetâ€Printed Metal Salt Decomposition Inks on Flexible Substrates. Advanced Engineering Materials, 2023, 25, .	1.6	2
2752	Soaking-free and self-healing hydrogel for wearable zinc-ion batteries. Chemical Engineering Journal, 2023, 452, 139605.	6.6	36
2753	Transfer printing technologies for soft electronics. Nanoscale, 2022, 14, 16749-16760.	2.8	9
2754	A review of wearable sensor systems for hand- transmitted vibration (HTV) applications. AIP Conference Proceedings, 2022, , .	0.3	0
2755	Opportunities for biocompatible and safe zinc-based batteries. Energy and Environmental Science, 2022, 15, 4911-4927.	15.6	39
2756	Autonomous wearable sweat rate monitoring based on digitized microbubble detection. Lab on A Chip, 2022, 22, 4267-4275.	3.1	4
2757	Non-invasive Wearable Device for Monitoring Chronic Disease. Cognitive Science and Technology, 2022, , 527-533.	0.2	0
2758	Integration of a CMOS LSI Chiplet into Micro Flexible Devices for Remote Electrostatic Actuation. , 2022, , .		0
2759	A Microwave CSRR Sensor for Non-Invasive Glucose-Level Detection. , 2022, , .		1
2760	A Comprehensive Review of the Recent Developments in Wearable Sweat-Sensing Devices. Sensors, 2022, 22, 7670.	2.1	12
2761	Ultra-Small Wearable Flexible Biosensor for Continuous Sweat Analysis. ACS Sensors, 2022, 7, 3102-3107.	4.0	32
2762	Highly Stretchable Sensor Based on Fluid Dynamics-Assisted Graphene Inks for Real-Time Monitoring of Sweat. ACS Applied Materials & Interfaces, 2022, 14, 48072-48080.	4.0	11
2763	Materials Perspectives of Integrated Plasmonic Biosensors. Materials, 2022, 15, 7289.	1.3	2
2764	A Rainbow Structural Color by Stretchable Photonic Crystal for Saccharide Identification. ACS Nano, 2022, 16, 20094-20099.	7.3	11
2765	Flexible Ring Sensor Array and Machine Learning Model for the Early Blood Leakage Detection during Dialysis. Processes, 2022, 10, 2197.	1.3	0
2766	Sweat sensors break free. Nature Electronics, 2022, 5, 631-632.	13.1	2

#	Article	IF	Citations
2767	Hydrogel interfaces for merging humans and machines. Nature Reviews Materials, 2022, 7, 935-952.	23.3	153
2768	2D-Materials-Based Wearable Biosensor Systems. Biosensors, 2022, 12, 936.	2.3	10
2769	A Wearable, Textile-Based Polyacrylate Imprinted Electrochemical Sensor for Cortisol Detection in Sweat. Biosensors, 2022, 12, 854.	2.3	14
2770	Elastic Fibers/Fabrics for Wearables and Bioelectronics. Advanced Science, 2022, 9, .	5.6	19
2771	A Soft Wearable Microfluidic Patch with Finger-Actuated Pumps and Valves for On-Demand, Longitudinal, and Multianalyte Sweat Sensing. ACS Sensors, 2022, 7, 3169-3180.	4.0	18
2772	A Study of the Performance Degradation of Conductive Threads Based on the Effects of Tensile Forces and Repeated Washing. Polymers, 2022, 14, 4581.	2.0	8
2773	All-inorganic transparent Hf0.85Ce0.15O2 ferroelectric thin films with high flexibility and stability. Nano Research, 2023, 16, 5065-5072.	5.8	4
2774	Engineering the Comfortâ€ofâ€Wear for Next Generation Wearables. Advanced Electronic Materials, 2023, 9, .	2.6	14
2775	Graphene and Its Derivatives: Synthesis and Application in the Electrochemical Detection of Analytes in Sweat. Biosensors, 2022, 12, 910.	2.3	16
2776	Recent Progress on Flexible Room-Temperature Gas Sensors Based on Metal Oxide Semiconductor. Nano-Micro Letters, 2022, 14, .	14.4	67
2777	Digital filtering dissemination for optimizing impedance cytometry signal quality and counting accuracy. Biomedical Microdevices, 2022, 24, .	1.4	0
2778	Recent progress in silk-based biosensors. International Journal of Biological Macromolecules, 2023, 224, 422-436.	3.6	6
2779	What Is Left for Real-Life Lactate Monitoring? Current Advances in Electrochemical Lactate (Bio)Sensors for Agrifood and Biomedical Applications. Biosensors, 2022, 12, 919.	2.3	7
2780	Green and Integrated Wearable Electrochemical Sensor for Chloride Detection in Sweat. Sensors, 2022, 22, 8223.	2.1	7
2781	Surface-enhanced Raman scattering as a potential strategy for wearable flexible sensing and point-of-care testing non-invasive medical diagnosis. Frontiers in Chemistry, 0, 10, .	1.8	10
2782	Design optimization of microfabricated coils for volume-limited miniaturized broadband electromagnetic vibration energy harvester. Energy Conversion and Management, 2022, 271, 116299.	4.4	4
2783	A tunable bioinspired process of SnO2 NPs synthesis for electrochemical CO2-into-formate conversion. Journal of CO2 Utilization, 2022, 66, 102263.	3.3	6
2784	Wearable artificial intelligence biosensor networks. Biosensors and Bioelectronics, 2023, 219, 114825.	5.3	33

#	Article	IF	Citations
2785	A hybridized nano-porous carbon reinforced 3D graphene-based epidermal patch for precise sweat glucose and lactate analysis. Biosensors and Bioelectronics, 2023, 219, 114846.	5.3	19
2786	Device, Circuit, and System Design for Enabling Giga-Hertz Large-Area Electronics. IEEE Open Journal of the Solid-State Circuits Society, 2022, , 1-1.	2.0	0
2787	CMOS-based microanalysis systems. , 2023, , 259-286.		0
2788	Wearable, nanofiber-based microfluidic systems with integrated electrochemical and colorimetric sensing arrays for multiplex sweat analysis. Chemical Engineering Journal, 2023, 454, 140248.	6.6	23
2789	A Reconfigurable Tri-Mode Frequency-Locked Loop Readout Circuit for Biosensor Interfaces. , 2022, , .		3
2790	Field-use device for the electrochemical quantification of carbamazepine levels in a background of human saliva. Journal of Applied Electrochemistry, 2023, 53, 523-534.	1.5	1
2791	Carbon nanotube-based flexible high-speed circuits with sub-nanosecond stage delays. Nature Communications, 2022, 13, .	5.8	22
2792	Electrochemical Determination of Homocysteine Using Self-Assembled 6-Ferrocenylhexanethiol on a Molybdenum Disulfide Nanoparticle Modified Glassy Carbon Electrode (GCE). Analytical Letters, 2023, 56, 1566-1576.	1.0	1
2793	Wireless, Soft Sensors of Skin Hydration with Designs Optimized for Rapid, Accurate Diagnostics of Dermatological Health. Advanced Healthcare Materials, 2023, 12, .	3.9	9
2794	Multifunctional Sensors Based on a Silver Nanowires/PDMS Aerogel Composite. ACS Applied Electronic Materials, 2022, 4, 5413-5420.	2.0	8
2795	An epifluidic electronic patch with spiking sweat clearance for event-driven perspiration monitoring. Nature Communications, 2022, 13, .	5.8	12
2796	Triboelectric Nanogenerators in Sustainable Chemical Sensors. Chemosensors, 2022, 10, 484.	1.8	8
2797	Total Bioaerosol Detection by Split Aptamer-Based Electrochemical Nanosensor Chips. Analytical Chemistry, 2022, 94, 16752-16758.	3.2	2
2798	Wearable chemical sensors for biomarker discovery in the omics era. Nature Reviews Chemistry, 2022, 6, 899-915.	13.8	136
2799	Ultra-fast self-healable stretchable bio-based elastomer/graphene ink using fluid dynamics process for printed wearable sweat-monitoring sensor. Chemical Engineering Journal, 2023, 454, 140443.	6.6	13
2800	Artificial Intelligence, Sensors and Vital Health Signs: A Review. Applied Sciences (Switzerland), 2022, 12, 11475.	1.3	4
2801	Design, fabrication and characterization of arrayed waveguide grating devices based on different polymers. Optics Communications, 2023, 530, 129139.	1.0	3
2802	Lowâ€Voltage Intrinsically Stretchable Organic Transistor Amplifiers for Ultrasensitive Electrophysiological Signal Detection. Advanced Materials, 2023, 35, .	11.1	7

