List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Gelatin Methacryloylâ€Based Tactile Sensors for Medical Wearables. Advanced Functional Materials, 2020, 30, 2003601.	14.9	112
2	Self-sustained autonomous wireless sensing based on a hybridized TENG and PEG vibration mechanism. Nano Energy, 2021, 80, 105555.	16.0	80
3	A GA-based parameters tuning method for an ADRC controller of ISP for aerial remote sensing applications. ISA Transactions, 2018, 81, 318-328.	5.7	62
4	High accuracy comsol simulation method of bimorph cantilever for piezoelectric vibration energy harvesting. AIP Advances, 2019, 9, .	1.3	44
5	System level design of wireless sensor node powered by piezoelectric vibration energy harvesting. Sensors and Actuators A: Physical, 2020, 310, 112039.	4.1	41
6	The Gas Leak Detection Based on a Wireless Monitoring System. IEEE Transactions on Industrial Informatics, 2019, 15, 6240-6251.	11.3	35
7	A thin-film temperature sensor based on a flexible electrode and substrate. Microsystems and Nanoengineering, 2021, 7, 42.	7.0	35
8	A wearable and sensitive graphene-cotton based pressure sensor for human physiological signals monitoring. Scientific Reports, 2019, 9, 14457.	3.3	34
9	A temperature sensor based on flexible substrate with ultra-high sensitivity for low temperature measurement. Sensors and Actuators A: Physical, 2020, 315, 112341.	4.1	30
10	A packaged piezoelectric vibration energy harvester with high power and broadband characteristics. Sensors and Actuators A: Physical, 2019, 295, 629-636.	4.1	29
11	Novel resonant pressure sensor based on piezoresistive detection and symmetrical in-plane mode vibration. Microsystems and Nanoengineering, 2020, 6, 95.	7.0	27
12	Advanced tools and methods for single-cell surgery. Microsystems and Nanoengineering, 2022, 8, 47.	7.0	27
13	Construction of NiCo2O4@NiFe LDHs core/shell nanowires array on carbon cloth for flexible, high-performance pseudocapacitor electrodes. Journal of Alloys and Compounds, 2018, 767, 1126-1132.	5.5	26
14	A novel three-dimensional spiral CoNi LDHs on Au@ErGO wire for high performance fiber supercapacitor electrodes. Materials Letters, 2019, 236, 728-731.	2.6	26
15	Piezoresistive pressure sensor with high sensitivity for medical application using peninsula-island structure. Frontiers of Mechanical Engineering, 2017, 12, 546-553.	4.3	25
16	Surface stress-induced deflection of a microcantilever with various widths and overall microcantilever sensitivity enhancement via geometry modification. Journal Physics D: Applied Physics, 2011, 44, 425402.	2.8	24
17	A MEMS Resonant Sensor to Measure Fluid Density and Viscosity under Flexural and Torsional Vibrating Modes. Sensors, 2016, 16, 830.	3.8	24
18	Modeling and design of V-shaped piezoelectric vibration energy harvester with stopper for low-frequency broadband and shock excitation. Sensors and Actuators A: Physical, 2021, 317, 112458.	4.1	23

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19	A flexible electrostatic nanogenerator and self-powered capacitive sensor based on electrospun polystyrene mats and graphene oxide films. Nanotechnology, 2021, 32, 405402.	2.6	22
20	Highly heterogeneous epitaxy of flexoelectric BaTiO3-δ membrane on Ge. Nature Communications, 2022, 13, .	12.8	22
21	An Analytical Equivalent Circuit Model for Optimization Design of a Broadband Piezoelectric Micromachined Ultrasonic Transducer With an Annular Diaphragm. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1760-1776.	3.0	21
22	Array Design of Piezoelectric Micromachined Ultrasonic Transducers With Low-Crosstalk and High-Emission Performance. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 789-800.	3.0	21
