Self â€Powered Insole Plantar Pressure Mapping Syster

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Citation Report

#	Article	IF	Citations
1	Fabric-based self-powered noncontact smart gloves for gesture recognition. Journal of Materials Chemistry A, 2018, 6, 20277-20288.	5.2	36
2	A Hierarchically Nanostructured Cellulose Fiberâ€Based Triboelectric Nanogenerator for Selfâ€Powered Healthcare Products. Advanced Functional Materials, 2018, 28, 1805540.	7.8	180
3	Performance Enhancement of Flexible Piezoelectric Nanogenerator via Doping and Rational 3D Structure Design For Selfâ€Powered Mechanosensational System. Advanced Functional Materials, 2019, 29, 1904259.	7.8	133
4	A self-powered stretchable sensor fabricated by serpentine PVDF film for multiple dynamic monitoring. Materials and Design, 2019, 182, 108025.	3.3	39
5	Emerging Technologies of Flexible Pressure Sensors: Materials, Modeling, Devices, and Manufacturing. Advanced Functional Materials, 2019, 29, 1808509.	7.8	316
6	Development of a Bendable Outsole Biaxial Ground Reaction Force Measurement System. Sensors, 2019, 19, 2641.	2.1	9
7	Selfâ€Powered Distributed Water Level Sensors Based on Liquidâ€“Solid Triboelectric Nanogenerators for Ship Draft Detecting. Advanced Functional Materials, 2019, 29, 1900327.	7.8	115
8	Rich lamellar crystal baklava-structured PZT/PVDF piezoelectric sensor toward individual table tennis training. Nano Energy, 2019, 59, 574-581.	8.2	204
9	One-step chemical treatment to design an ideal nanospacer structure for a highly sensitive and transparent pressure sensor. Journal of Materials Chemistry C, 2019, 7, 5059-5066.	2.7	18
10	A full-packaged rolling triboelectric-electromagnetic hybrid nanogenerator for energy harvesting and building up self-powered wireless systems. Nano Energy, 2019, 56, 300-306.	8.2	96
11	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
12	Selfâ€Powered Tactile Sensor Array Systems Based on the Triboelectric Effect. Advanced Functional Materials, 2019, 29, 1806379.	7.8	122
13	Mimicking Human and Biological Skins for Multifunctional Skin Electronics. Advanced Functional Materials, 2020, 30, 1904523.	7.8	247
14	Smart Textileâ€Integrated Microelectronic Systems for Wearable Applications. Advanced Materials, 2020, 32, e1901958.	11.1	427
15	Progress in wearable electronics/photonicsâ€”Moving toward the era of artificial intelligence and internet of things. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 1131-1162.	8.5	343
16	A wearable motion capture device able to detect dynamic motion of human limbs. Nature Communications, 2020, 11, 5615.	5.8	80
17	Recent Progress in Hybridized Nanogenerators for Energy Scavenging. IScience, 2020, 23, 101689.	1.9	46
18	Flexible P(VDF-TrFE) Shared Bottom Electrode Sensor Array Assisted with Machine Learning for Motion Detection. Coatings, 2020, 10, 1094.	1.2	7

#	Article	IF	Citations
19	Flexible sensor matrix film-based wearable plantar pressure force measurement and analysis system. PLoS ONE, 2020, 15, e0237090.	1.1	16
20	Real-time pressure mapping smart insole system based on a controllable vertical pore dielectric layer. Microsystems and Nanoengineering, 2020, 6, 62.	3.4	69
21	Technologies toward next generation human machine interfaces: From machine learning enhanced tactile sensing to neuromorphic sensory systems. Applied Physics Reviews, 2020, 7, .	5.5	194
22	Epitaxy Enhancement of Piezoelectric Properties in P(VDFâ€TrFE) Copolymer Films and Applications in Sensing and Energy Harvesting. Advanced Electronic Materials, 2020, 6, 2000578.	2.6	20
23	Matrix-Addressed Flexible Capacitive Pressure Sensor With Suppressed Crosstalk for Artificial Electronic Skin. IEEE Transactions on Electron Devices, 2020, 67, 2940-2944.	1.6	21
24	Selfâ€powered Biosensor Big Data Intelligent Information Processing System for Realâ€time Motion Monitoring. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 500-506.	0.6	7
25	A novel hybridized blue energy harvester aiming at all-weather IoT applications. Nano Energy, 2020, 76, 105052.	8.2	86
26	A Wearable Flow-MIMU Device for Monitoring Human Dynamic Motion. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 637-645.	2.7	19
27	Microchannelâ€Confined MXene Based Flexible Piezoresistive Multifunctional Microâ€Force Sensor. Advanced Functional Materials, 2020, 30, 1909603.	7.8	248
28	Largeâ€Area Fabrication of Highâ€Performance Flexible and Wearable Pressure Sensors. Advanced Electronic Materials, 2020, 6, 1901310.	2.6	53
29	VDF-content-guided selection of piezoelectric P(VDF-TrFE) films in sensing and energy harvesting applications. Energy Conversion and Management, 2020, 211, 112771.	4.4	30
30	Triboelectric nanogenerator for entire stroke energy harvesting with bidirectional gear transmission. Nano Energy, 2020, 72, 104726.	8.2	48
31	Wind-driven self-powered wireless environmental sensors for Internet of Things at long distance. Nano Energy, 2020, 73, 104819.	8.2	58
32	Technology evolution from self-powered sensors to AIoT enabled smart homes. Nano Energy, 2021, 79, 105414.	8.2	177
33	Triboelectric nanogenerators for human-health care. Science Bulletin, 2021, 66, 490-511.	4.3	93
34	Nanogenerator as self-powered sensing microsystems for safety monitoring. Nano Energy, 2021, 81, 105646.	8.2	27
35	A New Proposal of a Smart Insole for the Monitoring of Elderly Patients. Lecture Notes in Networks and Systems, 2021, , 273-284.	0.5	1
36	Skinâ€Inspired Piezoelectric Tactile Sensor Array with Crosstalkâ€Free Row+Column Electrodes for Spatiotemporally Distinguishing Diverse Stimuli. Advanced Science, 2021, 8, 2002817.	5.6	161