#	Article	IF	Citations
2803	A general self-powered wireless sensing solution based on triboelectric-discharge effect. Nano Energy, 2023, 105, 107982.	8.2	6
2804	Deposition of Ni/RGO nanocomposite on conductive cotton fabric as non-enzymatic wearable electrode for electrochemical sensing of uric acid in sweat. Diamond and Related Materials, 2022, 130, 109518.	1.8	16
2805	Advanced thermal sensing techniques for characterizing the physical properties of skin. Applied Physics Reviews, 2022, 9, .	5.5	7
2806	Bio-inspired Perspiration-wicking Electronic Skins for Comfort and Reliable Multimodal Health Monitoring. , 2022, , .		0
2807	Enhancing CO2 electroreduction to syngas by active protons of imidazolium ionic liquids: From performance to mechanism. Applied Catalysis B: Environmental, 2023, 326, 122185.	10.8	11
2808	Triboelectric Nanogenerator Enabled Wearable Sensors and Electronics for Sustainable Internet of Things Integrated Green Earth. Advanced Energy Materials, 2023, 13, .	10.2	79
2809	Flexible and printable integrated biosensors for monitoring sweat and skin condition. Analytical Biochemistry, 2023, 661, 114985.	1.1	3
2810	Stretchable Composite Conductive Fibers for Wearables. Advanced Materials Technologies, 2023, 8, .	3.0	6
2811	Intelligent wearable devices based on nanomaterials and nanostructures for healthcare. Nanoscale, 2023, 15, 405-433.	2.8	16
2812	Laser Induced Coffeeâ€Ring Structure through Solidâ€Liquid Transition for Color Printing. Small, 2023, 19, .	5.2	6
2813	Photolithographyâ€Based Microfabrication of Biodegradable Flexible and Stretchable Sensors. Advanced Materials, 2023, 35, .	11.1	11
2814	Emerging biotransduction strategies on soft interfaces for biosensing. Nanoscale, 2022, 15, 80-91.	2.8	0
2815	Graphene electrochemical transistor incorporated with gel electrolyte for wearable and non-invasive glucose monitoring. Analytica Chimica Acta, 2023, 1239, 340719.	2.6	6
2816	Novel AlGaN/GaN HEMT pH Sensor for Real-Time Monitoring Based on Visible Light Communication Technology. IEEE Electron Device Letters, 2023, 44, 120-123.	2.2	2
2817	Recent advances in wearable electromechanical sensorsâ€"Moving towards machine learning-assisted wearable sensing systems. Nano Energy, 2023, 105, 108041.	8.2	27
2818	Flexible enzymatic biosensor based on graphene sponge for glucose detection in human sweat. Surfaces and Interfaces, 2023, 36, 102525.	1.5	12
2819	A highly stretchable and breathable self-powered dual-parameter sensor for decoupled temperature and strain sensing. Organic Electronics, 2023, 113, 106723.	1.4	7
2820	Dual-gate thin film transistor lactate sensors operating in the subthreshold regime. Biosensors and Bioelectronics, 2023, 222, 114958.	5.3	11

#	Article	IF	Citations
2821	Wearable microneedle array-based sensor for transdermal monitoring of pH levels in interstitial fluid. Biosensors and Bioelectronics, 2023, 222, 114955.	5.3	25
2822	Attomolar detection of hepatitis C virus core protein powered by molecular antenna-like effect in a graphene field-effect aptasensor. Biosensors and Bioelectronics, 2023, 222, 115006.	5.3	10
2823	A simple yet multifunctional sensing platform inspired by healing-assembly hydrogels serving motion and sweat monitoring. Sensors and Actuators B: Chemical, 2023, 378, 133173.	4.0	6
2824	Moving toward smart biomedical sensing. Biosensors and Bioelectronics, 2023, 223, 115009.	5.3	11
2825	Enzymatic biofuel cell-powered iontophoretic facial mask for enhanced transdermal drug delivery. Biosensors and Bioelectronics, 2023, 223, 115019.	5.3	7
2826	Characterization and application of porous PHBV-based bacterial polymers to realize novel bio-based electroanalytical (bio)sensors. Sensors and Actuators B: Chemical, 2023, 379, 133178.	4.0	9
2827	Green Wearable Electronics, Sensors and Applications. , 2022, , 1-10.		0
2828	A Body-Wide RF Energy Harvester Based on Textile Surface Plasmonic Antenna Array for Wearable Wireless Power Transmission. IEEE Transactions on Circuits and Systems II: Express Briefs, 2023, 70, 1470-1474.	2.2	3
2829	Effects of Sensor Design on the Performance of Wearable Sweat Monitors. , 2022, , .		1
2830	Stencil Printing of Low-Cost Carbon-Based Stretchable Strain Sensors. , 2022, , .		2
2831	Wearable Perspiration Volume Sensor Using Dual-Frequency Impedance Measurement. , 2022, , .		1
2832	Magnetoelectric wireless power receiver for a wearable non-enzymatic lactic acid sensor. , 2022, , .		0
2833	Reflections on boosting wearable triboelectric nanogenerator performance via interface optimisation. Results in Engineering, 2023, 17, 100808.	2.2	3
2834	Access and Management of Sweat for Nonâ€Invasive Biomarker Monitoring: A Comprehensive Review. Small, 2023, 19, .	5.2	15
2835	Skin-like hydrogel-elastomer based electrochemical device for comfortable wearable biofluid monitoring. Chemical Engineering Journal, 2023, 455, 140609.	6.6	14
2836	Silent Speech Recognition with Strain Sensors and Deep Learning Analysis of Directional Facial Muscle Movement. ACS Applied Materials & Interfaces, 2022, 14, 54157-54169.	4.0	8
2837	Recent Advances in Multifunctional Wearable Sensors and Systems: Design, Fabrication, and Applications. Biosensors, 2022, 12, 1057.	2.3	9
2838	Wearable ultraviolet sensing fibers embedded with carbon nanotubes and zinc oxide nanowires. Smart Materials and Structures, 2022, 31, 125027.	1.8	0