23	Resonant frequency analysis on an electrostatically actuated microplate under uniform hydrostatic pressure. Journal Physics D: Applied Physics, 2013, 46, 195108.	2.8	20
24	A Novel Piezoresistive Accelerometer with SPBs to Improve the Tradeoff between the Sensitivity and the Resonant Frequency. Sensors, 2016, 16, 210.	3.8	20
25	Application and Optimization of Stiffness Abruption Structures for Pressure Sensors with High Sensitivity and Anti-Overload Ability. Sensors, 2017, 17, 1965.	3.8	19
26	Selfâ€Powered Flexible Sensor Based on the Graphene Modified P(VDFâ€TrFE) Electrospun Fibers for Pressure Detection. Macromolecular Materials and Engineering, 2019, 304, 1900504.	3.6	19
27	Fabrication of capacitive micromachined ultrasonic transducers with low-temperature direct wafer-Bonding technology. Sensors and Actuators A: Physical, 2017, 264, 63-75.	4.1	18
28	Theoretical modeling and experimental verification of circular Halbach electromagnetic energy harvesters for performance enhancement. Smart Materials and Structures, 2018, 27, 095019.	3.5	18
29	Overview of Human Kinetic Energy Harvesting and Application. ACS Applied Energy Materials, 2022, 5, 7091-7114.	5.1	18
30	Analysis and design of a novel piezoresistive accelerometer with axially stressed self-supporting sensing beams. Sensors and Actuators A: Physical, 2016, 247, 1-11.	4.1	17
31	Broadband vibration energy harvesting for wireless sensor node power supply in train container. Review of Scientific Instruments, 2019, 90, 125003.	1.3	17
32	3-D Image Reconstruction of Biological Organelles With a Robot-Aided Microscopy System for Intracellular Surgery. IEEE Robotics and Automation Letters, 2019, 4, 231-238.	5.1	17
33	A Novel CMUT-Based Resonant Biochemical Sensor Using Electrospinning Technology. IEEE Transactions on Industrial Electronics, 2019, 66, 7356-7365.	7.9	16
34	Precise Automated Intracellular Delivery Using a Robotic Cell Microscope System With Three-Dimensional Image Reconstruction Information. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2870-2881.	5.8	16
35	A High Precision Compound Control Scheme Based on Non-singular Terminal Sliding Mode and Extended State Observer for an Aerial Inertially Stabilized Platform. International Journal of Control, Automation and Systems, 2020, 18, 1498-1509.	2.7	16
36	An ultra-high pressure sensor based on SOI piezoresistive material. Journal of Mechanical Science and Technology, 2010, 24, 1655-1660.	1.5	15

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37	In-situ synthesized N-doped ZnO for enhanced CO2 sensing: Experiments and DFT calculations. Sensors and Actuators B: Chemical, 2022, 357, 131359.	7.8	15
38	A flexible and wearable NO2 gas detection and early warning device based on a spraying process and an interdigital electrode at room temperature. Microsystems and Nanoengineering, 2022, 8, 40.	7.0	15
39	Mechanical behavior analysis on electrostatically actuated rectangular microplates. Journal of Micromechanics and Microengineering, 2015, 25, 035007.	2.6	13
40	An Improved Method for the Mechanical Behavior Analysis of Electrostatically Actuated Microplates Under Uniform Hydrostatic Pressure. Journal of Microelectromechanical Systems, 2015, 24, 474-485.	2.5	13
41	Equivalent Circuit Models of Cell and Array for Resonant Cavity-Based Piezoelectric Micromachined Ultrasonic Transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2103-2118.	3.0	13
42	Design and analysis of high-frequency fiber Bragg grating vibration sensor. Measurement Science and Technology, 2021, 32, 025108.	2.6	13
43	Active Frequency Tuning for Magnetically Actuated and Piezoresistively Sensed MEMS Resonators. IEEE Electron Device Letters, 2013, 34, 921-923.	3.9	12