#	Article	IF	Citations
37	Triboelectric Sensors for IoT and Wearable Applications. , 2023, , 235-257.		6
38	Bioinspired design and assembly of a multilayer cage-shaped sensor capable of multistage load bearing and collapse prevention. Nanotechnology, 2021, 32, 155506.	1.3	14
39	A Facile Low-Cost Wireless Self-Powered Footwear System for Monitoring Plantar Pressure. , 2021, , .		1
40	Magnetically induced micropillar arrays for an ultrasensitive flexible sensor with a wireless recharging system. Science China Materials, 2021, 64, 1977-1988.	3.5	13
41	Construction of Bioâ€Piezoelectric Platforms: From Structures and Synthesis to Applications. Advanced Materials, 2021, 33, e2008452.	11.1	114
42	A Universal Power Management Strategy Based on Novel Soundâ€Driven Triboelectric Nanogenerator and Its Fully Selfâ€Powered Wireless System Applications. Advanced Functional Materials, 2021, 31, 2103081.	7.8	46
43	Allâ€inâ€one energy harvesting system with triboelectric and thermoelectric hybrid generator and Au nanoflower supercapacitor for a light stimulation to the wildlife. International Journal of Energy Research, 2022, 46, 1444-1456.	2.2	4
44	Selfâ€Powered Interactive Fiber Electronics with Visualâ€“Digital Synergies. Advanced Materials, 2021, 33, e2104681.	11.1	58
45	Plantar Pressureâ€Based Insole Gait Monitoring Techniques for Diseases Monitoring and Analysis: A Review. Advanced Materials Technologies, 2022, 7, 2100566.	3.0	35
46	A whirligig-inspired intermittent-contact triboelectric nanogenerator for efficient low-frequency vibration energy harvesting. Nano Energy, 2021, 90, 106576.	8.2	39
47	Advance on flexible pressure sensors based on metal and carbonaceous nanomaterial. Nano Energy, 2021, 87, 106181.	8.2	86
48	Regulating random mechanical motion using the principle of auto-winding mechanical watch for driving TENG with constant AC output â€“ An approach for efficient usage of high entropy energy. Nano Energy, 2021, 87, 106195.	8.2	18
49	Promoting smart cities into the 5G era with multi-field Internet of Things (IoT) applications powered with advanced mechanical energy harvesters. Nano Energy, 2021, 88, 106304.	8.2	185
50	Interconnected array design for enhancing the performance of an enclosed flexible triboelectric nanogenerator. Nano Energy, 2021, 89, 106476.	8.2	16
51	Nanogenerator-based devices for biomedical applications. Nano Energy, 2021, 89, 106461.	8.2	45
52	Fully Textile Insole Seam-Line for Multimodal Sensor Mapping. IEEE Sensors Journal, 2020, 20, 10145-10153.	2.4	5
53	Advances and prospects of triboelectric nanogenerator for self-powered system. International Journal of Smart and Nano Materials, 2021, 12, 233-255.	2.0	20
54	Artificial Intelligence of Things (AIoT) Enabled Floor Monitoring System for Smart Home Applications. ACS Nano, 2021, 15, 18312-18326.	7.3	80