#	Article	IF	Citations
2839	A low-cost flexible piezoresistive sensor with high sensitivity and broad detection range based on porous random microstructures for wearable electronics. Smart Materials and Structures, 2023, 32, 025005.	1.8	5
2840	The Emergence of Wearable Technologies in Healthcare: A Systematic Review. Automation, Collaboration, and E-services, 2023, , 43-59.	0.5	2
2841	Polyurethaneâ€polypyrrole hybrid structural color films forÂdualâ€signal mechanics sensing. , 2022, 1, .		14
2842	Constant Load Pedaling Exercise Combined with Electrical Muscle Stimulation Leads to an Early Increase in Sweat Lactate Levels. Sensors, 2022, 22, 9585.	2.1	5
2843	Recent advances in electronic skins: material progress and applications. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	6
2844	An Integrated Wearable Sweat Sensing Patch for Passive Continuous Analysis of Stress Biomarkers at Rest. Advanced Functional Materials, 2023, 33, .	7.8	16
2845	Selfâ€Healing Electronics for Prognostic Monitoring of Methylated Circulating Tumor DNAs. Advanced Materials, 2023, 35, .	11.1	7
2846	Smartphone light-driven zinc porphyrinic MOF nanosheets-based enzyme-free wearable photoelectrochemical sensor for continuous sweat vitamin C detection. Chemical Engineering Journal, 2023, 455, 140779.	6.6	26
2847	A Bibliometric Analysis of Wearable Device Research Trends 2001â€“2022â€”A Study on the Reversal of Number of Publications and Research Trends in China and the USA. International Journal of Environmental Research and Public Health, 2022, 19, 16427.	1.2	7
2848	Threeâ€inâ€One Portable Electronic Sensory System Based on Lowâ€Impedance Laserâ€Induced Graphene Onâ€Skin Electrode Sensors for Electrophysiological Signal Monitoring. Advanced Materials Interfaces, 2023, 10, .	1.9	9
2849	Modelling barriers to wearable technologies in Indian context: validating the moderating role of technology literacy. Global Knowledge, Memory and Communication, 2022, ahead-of-print, .	0.9	8
2850	A Step Forward for Smart Clothesâ€Fabric-Based Microfluidic Sensors for Wearable Health Monitoring. ACS Sensors, 2022, 7, 3857-3866.	4.0	9
2851	Biosensors for healthcare: current and future perspectives. Trends in Biotechnology, 2023, 41, 374-395.	4.9	22
2852	Ultrasensitive rapid cytokine sensors based on asymmetric geometry two-dimensional MoS2 diodes. Nature Communications, 2022, 13, .	5.8	11
2853	Fiber/Yarn-Based Triboelectric Nanogenerators (TENGs): Fabrication Strategy, Structure, and Application. Sensors, 2022, 22, 9716.	2.1	9
2854	In Situ Fabrication of Benzoquinone Crystal Layer on the Surface of Nestâ€Structural Ionohydrogel for Flexible â€œAllâ€inâ€Oneâ€•Supercapattery. Advanced Materials, 2023, 35, .	11.1	4
2855	Lossless enrichment of trace analytes in levitating droplets for multiphase and multiplex detection. Nature Communications, 2022, 13, .	5.8	29
2856	Dynamic Semiconductor Junctions for Mechanical-to-Electric Power Conversion. , 2023, , 1-28.		0

#	Article	IF	Citations
2858	A review on advanced nanocomposites materials based smart textile biosensor for healthcare monitoring from human sweat. Sensors and Actuators A: Physical, 2023, 350, 114093.	2.0	11
2859	Fully integrated wearable humidity sensor for respiration monitoring. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	8
2860	Masticatory systemâ€“inspired microneedle theranostic platform for intelligent and precise diabetic management. Science Advances, 2022, 8, .	4.7	11
2861	MicroSweat: A Wearable Microfluidic Patch for Noninvasive and Reliable Sweat Collection Enables Human Stress Monitoring. Advanced Science, 2023, 10, .	5.6	9
2862	Continuous monitoring of chemical signals in plants under stress. Nature Reviews Chemistry, 2023, 7, 7-25.	13.8	18
2864	Recent Advances in Wearable Biosensors for Non-Invasive Detection of Human Lactate. Biosensors, 2022, 12, 1164.	2.3	7
2865	Fine-Tuning the Performance of Ultraflexible Organic Complementary Circuits on a Single Substrate via a Nanoscale Interfacial Photochemical Reaction. ACS Applied Electronic Materials, 2022, 4, 6308-6321.	2.0	3
2866	Understanding resistance increase in composite inks under monotonic and cyclic stretching. Flexible and Printed Electronics, 2022, 7, 045010.	1.5	1
2868	A photoacoustic patch for three-dimensional imaging of hemoglobin and core temperature. Nature Communications, 2022, 13, .	5.8	22
2869	Emerging 0D, 1D, 2D, and 3D nanostructures for efficient point-of-care biosensing. Biosensors and Bioelectronics: X, 2022, 12, 100284.	0.9	15
2870	Semiconductor Plasmon Enhanced Upconversion toward a Flexible Temperature Sensor. ACS Applied Materials & Interfaces, 2023, 15, 4469-4476.	4.0	10
2871	Ultrafine-fiber thermistors for microscale biomonitoring. Journal of Materials Chemistry C, 0, , .	2.7	1
2872	A portable wirelessâ€•sensor system from allâ€•inâ€•one sensor array based hybrid solid contact layer for pointâ€•ofâ€•care ion monitoring in river basin. Electroanalysis, 2023, 35, .	1.5	2
2873	A Thermoregulatory Flexible Phase Change Nonwoven for All-Season High-Efficiency Wearable Thermal Management. Nano-Micro Letters, 2023, 15, .	14.4	20
2874	Wearable LIG Flexible Stress Sensor Based on Spider Web Bionic Structure. Coatings, 2023, 13, 155.	1.2	5
2875	Development and Performance Evaluation of an IoT-Integrated Breath Analyzer. International Journal of Environmental Research and Public Health, 2023, 20, 1319.	1.2	2
2876	Microelectronic fibers for multiplexed sweat sensing. Analytical and Bioanalytical Chemistry, 2023, 415, 4307-4318.	1.9	5
2877	Large Transconductance of Electrochemical Transistors Based on Fluorinated Donorâ€“Acceptor Conjugated Polymers. ACS Applied Materials & Interfaces, 2023, 15, 1629-1638.	4.0	1