44	A High-Precision Control Scheme Based on Active Disturbance Rejection Control for a Three-Axis Inertially Stabilized Platform for Aerial Remote Sensing Applications. Journal of Sensors, 2018, 2018, 1-9.	1.1	12
45	The Design and Analysis of a Novel Micro Force Sensor Based on Depletion Type Movable Gate Field Effect Transistor. Journal of Microelectromechanical Systems, 2019, 28, 298-310.	2.5	12
46	Well-connected ZnO nanoparticle network fabricated by in-situ annealing of ZIF-8 for enhanced sensitivity in gas sensing application. Sensors and Actuators B: Chemical, 2021, 344, 130180.	7.8	12
47	Novel high-performance piezoresistive shock accelerometer for ultra-high-g measurement utilizing self-support sensing beams. Review of Scientific Instruments, 2020, 91, 085001.	1.3	11
48	Optimal design of SiC piezoresistive pressure sensor considering material anisotropy. Review of Scientific Instruments, 2020, 91, 015004.	1.3	11
49	A piezoelectric cantilever with novel large mass for harvesting energy from low frequency vibrations. AIP Advances, 2018, 8, .	1.3	10
50	Equivalent Circuit Model for a Large Array of Coupled Piezoelectric Micromachined Ultrasonic Transducers With High Emission Performance. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 718-733.	3.0	10
51	High Sensitivity Optical Fiber Mach–Zehnder Refractive Index Sensor Based on Waist-Enlarged Bitaper. Micromachines, 2022, 13, 689.	2.9	10
52	In-Situ Measurement of Fluid Density Rapidly Using a Vibrating Piezoresistive Microcantilever Sensor Without Resonance Occurring. IEEE Sensors Journal, 2014, 14, 645-650.	4.7	8
53	Synthetic preparation of novel 3D Si/TiO2–Ti2O3 composite nanorod arrays as anodes in lithium ion batteries. RSC Advances, 2015, 5, 37399-37404.	3.6	8
54	WRe26–In2O3 probe-type thin film thermocouples applied to high temperature measurement. Review of Scientific Instruments, 2020, 91, 074901.	1.3	8

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55	High-Performance Temperature Sensor by Employing Screen Printing Technology. Micromachines, 2021, 12, 924.	2.9	8
56	Capacitive micromachined ultrasonic transducer for ultra-low pressure measurement: Theoretical study. AIP Advances, 2015, 5, .	1.3	7
57	A Novel Slope Method for Measurement of Fluid Density with a Micro-cantilever under Flexural and Torsional Vibrations. Sensors, 2016, 16, 1471.	3.8	7
58	An Improved Fuzzy Neural Network Compound Control Scheme for Inertially Stabilized Platform for Aerial Remote Sensing Applications. International Journal of Aerospace Engineering, 2018, 2018, 1-15.	0.9	7
59	A resonant microcantilever sensor for in-plane multi-axis magnetic field measurements. Journal of Micromechanics and Microengineering, 2019, 29, 065010.	2.6	7
60	Optimizing electrospinning-hydrothermal hybrid process based on Taguchi method for modulation of point defects in ZnO micro/nano arrays towards photoelectronic application. Journal of Alloys and Compounds, 2019, 779, 167-174.	5.5	7
61	High-accuracy differential resonant pressure sensor with linear fitting method. Journal of Micromechanics and Microengineering, 2021, 31, 045006.	2.6	7
62	Piezoelectric-AlN resonators at two-dimensional flexural modes for the density and viscosity decoupled determination of liquids. Microsystems and Nanoengineering, 2022, 8, 38.	7.0	7
63	A Flexible and Wearable Nylon Fiber Sensor Modified by Reduced Graphene Oxide and ZnO Quantum Dots for Wide-Range NO2 Gas Detection at Room Temperature. Materials, 2022, 15, 3772.	2.9	7
64	Thermoelectricity and antivibration properties of screen-printed nanodoped In1.35ZnO2.11/In2O3 thin-film thermocouples on alumina substrates. Ceramics International, 2022, 48, 25747-25755.	4.8	7
65	An ultra-high pressure sensor with cylinder structure. Journal of Mechanical Science and Technology, 2013, 27, 2383-2389.	1.5	6