#	Article	IF	Citations
55	Sensing mechanisms and applications of flexible pressure sensors. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 178102.	0.2	13
56	An additively manufactured pressure measurement system based on optical sensors. , 2021, , .		0
57	A flexible dual-structured MXene for ultra-sensitive and ultra-wide monitoring of anatomical and physiological movements. Journal of Materials Chemistry A, 2021, 9, 26867-26874.	5.2	14
58	3D Force Measurements and the Application in Handwriting Recognition. , 2021, , .		0
59	Plantar pressure measurement system based on piezoelectric sensor: a review. Sensor Review, 2022, 42, 241-249.	1.0	5
60	Self-Rebound Cambered Triboelectric Nanogenerator Array for Self-Powered Sensing in Kinematic Analytics. ACS Nano, 2022, 16, 1271-1279.	7.3	18
61	Displacement Visualization at Flexible Interface: A Coordinate Correction Scheme Applicable to High-Accuracy Pressure Distribution Mapping. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	2.4	0
62	Insole-Based Systems for Health Monitoring: Current Solutions and Research Challenges. Sensors, 2022, 22, 438.	2.1	42
63	Ionic Flexible Sensors: Mechanisms, Materials, Structures, and Applications. Advanced Functional Materials, 2022, 32, .	7.8	79
64	A Multimodal Sensory Apparatus for Robotic Prosthetic Feet Combining Optoelectronic Pressure Transducers and IMU. Sensors, 2022, 22, 1731.	2.1	5
65	Activeâ€Matrix Sensing Array Assisted with Machineâ€Learning Approach for Lumbar Degenerative Disease Diagnosis and Postoperative Assessment. Advanced Functional Materials, 2022, 32, .	7.8	34
66	Multiâ€Parameter Optimized Triboelectric Nanogenerator Based Selfâ€Powered Sensor Network for Broadband Aeolian Vibration Onlineâ€Monitoring of Transmission Lines. Advanced Energy Materials, 2022, 12, .	10.2	72
67	Human movement monitoring and behavior recognition for intelligent sports using customizable and flexible triboelectric nanogenerator. Science China Technological Sciences, 2022, 65, 826-836.	2.0	27
68	Wearable triboelectric devices for haptic perception and VR/AR applications. Nano Energy, 2022, 96, 107112.	8.2	39
69	An Integrated Self-Powered Real-Time Pedometer System with Ultrafast Response and High Accuracy. ACS Applied Materials & Interfaces, 2021, 13, 61789-61798.	4.0	6
70	Breathable, Antibacterial, and Biocompatible Collagen Fiber Network Decorated with Zwitterionic Silver Nanoparticles for Plantar Pressure Monitoring. ACS Applied Materials & Interfaces, 2022, 14, 21645-21656.	4.0	20
71	Influence of mechanical motions on the output characteristics of triboelectric nanogenerators. Materials Today Physics, 2022, 25, 100701.	2.9	6
72	Overview of Human Kinetic Energy Harvesting and Application. ACS Applied Energy Materials, 2022, 5, 7091-7114.	2.5	18

#	Article	IF	Citations
73	3D Printed Soft and Flexible Insole With Intrinsic Pressure Sensing Capability. IEEE Sensors Journal, 2023, 23, 23995-24003.	2.4	14
74	Selfâ€Powered Smart Shoes with Functional Ribbon Units for Monitoring Human Gait. Advanced Materials Technologies, 2022, 7, .	3.0	3
75	Smart insoles review (2008-2021): Applications, potentials, and future. Smart Health, 2022, 25, 100301.	2.0	15
76	Recent Progress in Flexible Pressure Sensor Arrays. Nanomaterials, 2022, 12, 2495.	1.9	26
77	Applications of nanogenerator-based wearable devices in orthopedics. Nano Energy, 2022, 103, 107762.	8.2	10
78	Compensated Resistance Matrix Approach for Readout of the Two-dimensional Resistive Sensor Array for High Temperature Measurement. IEEE Sensors Journal, 2022, , 1-1.	2.4	0
79	Plantar Pressure Distribution Measurement System Based on PVDF Piezoelectric Senors. Integrated Ferroelectrics, 2022, 230, 40-47.	0.3	0
80	Matrix-addressed crosstalk-free self-powered pressure sensor array based on electrospun isolated PVDF-TrFE cells. Sensors and Actuators A: Physical, 2022, 347, 113993.	2.0	4
81	Fiber Bragg Gratings based smart insole to measure plantar pressure and temperature. Sensors and Actuators A: Physical, 2023, 350, 114092.	2.0	5
82	Triboelectric and Piezoelectric Nanogenerators for Self-Powered Healthcare Monitoring Devices: Operating Principles, Challenges, and Perspectives. Nanomaterials, 2022, 12, 4403.	1.9	7
83	Intermediate nanofibrous charge trapping layer-based wearable triboelectric self-powered sensor for human activity recognition and user identification. Nano Energy, 2023, 108, 108180.	8.2	16
84	Capacitive Sensors with Hybrid Dielectric Structures and High Sensitivity over a Wide Pressure Range for Monitoring Biosignals. ACS Applied Materials & Interfaces, 2023, 15, 6217-6227.	4.0	12
85	Selfâ€powered highâ€resolution smart insole system for plantar pressure mapping. , 2023, 1, .		18
86	Open-Source Strain Gauge System for Monitoring Pressure Distribution of Runnerâ€™s Feet. Sensors, 2023, 23, 2323.	2.1	1
87	Self-Assembled Porous-Reinforcement Microstructure-Based Flexible Triboelectric Patch for Remote Healthcare. Nano-Micro Letters, 2023, 15, .	14.4	6