#	Article	IF	Citations
2878	Magnetocaloric effect and tunable phase transition exponents of SrRuO ₃/mica heterostructure with varied mechanical bending. Physica Scripta, 2023, 98, 025810.	1.2	0
2879	Flexible Textile-Based Sweat Sensors for Wearable Applications. Biosensors, 2023, 13, 127.	2.3	21
2880	Hierarchical copper-based metal-organic frameworks nanosheet assemblies for electrochemical ascorbic acid sensing. Colloids and Surfaces B: Biointerfaces, 2023, 223, 113149.	2.5	8
2881	Unlimited recyclable wearable sensors based on a homogeneous ionic liquid and polyvinyl alcohol network. , 0, , .		1
2882	Carbonâ€Based Flexible Devices for Comprehensive Health Monitoring. Small Methods, 2023, 7, .	4.6	25
2883	Wearable and flexible electrochemical sensors for sweat analysis: a review. Microsystems and Nanoengineering, 2023, 9, .	3.4	98
2884	Non-invasive and wearable glucose biosensor based on gel electrolyte for detection of human sweat. Journal of Materials Science, 2023, 58, 890-901.	1.7	7
2885	Potentiometric Sensor System with Self-Calibration for Long-Term, In Situ Measurements. Chemosensors, 2023, 11, 48.	1.8	0
2886	Wearable Electrodes for Lactate: Applications in Enzymeâ€Based Sensors and Energy Biodevices. Analysis & Sensing, 2023, 3, .	1.1	3
2887	The Future of Nanomedicine. Micro/Nano Technologies, 2023, , 847-873.	0.1	0
2888	Biomedical Microelectromechanical System for Molecular, Cellular, and Organ Study. Micro/Nano Technologies, 2023, , 331-359.	0.1	0
2889	Emerging Bioâ€Interfacing Wearable Devices for Signal Monitoring: Overview of the Mechanisms and Diverse Sensor Designs to Target Distinct Physiological Bioâ€Parameters. , 2023, 2, .		5
2890	Natural oxidase-mimicking copper-organic frameworks for targeted identification of ascorbate in sensitive sweat sensing. Nature Communications, 2023, 14, .	5.8	27
2891	Systematic Design of a Graphene Ink Formulation for Aerosol Jet Printing. ACS Applied Materials & Interfaces, 2023, 15, 3325-3335.	4.0	11
2892	Electromagnetic Reconfiguration Using Stretchable Mechanical Metamaterials. Advanced Science, 2023, 10, .	5.6	4
2893	Temperature-insensitive conductive composites for noninterference strain sensing. Chemical Engineering Journal, 2023, 457, 141269.	6.6	13
2894	A conformable, durable, adhesive welded fiber mate for on-skin strain sensing. Chemical Engineering Journal, 2023, 457, 141233.	6.6	8
2895	Wearable potentiometric biosensor for analysis of urea in sweat. Biosensors and Bioelectronics, 2023, 223, 114994.	5.3	13

#	Article	IF	Citations
2896	Wearable power management system enables uninterrupted battery-free data-intensive sensing and transmission. Nano Energy, 2023, 107, 108107.	8.2	6
2897	Hollow-porous fiber-shaped strain sensor with multiple wrinkle-crack microstructure for strain visualization and wind monitoring. Nano Energy, 2023, 108, 108197.	8.2	25
2898	Recent Advances and Progress of Conducting Polymer-Based Hydrogels in Strain Sensor Applications. Gels, 2023, 9, 12.	2.1	6
2899	A Breathable, Passiveâ€Cooling, Nonâ€Inflammatory, and Biodegradable Aerogel Electronic Skin for Wearable Physicalâ€Electrophysiologicalâ€Chemical Analysis. Advanced Materials, 2023, 35, .	11.1	27
2900	Flexible temperature sensors based on two-dimensional materials for wearable devices. Journal Physics D: Applied Physics, 2023, 56, 063001.	1.3	6
2901	Applications of Smart Material Sensors and Soft Electronics in Healthcare Wearables for Better User Compliance. Micromachines, 2023, 14, 121.	1.4	6
2902	MÄ°LÄ°METRE DALGA BANDINDA Ä°NVAZÄ°F OLMAYAN BÄ°R YÃ–NTEM Ä°LE SIVILARDA GLÄ°KOZ SEVÄ°YESÄ°NÄ°N BELÄ°RLENMESÄ° UludaÄŸ University Journal of the Faculty of Engineering, 2022, 27, 1235-1248.	0.2	0
2903	Epidermal Patch with Biomimetic Multistructural Microfluidic Channels for Timeliness Monitoring of Sweat. ACS Applied Materials & Interfaces, 2023, 15, 469-478.	4.0	7
2904	Advances in electrochromic device technology through the exploitation of nanophotonic and nanoplasmonic effects. Nanophotonics, 2023, 12, 637-657.	2.9	10
2905	Extremely Sensitive Wearable Strain Sensor with Wide Range Based on a Simple Parallel Connection Architecture. Advanced Electronic Materials, 2023, 9, .	2.6	2
2906	Subgroup State Prediction under Different Noise Levels Using MODWT and XGBoost. Journal of Healthcare Engineering, 2023, 2023, 1-8.	1.1	0
2907	Smart biomaterials for skin tissue engineering and health monitoring. , 2023, , 211-258.		0
2908	Rational Design of Flexible Zn-Based Batteries for Wearable Electronic Devices. ACS Nano, 2023, 17, 1764-1802.	7.3	50
2909	Sensor commercialization and global market. , 2023, , 879-915.		3
2910	Anatomically Designed Triboelectric Wristbands with Adaptive Accelerated Learning for Humanâ€“Machine Interfaces. Advanced Science, 2023, 10, .	5.6	19
2911	The Gx Sweat Patch for personalized hydration management. , 2023, 1, 5-7.		11
2912	Advances in wearable flexible electrochemical sensors for sweat monitoring: A mini-review. International Journal of Electrochemical Science, 2023, 18, 13-19.	0.5	7
2913	Petromyzontidaeâ€Biomimetic Multimodal Microneedlesâ€Integrated Bioelectronic Catheters for Theranostic Endoscopic Surgery. Advanced Functional Materials, 2023, 33, .	7.8	3

#	Article	IF	Citations
2914	AuNP/Cu-TCPP(Fe) metalâ€“organic framework nanofilm: a paper-based electrochemical sensor for non-invasive detection of lactate in sweat. Nanoscale, 2023, 15, 5023-5035.	2.8	6
2915	Tapeâ€Free, Digital Wearable Band for Exercise Sweat Rate Monitoring. Advanced Materials Technologies, 2023, 8, .	3.0	6
2916	Liquid Metalâ€Carbon Fiber Thermocouple Array for Detection of Human Thermal Parameters. Advanced Materials Technologies, 2023, 8, .	3.0	2
2917	Exfoliated Flexible Photonic Crystal Slabs for Refractive Index and Biomolecular Sensing. , 2023, 2, 136-144.		4
2918	Flexible and compact perspiration-monitoring system with 0.18 Î¼m BCD process and PDMS micro air-flow path. Japanese Journal of Applied Physics, 2023, 62, SC1078.	0.8	1
2919	Finite Element Analysis Model of Electronic Skin Based on Surface Acoustic Wave Sensor. Nanomaterials, 2023, 13, 465.	1.9	4
2920	Wearable Microfluidic Sweat Chip for Detection of Sweat Glucose and pH in Long-Distance Running Exercise. Biosensors, 2023, 13, 157.	2.3	11
2921	Large area roll-to-roll printed semiconducting carbon nanotube thin films for flexible carbon-based electronics. Nanoscale, 2023, 15, 5317-5326.	2.8	3
2922	A non-invasive wearable stress patch for real-time cortisol monitoring using a pseudoknot-assisted aptamer. Biosensors and Bioelectronics, 2023, 227, 115097.	5.3	17
2923	Long-distance multifunctional wireless sensing platform for identifying and ranging. Nano Energy, 2023, 109, 108267.	8.2	1
2924	Solution-processed, flexible, and highly transparent ZrO2:PVP hybrid dielectric layer. Organic Electronics, 2023, 116, 106759.	1.4	5
2925	Metalâ€“organic framework and MXene-based flexible supercapacitors. , 2023, , 299-324.		0
2926	Evolution of nanostructured skin patches towards multifunctional wearable platforms for biomedical applications. Nanoscale, 2023, 15, 8044-8083.	2.8	10
2927	Carbon-based electrochemical biosensors as diagnostic platforms for connected decentralized healthcare. Sensors & Diagnostics, 2023, 2, 529-558.	1.9	5
2928	Plasmonic Bridge Sensor Enabled by Carbon Nanotubes and Auâ€“Ag Nano-Rambutan for Multifunctional Detection of Biomechanics and Bio/Chemical Molecules. ACS Applied Materials & Interfaces, 2023, 15, 8783-8793.	4.0	4
2929	Epidermal Wearable Biosensors for Monitoring Biomarkers of Chronic Disease in Sweat. Biosensors, 2023, 13, 313.	2.3	6
2930	Hydrogelâ€Based Multifunctional Soft Electronics with Distributed Sensing Units: A Review. , 2023, 2, .		3
2931	A Single Electronic Tattoo for Multisensory Integration. Small Methods, 2023, 7, .	4.6	3