66	A novel MEMS force sensor based on Laterally Movable Gate Array Field Effect Transistor(LMGAFET). , 2017, , .		6
67	Evaluation of width and width uniformity of near-field electrospinning printed micro and sub-micrometer lines based on optical image processing. Journal of Micromechanics and Microengineering, 2018, 28, 035010.	2.6	6
68	Temperature compensation in fluid density measurement using micro-electromechanical resonant sensor. Review of Scientific Instruments, 2018, 89, 125001.	1.3	6
69	Wearable Tactile Sensors: Gelatin Methacryloylâ€Based Tactile Sensors for Medical Wearables (Adv.) Tj ETQq1	1 0.784314 14.9	rgBT /Overic
70	Advanced Biological Imaging for Intracellular Micromanipulation: Methods and Applications. Applied Sciences (Switzerland), 2020, 10, 7308.	2.5	6
71	The Radial Piezoelectric Response from Three-Dimensional Electrospun PVDF Micro Wall Structure. Materials, 2020, 13, 1368.	2.9	6
72	Optimization on thermoelectric characteristics of indium tin oxide/indium oxide thin film thermocouples based on screen printing technology. Review of Scientific Instruments, 2021, 92, 105001.	1.3	6

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73	Influences of RF Magnetron Sputtering Power and Gas Flow Rate on a High Conductivity and Low Drift Rate of Tungsten-Rhenium Thin-Film Thermocouples. Nanomaterials, 2022, 12, 1120.	4.1	6
74	A novel piezoresistive sensitive structure for micromachined high-pressure sensors. , 2017, , .		5
75	Impact experiment analysis of MEMS ultra-high G piezoresistive shock accelerometer. , 2018, , .		5
76	Structural multi-objective optimization on a MUAV-based pan–tilt for aerial remote sensing applications. ISA Transactions, 2020, 100, 405-421.	5.7	5
77	A Novel Micro-Displacement Sensor Based on Double Optical Fiber Probes Made through Photopolymer Materials. Materials, 2020, 13, 5475.	2.9	5
78	A High-Frequency Acceleration Sensor Based on Fiber Grating. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	5
79	A high-resolution electric field sensor based on piezoelectric bimorph composite. Smart Materials and Structures, 2022, 31, 025008.	3.5	5
80	Simultaneous Measurement of Temperature and Refractive Index Using Michelson Interferometer Based on Waist-Enlarged Fiber Bitaper. Micromachines, 2022, 13, 658.	2.9	5
81	Capacitive micromachined ultrasonic transducer for ultra-low pressure detection. , 2014, , .		4
82	Parameter Optimization on FNN/PID Compound Controller for a Three-Axis Inertially Stabilized Platform for Aerial Remote Sensing Applications. Journal of Sensors, 2019, 2019, 1-15.	1.1	4
83	Effect of Annealing on the Thermoelectricity Properties of the WRe26-In2O3 Thin Film Thermocouples. Micromachines, 2020, 11, 664.	2.9	4
84	Closed-Form Expressions on CMUTs With Layered Anisotropic Microplates Under Residual Stress and Pressure. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1828-1843.	3.0	4
85	Coupling Effects of Crosstalk and Parasitic Loss on Capacitive Micromachined Ultrasonic Transducers. IEEE Sensors Journal, 2022, 22, 3281-3297.	4.7	4
86	Simulation, fabrication, and characteristics of high-temperature, quick-response tungsten–rhenium thin-film thermocouples probe sensor. Measurement Science and Technology, 2022, 33, 105105.	2.6	4
87	Design and characterization of an integrated multifunction micro sensor. Microsystem Technologies, 2012, 18, 283-294.	2.0	3
88	A trapezoidal cantilever density sensor based on MEMS technology. Journal of Zhejiang University: Science C, 2013, 14, 274-278.	0.7	3
89	High Precision Control of an Inertially Stabilized Platform for Aerial Remote Sensing Applications. , 2018, , .		3
90	Giant enhancement on response-speed of electrospun-based UV photodetector via		3

polydimethylsiloxane coating. , 2018, , .