#	Article	IF	Citations
2932	Fieldâ€Effect Transistorâ€Based Biosensor for pH Sensing and Mapping. , 2023, 2, .		2
2933	Organic Thin Film Transistor for Effective Biomarker Detection in Early Disease Diagnosis. Chemosensors, 2023, 11, 202.	1.8	0
2934	Monitoring Cardiac Biomarkers with Aptamerâ€Based Molecular Pendulum Sensors. Angewandte Chemie, 2023, 135, .	1.6	1
2935	Biocompatible and Long-Term Monitoring Strategies of Wearable, Ingestible and Implantable Biosensors: Reform the Next Generation Healthcare. Sensors, 2023, 23, 2991.	2.1	18
2936	3-D-Curved Iontronic Tactile Sensor and Denoising Method for Physical Humanâ€“Robot Interactions. IEEE Sensors Journal, 2023, 23, 7667-7682.	2.4	1
2937	Self-assembled colloidal gold nanoparticles as substrates for plasmon enhanced fluorescence. European Journal of Materials, 2023, 3, .	0.8	2
2938	Synthesis and characterization of wearable cuprous oxide/conductive fabric enabled non-enzymatic electrochemical sensing of glucose. Ionics, 2023, 29, 2501-2513.	1.2	5
2939	Mass transport limitations for electrochemical sensing in low-flux excretory fluids. Biosensors and Bioelectronics, 2023, 227, 115148.	5.3	4
2940	High gain fiber-shaped transistor based on rGO-mediated hierarchical polypyrrole for ultrasensitive sweat sensor. Sensors and Actuators A: Physical, 2023, 354, 114297.	2.0	1
2941	A miniaturization scheme of flexible inkjet-printed Ag/AgCl(s) reference electrodes using the ionic liquid (IL)-typed PVC membrane with the addition of graphene for electrochemical sensing applications. Sensors and Actuators Reports, 2023, 5, 100145.	2.3	1
2942	Smart Janus fabrics for one-way sweat sampling and skin-friendly colorimetric detection. Talanta, 2023, 259, 124507.	2.9	5
2943	A review: Recent advancements in sensor technology for non-invasive neonatal health monitoring. Biosensors and Bioelectronics: X, 2023, 14, 100332.	0.9	2
2944	A wearable electrochemical fabric for cytokine monitoring. Biosensors and Bioelectronics, 2023, 232, 115301.	5.3	5
2945	Wearable bistable triboelectric nanogenerator for harvesting torsional vibration energy from human motion. Nano Energy, 2023, 109, 108315.	8.2	9
2946	Skin-interfaced electronics: A promising and intelligent paradigm for personalized healthcare. Biomaterials, 2023, 296, 122075.	5.7	12
2947	Flexible and transparent MXene-platformed ultrafast photodetector for encrypted signal communication in self-powered operation. Nano Energy, 2023, 109, 108331.	8.2	8
2948	Flexible and wearable glove-based SERS sensor for rapid sampling and sensitive detection of controlled drugs. Sensors and Actuators B: Chemical, 2023, 386, 133738.	4.0	7
2949	Off-the-shelf wearable sensing devices for personalized thermal comfort models: A systematic review on their use in scientific research. Journal of Building Engineering, 2023, 70, 106379.	1.6	2

#	Article	IF	Citations
2950	Structural Engineering of Flexible Electronics. , 2022, , 1-26.		0
2951	Bioelectronic devices for light-based diagnostics and therapies. Biophysics Reviews, 2023, 4, .	1.0	2
2952	Suppressing the mechanochromism of flexible photonic crystals. Optics Express, 2023, 31, 6281.	1.7	3
2953	Adhesive tapes: From daily necessities to flexible smart electronics. Applied Physics Reviews, 2023, 10, .	5.5	8
2954	Wearable and batteryâ€free wound dressing system for wireless and early sepsis diagnosis. Bioengineering and Translational Medicine, 2023, 8, .	3.9	1
2955	Wearable nucleic acid testing platform - A perspective on rapid self-diagnosis and surveillance of infectious diseases. Biosensors and Bioelectronics, 2023, 226, 115115.	5.3	1
2956	Wearable molecularly imprinted electrochemical sensor with integrated nanofiber-based microfluidic chip for in situ monitoring of cortisol in sweat. Sensors and Actuators B: Chemical, 2023, 381, 133451.	4.0	18
2957	Flexible, Bifunctional Sensing Platform Made with Biodegradable Mats for Detecting Glucose in Urine. ACS Sustainable Chemistry and Engineering, 2023, 11, 2209-2218.	3.2	12
2958	A self-powered sound-driven humidity sensor for wearable intelligent dehydration monitoring system. Nanotechnology, 2023, 34, 195501.	1.3	4
2959	Recent Progress of Energy-Storage-Device-Integrated Sensing Systems. Nanomaterials, 2023, 13, 645.	1.9	6
2960	Electrochemical Deposition of Conductive Polymers on Fabrics. Coatings, 2023, 13, 383.	1.2	3
2961	Self-Powered Biosensors for Monitoring Human Physiological Changes. Biosensors, 2023, 13, 236.	2.3	6
2962	Modeling resistance increase in a composite ink under cyclic loading. Flexible and Printed Electronics, 2023, 8, 015014.	1.5	0
2963	Artificial intelligence biosensors for continuous glucose monitoring. , 2023, 2, 290-307.		15
2964	Flexible Sweat Sensors: From Films to Textiles. ACS Sensors, 2023, 8, 465-481.	4.0	21
2965	Intelligent Soft Sweat Sensors for the Simultaneous Healthcare Monitoring and Safety Warning. Advanced Healthcare Materials, 2023, 12, .	3.9	10
2966	Miniaturized surface engineered technologies for multiplex biosensing devices. Electroanalysis, 2023, 35, .	1.5	5
2967	Functional microneedles for wearable electronics. , 2023, 2, .		8

#	Article	IF	Citations
2968	A brushed hemicylindrical pressure sensor based on triboelectricity exhibits high sensitivity, a low detection limit and a wide detection range. Journal of Materials Chemistry C, 2023, 11, 3644-3651.	2.7	6
2969	Textileâ€based Thermoelectric Generator Produced Via Electrochemical Polymerization. Advanced Materials Interfaces, 2023, 10, .	1.9	5
2970	Impact of Thread-Based Microfluidic Devices in Modern Analysis: An Update on Recent Trends and Applications. Current Analytical Chemistry, 2023, 19, .	0.6	0
2971	Large-scale nano-biosensing technologies. Frontiers in Nanotechnology, 0, 5, .	2.4	3
2972	Multimodal Simultaneous Amperometry and Electrochemical Impedance Spectroscopy Measurement for Biosensing Applications. , 2022, , .		0
2973	Current Advancements and Future Perspectives in Electronic Materials for Developing Smart Clothing. , 2023, , 507-516.		2
2974	Graphene-interfaced flexible and stretchable microâ€“nano electrodes: from fabrication to sweat glucose detection. Materials Horizons, 2023, 10, 1580-1607.	6.4	17
2975	Integration of nanomaterial sensing layers on printable organic field effect transistors for highly sensitive and stable biochemical signal conversion. Nanoscale, 2023, 15, 5537-5559.	2.8	5
2976	Flexible and Stretchable Organic Electrochemical Transistors for Physiological Sensing Devices. Advanced Materials, 2023, 35, .	11.1	27
2977	Paper-based microfluidics in sweat detection: from design to application. Analyst, The, 2023, 148, 1175-1188.	1.7	3
2978	MXene Fiber-based Wearable Textiles in Sensing and Energy Storage Applications. Fibers and Polymers, 2023, 24, 1167-1182.	1.1	4
2979	Advancing Electrochemical Screening of Neurotransmitters Using a Customizable Machine Learning-Based Multimodal System. , 2023, 7, 1-4.		0
2980	Smart Wearable Systems for Health Monitoring. Sensors, 2023, 23, 2479.	2.1	17
2981	All-Fiber Integrated Thermoelectrically Powered Physiological Monitoring Biosensor. Advanced Fiber Materials, 2023, 5, 1025-1036.	7.9	6
2982	Device integration of electrochemical biosensors. , 2023, 1, 346-360.		81
2983	Growth, structure, and morphology of van der Waals epitaxy Cr1+ÎTe2 films. , 2023, 18, .		1
2984	Wearable sweat biosensors on textiles for health monitoring. Journal of Semiconductors, 2023, 44, 021601.	2.0	10
2985	Wearable technology in healthcare engineering. , 2023, , 227-248.		1

#	Article	IF	Citations
2986	Epidermal Bioelectronics for Management of Chronic Diseases: Materials, Devices and Systems. , 2023, 2, .		2
2987	Noninvasive Monitoring to Detect Dehydration: Are We There Yet?. Annual Review of Biomedical Engineering, 2023, 25, .	5.7	0
2988	Ordered Co^{III}â€MOF@Co^{II}â€MOF Heterojunction for Highly Efficient Photocatalytic Syngas Production. Small Science, 2023, 3, .	5.8	2
2989	Microfluidic Approaches for Microactuators: From Fabrication, Actuation, to Functionalization. Small, 2023, 19, .	5.2	4
2990	Rapid and Accurate Measurement of the Na⁺/K⁺ Balance in Urine for Remote Patient Monitoring Using a Symmetric Electrode Architecture. Analytical Chemistry, 2023, 95, 4627-4633.	3.2	0
2991	Sweat as a diagnostic biofluid. Science, 2023, 379, 760-761.	6.0	40
2992	Realâ€Time Monitoring and Early Warning of a Cytokine Storm In Vivo Using a Wearable Noninvasive Skin Microneedle Patch. Advanced Healthcare Materials, 2023, 12, .	3.9	4
2993	A Systematic Review on the Advanced Techniques of Wearable Point-of-Care Devices and Their Futuristic Applications. Diagnostics, 2023, 13, 916.	1.3	8
2994	Biocompatible Gel-Free Coconut Oil and Carbon Black Electrodes for ECG and Respiration Measurements. IEEE Sensors Journal, 2023, 23, 23980-23987.	2.4	1
2995	A Hybrid Nanogenerator-Driven Self-Powered Wearable Perspiration Monitoring System. , 2023, , .		2
2996	Triboelectric Nanogenerator for Sports. , 2023, , 1-20.		0
2997	2D material-based sensing devices: an update. Journal of Materials Chemistry A, 2023, 11, 6016-6063.	5.2	16
2998	Biosensors and Biofuel Cells Based on Porous Carbon with Mesopores/Macropores Suitable for Enzymes. Denki Kagaku, 2023, 91, 10-18.	0.0	0
2999	Touchable Gustation via a Hoffmeister Gel Iontronic Sensor. ACS Nano, 2023, 17, 5129-5139.	7.3	13
3000	Efficient Distributed Wireless Power Transfer System for Multiple Wearable Sensors through Textile Coil Array. Sensors, 2023, 23, 2810.	2.1	3
3001	Advances in Electrochemical Sensors for Detecting Analytes in Biofluids. , 2023, 2, .		8
3002	3D-assembled microneedle ion sensor-based wearable system for the transdermal monitoring of physiological ion fluctuations. Microsystems and Nanoengineering, 2023, 9, .	3.4	11
3003	Technology Roadmap for Flexible Sensors. ACS Nano, 2023, 17, 5211-5295.	7.3	238

#	Article	IF	Citations
3004	Monitoring Cardiac Biomarkers with Aptamerâ€Based Molecular Pendulum Sensors. Angewandte Chemie - International Edition, 2023, 62, .	7.2	3
3005	Materials and device architecture towards a multimodal electronic skin. Materials Today, 2023, 64, 165-179.	8.3	12
3006	Smartphone-based platforms implementing microfluidic detection with image-based artificial intelligence. Nature Communications, 2023, 14, .	5.8	29
3007	å…¨å›ºæ€ç¦»å€‰æ‹©æ€§ç”µæžåœ¨åˆ©ç©¿æˆ´ç”µåŒ–å¦ä¼ æ„Ÿå™¨ä¸çš„åº”ç”¨. Scientia Sinica Chimica, 2023, , .	0.2	0
3008	Wearable and Implantable Cortisolâ€Sensing Electronics for Stress Monitoring. Advanced Materials, 2024, 36, .	11.1	9
3009	Microneedle-Coupled Epidermal Sensors for In-Situ-Multiplexed Ion Detection in Interstitial Fluids. ACS Applied Materials & Interfaces, 0, , .	4.0	7
3010	Ultraflexible tattoo electrodes for epidermal and inÂvivo electrophysiological recording. Cell Reports Physical Science, 2023, 4, 101335.	2.8	4
3011	Snâ€Based Selfâ€Powered Ultrafast Perovskite Photodetectors with Highly Crystalline Order for Flexible Imaging Applications. Advanced Functional Materials, 2023, 33, .	7.8	14
3012	Highly Sensitive Piezoelectric Eâ€Skin Design Based on Electromechanical Coupling Concept. Advanced Electronic Materials, 2023, 9, .	2.6	4
3013	Artificial Intelligenceâ€Based Medical Sensors for Healthcare System. , 2024, 3, .		6
3014	3D Extruded Graphene Thermoelectric Threads for Selfâ€Powered Oral Health Monitoring. Small, 2023, 19, .	5.2	8
3015	Nearâ€Sensor Reservoir Computing for Gait Recognition via a Multiâ€Gate Electrolyteâ€Gated Transistor. Advanced Science, 2023, 10, .	5.6	10
3016	High-Performance Potassium-Selective Biosensor Platform Based on Resistive Coupling of a-IGZO Coplanar-Gate Thin-Film Transistor. International Journal of Molecular Sciences, 2023, 24, 6164.	1.8	0
3017	Microneedle fabrication methods and applications. MRS Communications, 2023, 13, 212-224.	0.8	3
3018	A stretchable wireless wearable bioelectronic system for multiplexed monitoring and combination treatment of infected chronic wounds. Science Advances, 2023, 9, .	4.7	62
3019	Universal Fully Integrated Wearable Sensor Arrays for the Multiple Electrolyte and Metabolite Monitoring in Raw Sweat, Saliva, or Urine. Analytical Chemistry, 2023, 95, 6690-6699.	3.2	26
3020	Efficient Fog-to-Cloud Internet-of-Medical-Things System. , 2023, , 223-243.		1
3021	Directly Using Ti3C2Tx MXene for a Solid-Contact Potentiometric pH Sensor toward Wearable Sweat pH Monitoring. Membranes, 2023, 13, 376.	1.4	2