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91	A closed-form approach for the resonant frequency analysis of clamped rectangular microplates under distributed electrostatic force. Sensors and Actuators A: Physical, 2018, 280, 447-458.	4.1	3
92	Capacitive micromachined ultrasonic transducers for biochemical detection with flexible high sensitivity. , 2018, , .		3
93	Capacitive micromachined ultrasonic transducers for transmitting and receiving ultrasound in air. Journal of Micromechanics and Microengineering, 2019, 29, 125015.	2.6	3
94	A High-g Triaxial Piezoresistive Accelerometer with Sensing Beams in Pure Axial Deformation. , 2019, , .		3
95	Characterization of the Electrical Properties of a Double Heterostructure GaN/AlGaN Epitaxial Layer with an AlGaN Interlayer. Journal of Electronic Materials, 2021, 50, 2521-2529.	2.2	3
96	Contribution discrimination of auxetic cantilever for increased piezoelectric output in vibration energy harvesting. , 2021, , .		3
97	Research on the High Temperature and High Pressure Gold-Plated Fiber Grating Dual-Parameter Sensing Measurement System. Micromachines, 2022, 13, 195.	2.9	3
98	Research and evaluation of a high temperature pressure sensor chip. , 2009, , .		2
99	A fluid viscosity sensor with resonant trapezoidal micro cantilever. , 2013, , .		2
100	DC current measurement utilizing a resonant magnetically actuated piezoresistive microcantilever. Measurement Science and Technology, 2013, 24, 125102.	2.6	2
101	A novel piezoresistive accelerometer featuring in-plane vibration. , 2014, , .		2
102	Coupled Piezoelectric Micromachined Ultrasonic Transducers Array with High Ultrasonic Emission Performance. , 2018, , .		2
103	A PMUT-based Ultrasonic Probe Used for Contact Force Sensing. , 2021, , .		2
104	A Flexible Tactile Sensor for Three-dimensional Force Detection Based on Piezoelectric Sensing. , 2021, , ,		2
105	Equivalent Circuit Analysis of CMUTs-based Device for Measurement in Liquid Samples. , 2021, , .		2
106	Large-Area and Clean Graphene Transfer on Gold-Nanopyramid-Structured Substrates: Implications for Surface-Enhanced Raman Scattering Detection. ACS Applied Nano Materials, 2022, 5, 3878-3888.	5.0	2
107	Uniform Stress Distribution of Bimorph by Arc Mechanical Stopper for Maximum Piezoelectric Vibration Energy Harvesting. Energies, 2022, 15, 3268.	3.1	2

108 A MEMS density sensor based on mircro-rectangular cantilever. , 2010, , .

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109	A MEMS resonator-type viscosity sensor based on triangular cantilever. , 2010, , .		1
110	Sensitivity enhancement of a microcantilever based DC current sensor by using its torsional modes. Measurement Science and Technology, 2014, 25, 125108.	2.6	1
111	The fluid viscosity measurement based on variable cross-section MEMS cantilever under torsional excitation. , 2015, , .		1
112	Fabrication of CMUTs with a low temperature wafer bonding technology. , 2015, , .		1
113	Novel Mechanical Coupling Piezoelectric Micromachined Ultrasonic Transducers Based on Base Excitation System. , 2018, , .		1
114	Liquid packaging effects on piezoresistive MEMS accelerometer. , 2018, , .		1
115	Density Measurement Performance in Flowing Liquid Using Microcantilever-Based Resonators under Bending and Torsion Vibrations. , 2019, , .		1
116	One kind of wide bandwidth and high radiation efficiency antenna for microwave manipulation of NV color centers. , 2019, , .		1
117	A novel microsensor for measuring thermal conductivity of fluid based on three omega method. Review of Scientific Instruments, 2019, 90, 015002.	1.3	1
118	A Wearable Strain Sensor Based on Fiber-structured PU/MXene/CNT Composite with Ultra-high Sensitivity and Broad Sensing Range. , 2021, , .		1
119	Micro-fabricated alkali vapor cells for atomic spin gyroscope study. , 2021, , .		1
120	A Tunable Quasi-Zero Stiffness Mechanism for Thermal Compensation of a MEMS Gravimeter. , 2021, , .		1
121	Au-assisted Polymerization of Conductive Poly(N-phenylglycine) as High-performance Positive Electrodes for Asymmetric Supercapacitors. Nanotechnology, 2021, 33, .	2.6	1
122	Shielding Effectiveness Simulation of Rectangular Enclosures Using FIT. , 2020, , .		1
123	Flexible carbon monoxide sensor for environmental detection of smallâ€scale robot. Micro and Nano Letters, 2020, 15, 949-953.	1.3	1
124	Finger Bending Sensing Based on Series-Connected Fiber Bragg Gratings. Materials, 2022, 15, 3472.	2.9	1
125	Development of a Piezoresistive Force Transmitter for Gauging Yarn's Linear Density in High-Speed Textile Machinery. IEEE Sensors Journal, 2011, 11, 2279-2285.	4.7	0
126	Multilayer graphene sheets assembled by Langmuir-Blodgett fro tribology application. , 2012, , .		0

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127	Capacitive micromachined ultrasonic transducer as a resonant temperature sensor. , 2013, , .		Ο
128	MEMS fluid density sensor based on oscillating piezoresistive microcantilever. , 2013, , .		0
129	Magnetically actuated resonant piezoresistive microcantilever operating in fluid for dc current measurement. , 2013, , .		0
130	A novel capacitive micromachined transducer for micro-pressure measurement. , 2015, , .		0
131	Analysis of the 3ω method for the measurement of fluid thermal properties. , 2016, , .		Ο
132	Vibration and large deformation simulation analysis of graphene membrane for nanomechanical applications. , 2016, , .		0
133	A Novel Air-Coupled Piezoelectric Micromachined Ultrasonic Transducers Based on Parametric Excitation Method. , 2018, , .		Ο
134	A CMUT-based gas density sensor with high sensitivity. Journal of Micromechanics and Microengineering, 2019, 29, 115012.	2.6	0
135	A High Accuracy Resonant Pressure Sensor with Lateral Driven and Piezoresistive Detection. , 2019, , .		Ο
136	Smith Matching for CMUTs-based Biochemical Resonant Sensor. , 2019, , .		0
137	A Novel Resonator Based on In-plane Mode for Fluid Density and Viscosity Measurements. , 2019, , .		Ο
138	The Design of a High Precision Capacitive Pressure Sensor Based on Comb Electrode. , 2019, , .		0
139	Study on the Enhancement of Diamond Fluorescence Characteristics by Multi-layer Anti-reflection Coating. , 2019, , .		Ο
140	Lumped Element Model for CMUTsÂBased Biochemical Resonant Sensor. , 2019, , .		0
141	Development of a 4H-SiC Piezoresistive Pressure Sensor for High Temperature Applications. , 2019, , .		Ο
142	MEMS Piezoelectric Vibration Energy Harvester with In-Plane PZT Bimorph. , 2019, , .		0
143	Design and Simulation of a Wide-Bandwidth CMUTs Array with Dual-Mixed radii and Multi Operating Modes. , 2021, , .		0
144	Temperature and pressure dual-parameter sensing based on Fiber Bragg Grating. , 2021, , .		0

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145	A Novel Piezoelectric Resonator for Liquid Density and Viscosity Measurement. , 2020, , .		0
146	Ultrasonic wireless communication using capacitive micromachined ultrasonic transducers in liquid with OOK digital modulation. Journal of Micromechanics and Microengineering, 2020, 30, 125016.	2.6	0
147	A Novel Peninsula-island Structure for Sensing Ultra-low Pressure Based on Dry-wet Combination Etching Process. , 2020, , .		0
148	High-precision and long-range optical fiber Fabry-Perot interferometer for high temperature measurement. Measurement Science and Technology, 0, , .	2.6	0