#	Article	IF	Citations
3022	Skin-Interfaced Wearable Sweat Sensors for Precision Medicine. Chemical Reviews, 2023, 123, 5049-5138.	23.0	85
3023	Reshaping healthcare with wearable biosensors. Scientific Reports, 2023, 13, .	1.6	30
3024	Giant Humidity Effect of 2D Perovskite on Paper Substrate: Optoelectronic Performance and Mechanical Flexibility. Advanced Optical Materials, 2023, 11, .	3.6	1
3025	Wearable Plasmonic Sweat Biosensor for Acetaminophen Drug Monitoring. ACS Sensors, 2023, 8, 1766-1773.	4.0	14
3026	Biocompatible Materialâ€Based Flexible Biosensors: From Materials Design to Wearable/Implantable Devices and Integrated Sensing Systems. Small, 2023, 19, .	5.2	17
3027	A Review of Skin-Wearable Sensors for Non-Invasive Health Monitoring Applications. Sensors, 2023, 23, 3673.	2.1	7
3028	Ultrathin, soft, radiative cooling interfaces for advanced thermal management in skin electronics. Science Advances, 2023, 9, .	4.7	21
3029	A flexible nonenzymatic sweat glucose sensor based on Au nanoflowers coated carbon cloth. Sensors and Actuators B: Chemical, 2023, 388, 133798.	4.0	7
3030	Non-Invasive Multiparametric Approach To Determine Sweatâ€“Blood Lactate Bioequivalence. ACS Sensors, 2023, 8, 1536-1541.	4.0	2
3031	Surface Patterning Enhanced Visualization for Ultrasensitive Nakedâ€Eye Detection and RGBâ€Based Highâ€Density Information Storage. Advanced Optical Materials, 2023, 11, .	3.6	2
3032	Recent Advances in Multiplexed Wearable Sensor Platforms for Real-Time Monitoring Lifetime Stress: A Review. Biosensors, 2023, 13, 470.	2.3	4
3033	A 3D-printed microneedle extraction system integrated with patterned electrodes for minimally invasive transdermal detection. Biomaterials Science, 2023, 11, 3737-3749.	2.6	3
3034	Inkjet-printed Soft Intelligent Medical Bracelet for Simultaneous Real-time Sweat Potassium (K⁺), Sodium (Na⁺), and Skin Temperature Analysis. , 2023, , 1-4.		2
3035	Electrochemical Sweat Sensors. Chemosensors, 2023, 11, 244.	1.8	7
3036	Promoting brain health in a digital world. , 2024, , .		0
3037	High-Throughput Screening of Deformable Inorganic Layered Semiconductors. Journal of Physical Chemistry C, 2023, 127, 7870-7877.	1.5	5
3038	Clinical-Grade Patches as a Medium for Enrichment of Sweat-Extracellular Vesicles and Facilitating Their Metabolic Analysis. International Journal of Molecular Sciences, 2023, 24, 7507.	1.8	2
3039	The next generation of hybrid microfluidic/integrated circuit chips: recent and upcoming advances in high-speed, high-throughput, and multifunctional lab-on-IC systems. Lab on A Chip, 2023, 23, 2553-2576.	3.1	2

#	Article	IF	Citations
3040	A Wearable Localized Surface Plasmons Antenna Sensor for Communication and Sweat Sensing. IEEE Sensors Journal, 2023, 23, 11591-11599.	2.4	28
3041	Laser-scribed graphene for sensors: preparation, modification, applications, and future prospects. , 2023, 4, 1.		1
3042	Integrated Biochipâ€“Electronic System with Single-Atom Nanozyme forinVivoAnalysis of Nitric Oxide. ACS Nano, 2023, 17, 8575-8585.	7.3	5
3043	Nonâ€Invasive Touchâ€Based Lithium Monitoring Using an Organohydrogelâ€Based Sensing Interface. Advanced Materials Technologies, 2023, 8, .	3.0	1
3044	Microneedleâ€Integrated Device for Transdermal Sampling and Analyses of Targeted Biomarkers. Small Science, 2023, 3, .	5.8	1
3045	Recent Advancements in Physiological, Biochemical, and Multimodal Sensors Based on Flexible Substrates: Strategies, Technologies, and Integrations. ACS Applied Materials & Interfaces, 2023, 15, 21721-21745.	4.0	5
3050	Recent progress in flexible micro-pressure sensors for wearable health monitoring. Nanoscale Advances, 2023, 5, 3131-3145.	2.2	12
3066	Potentiometric sensors. , 2023, , 99-121.		0
3068	Biomolecular sensors for advanced physiological monitoring. , 2023, 1, 560-575.		16
3072	Biological Liquid Monitoring using Microwave Resonator. , 2022, , .		1
3076	A Machine Learning Approach in Wearable Technologies. , 2023, , 43-74.		0
3085	Self-powered sensors for biomarker detection. Sensors & Diagnostics, 0, , .	1.9	0
3095	Wearables, E-textiles, and Soft Robotics for Personalized Medicine. Springer Handbooks, 2023, , 1265-1287.	0.3	0
3097	BioScatter: Low-Power Sweat Sensing with Backscatter. , 2023, , .		0
3113	Conductive polymer based hydrogels and their application in wearable sensors: a review. Materials Horizons, 2023, 10, 2800-2823.	6.4	23
3131	Analysis of Molecules and Biomolecules. Lecture Notes in Quantum Chemistry II, 2023, , 197-244.	0.3	0
3133	Towards Wearable Sweat Sensing for Glucose and Lactate: Sensors Characterisation. , 2023, , .		0
3143	Electrochemical Characterization of Flexible Interdigitated Electrodes for Hydration Monitoring. , 2023, , .		0

#	Article	IF	Citations
3151	Electrospun nanofibers: promising nanomaterials for biomedical applications. , 2023, , 225-260.		0
3157	Digital health for aging populations. Nature Medicine, 2023, 29, 1623-1630.	15.2	27
3158	A Low-Complexity FPGA-Based Neural Network for Hand-Arm Vibrations Classification. , 2023, , .		0
3159	Opportunities and challenges for sweat-based monitoring of metabolic syndrome via wearable technologies. , 2023, 2, .		5
3167	Skin-interfaced wireless biosensors for perinatal and paediatric health. , 2023, 1, 631-647.		6
3169	Bioinspired nanomaterials for wearable sensing and human-machine interfacing. Nano Research, 2024, 17, 445-461.	5.8	3
3174	Nanostructured wearable electrochemical and biosensor towards healthcare management: a review. RSC Advances, 2023, 13, 22973-22997.	1.7	3
3176	Graphene-Based Wearable Sensors. , 2023, , 473-487.		0
3177	Editorial: Current development on wearable biosensors towards biomedical applications. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	1
3185	Dermal-fluid-enabled detection platforms for non-invasive ambulatory monitoring. Sensors & Diagnostics, 0, , .	1.9	0
3187	Sweat analysis for urea sensing: trends and challenges. Analytical Methods, 0, , .	1.3	0
3194	Apollo: Battery-Free Wearable Sweat Monitoring System. , 2023, , 245-265.		0
3199	Triboelectric Nanogenerator for Sports. , 2023, , 951-970.		0
3201	Dynamic Semiconductor Junctions for Mechanical-to-Electric Power Conversion. , 2023, , 111-138.		0
3204	Laser-Printed Highly Sensitive Flexible Urea Sensors. , 2023, , .		0
3206	FunctionalÂPolymer Nanocomposites as Supercapacitors for Health Care. Materials Horizons, 2024, , 505-529.	0.3	0
3209	Hierarchical Fermat helix-structured electrochemical sensing fibers enable sweat capture and multi-biomarker monitoring. Materials Horizons, 0, , .	6.4	1
3215	Wearable flexible microfluidic sensing technologies. , 2023, 1, 950-971.		7

#	Article	IF	Citations
3229	Skin-interfaced colorimetric microfluidic devices for on-demand sweat analysis. Npj Flexible Electronics, 2023, 7, .	5.1	6
3240	Wearable biosensor platform: design and healthcare commercial values. , 2024, , 201-225.		0
3247	Processes in biosensor design, development, and validation parameters. , 2024, , 27-49.		0
3250	Sensors for in situ monitoring of oral and dental health parameters in saliva. Clinical Oral Investigations, 2023, 27, 5719-5736.	1.4	0
3259	ElectroSense: a Low-cost Wearable Potentiostat for Real-time Monitoring of Glucose Level. , 2023, , .		1
3262	Cybersecurity in Fitness Devices-A Systematic Literature Review. , 2023, , .		0
3265	Ultra-Thin, Soft, Radiative Cooling Interfaces for Advanced Thermal Management in Skin Electronics. , 2023, , .		0
3270	Co-design of a Full Bio/CMOS Interface. , 2024, , 431-453.		0
3276	A Portable Electrochemical Measurement Platform for Wearable-Flexible Sweat Sensors. , 2023, , .		0
3280	Smartphone Interface and Wearable Biosensors for on-Site Diagnosis. , 2023, , 297-321.		0
3289	An Electrical Impedance Spectroscopy IC with a Printable, Fractal Root Textile Sensor for Perspiration Analysis. , 2023, , .		0
3290	BioSparks: Jewelry as Electrochemical Sweat Biosensors with Modular, Repurposing and Interchangeable Approaches. , 2023, , .		1
3294	A mass-based aptasensor for real-time, continuous quantification of TNF-alpha with quartz crystal microbalance. , 2023, , .		0
3295	A Numerical Analytical Model for Multi-Ion Detection Applied to Solid-State Contact Ion-Selective Electrode Array. , 2023, , .		0
3298	Contact efficiency optimization for tribovoltaic nanogenerators. Materials Horizons, 2023, 10, 5962-5968.	6.4	1
3300	BioNanotechnology and BioMEMS (BNM): State-of-the-Art Applications, Opportunities, and Challenges. Lab on A Chip, 0, , .	3.1	1
3303	Point of Care Genomics, Proteomics, Biomarkers, and Precision Nutrition: Emerging Point of Care Sensors for Precision Nutrition. , 2024, , 403-416.		0
3320	Coordination Between Respiration and Motion During Running by a Wearable System. , 2023, , .		0

#	Article	IF	Citations
3323	A Metal Nanoparticles and 2D-Siloxene Sheets Incorporated Laser-Ablated Graphene-Based Epidermal Patch for Electrolytes Analysis and Monitoring. , 2023, , .		0
3324	Wireless Wearable Devices and Recent Applications in Health Monitoring and Clinical Diagnosis. , 0, , .		0
3329	Triple-Sensing with An Ion-Sensitive-Field-Effect-Transistor via Machine-Learning Algorithm. , 2023, , .		0
3347	Nanomaterials for Precision Medicine. , 2023, , 269-290.		0
3353	Intelligent Biosensors for Healthcare 5.0. Advances in Healthcare Information Systems and Administration Book Series, 2023, , 61-77.	0.2	0
3355	Artificial intelligence-powered electronic skin. Nature Machine Intelligence, 2023, 5, 1344-1355.	8.3	4
3361	Future Visions of Personalized and Precision Nutrition. , 2024, , 167-180.		0
3362	Analytical and computational analysis of a wearable impedance sensor for wireless measurements of analytes in bodily fluids. , 2023, , .		0
3363	AdVanced and pERSonalized heAlThcare through Integrated WearabLe sEnsors (VERSATILE). Materials Advances, 0, , .	2.6	0
3369	Innovative-shaped FBARs for smart sensors. , 2023, , .		0
3373	Synthesis of Polyethylene-Based Materials, Ion Exchanger, Superabsorbent, Radiation Shielding, and Laser Ablation Applications. , 0, , .		0
3375	The fabrication and application of triphase reaction interface based on superwettability for improved reaction efficiency. Journal of Materials Chemistry A, 0, , .	5.2	0
3396	Design and Fabrication of Wearable Biosensors: Materials, Methods, and Prospects. , 2024, , 317-378.		0
3398	The challenges and promise of sweat sensing. Nature Biotechnology, 0, , .	9.4	2
3399	Harvesting and manipulating sweat and interstitial fluid in microfluidic devices. Lab on A Chip, 2024, 24, 1244-1265.	3.1	0
3400	Carbon nanomaterials for sweat-based sensors: a review. Mikrochimica Acta, 2024, 191, .	2.5	0
3402	Electrochemical analysis of biological fluids. , 2024, , 437-483.		0
3403	Nano-inspired Point-of-Care Enzyme-Based Wearable Biosensors for Global Health Care. , 2023, , 293-322.		0

#	Article	IF	Citations
3408	Advancing cardiometabolic monitoring: A hybrid study on smart garments and wearables. , 2023, , .		0
3410	Printable Wearable Self-Powered Biosensing System Based on Paper-Based Biofuel Cells Using Porous Carbon Material. , 2024, , 379-397.		0
3411	Wearable Biosensors on Sutures and Threads. , 2024, , 267-297.		0
3427	Trends and emerging opportunities for smart wearables. , 2024, , 511-557.		0
3430	Ultra-Flexible Organic Electronics. , 2024, , 185-219.		0
3431	Wearing the Lab: Advances and Challenges in Skin-Interfaced Systems for Continuous Biochemical Sensing. Advances in Biochemical Engineering/Biotechnology, 2023, , .	0.6	0
3438	Thermal release tapeâ€“enabled transfer printing techniques. , 2024, , 63-78.		0
3449	AI-Integrated Biosensors and Bioelectronics for Healthcare. Advances in Medical Diagnosis, Treatment, and Care, 2024, , 82-96.	0.1	0
3453	FECG: A Flexible Holter for Ambulatory Heart Rate Monitoring. Studies in Computational Intelligence, 2024, , 787-799.	0.7	0
3456	A Review On Wearable Device Technology For Healthcare Industry Applications. , 2023, , .		0
3469	Wearable Perspiration Characteristic Sensor Using Bi-Directional Driver Circuit. , 2024, , .		0
3505	Wearable Health Monitoring System for Sweat Analysis. Communications in Computer and Information Science, 2024, , 401-417.	0.4	0