Liwei Lin

List of Publications by Year
in descending order

259 papers	12,708 citations	28274 55 h-index	28297 105 g-index
263 all docs	263 docs citations	263 times ranked	14931 citing authors

#	Article	IF	Citations
1	A 5-mm Untethered Crawling Robot via Self-Excited Electrostatic Vibration. IEEE Transactions on Robotics, 2022, 38, 719-730.	10.3	17
2	Gold nanoparticle based plasmonic sensing for the detection of SARS-CoV-2 nucleocapsid proteins. Biosensors and Bioelectronics, 2022, 195, 113669.	10.1	51
3	Programmable Tactile Feedback Patterns for Cognitive Assistance by Flexible Electret Actuators. Advanced Functional Materials, 2022, 32, .	14.9	11
4	Soft magnetic composites for highly deformable actuators by four-dimensional electrohydrodynamic printing. Composites Part B: Engineering, 2022, 231, 109596.	12.0	26
5	Mapping and Simultaneous Detection of Arterial and Venous Pulses using Largeâ€Scale Highâ€Density Flexible Piezoelectret Sensor Array. Advanced Electronic Materials, 2022, 8, .	5.1	12
6	Facile Fabrication of Multilayer Stretchable Electronics via a Two-mode Mechanical Cutting Process. ACS Nano, 2022, 16, 1533-1546.	14.6	5
7	Laser-Sculptured Hierarchical Spinous Structures for Ultra-High-Sensitivity Iontronic Sensors with a Broad Operation Range. ACS Applied Materials & Interfaces, 2022, 14, 19672-19682.	8.0	18
8	An Improved Lumped Element Model for Circular-Shape pMUTs. IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 2, 83-95.	1.4	5
9	An Ultrasound ASIC With Universal Energy Recycling for >7-m All-Weather Metamorphic Robotic Vision. IEEE Journal of Solid-State Circuits, 2022, 57, 3036-3047.	5.4	5
10	A Moisture-Resistant Soft Actuator with Low Driving Voltages for Haptic Stimulations in Virtual Games. ACS Applied Materials & Interfaces, 2022, 14, 31257-31266.	8.0	4
11	Improved Ring-Down Time and Axial Resolution of pMUTs via a Phase-Shift Excitation Scheme. , 2021, , .		10
12	Ultrasond-Induced Haptic Sensations Via PMUTS. , 2021, , .		8
13	Electrically Adaptive and Shape-Changeable Invertible Microlens. ACS Applied Materials & Interfaces, 2021, 13, 10397-10408.	8.0	5
14	Electrostatic footpads enable agile insect-scale soft robots with trajectory control. Science Robotics, 2021, 6, .	17.6	66
15	Bioinspired Light-Driven Soft Robots by a Facile Two-Mode Laser Engraving and Cutting Process. , 2021, , .		2
16	A 36-Channel Auto-Calibrated Front-End ASIC for a pMUT-Based Miniaturized 3-D Ultrasound System. IEEE Journal of Solid-State Circuits, 2021, 56, 1910-1923.	5.4	26
17	Electrohydrodynamic 3D printing of orderly carbon/nickel composite network as supercapacitor electrodes. Journal of Materials Science and Technology, 2021, 82, 135-143.	10.7	19
18	Deep Reinforcement Learning for Digital Materials Design. , 2021, 3, 1433-1439.		46

#	Article	IF	Citations
19	Bimorph Pinned Piezoelectric Micromachined Ultrasonic Transducers for Space Imaging Applications. Journal of Microelectromechanical Systems, 2021, 30, 650-658.	2.5	17
20	Moisture-induced autonomous surface potential oscillations for energy harvesting. Nature Communications, 2021, 12, 5287.	12.8	26
21	A Pulsed Wave Doppler Ultrasound Blood Flowmeter by PMUTs. Journal of Microelectromechanical Systems, 2021, 30, 680-682.	2.5	10
22	A low voltage-powered soft electromechanical stimulation patch for haptics feedback in human-machine interfaces. Biosensors and Bioelectronics, 2021, 193, 113616.	10.1	12
23	A Single Chip Directional Loudspeaker Based on PMUTS. , 2021, , .		6
24	High-Accuracy Quartz Crystal Resonance DP Instrument. IEEE Transactions on Industrial Electronics, 2020, 67, 8026-8033.	7.9	4
25	3D printed microfluidic devices for circulating tumor cells (CTCs) isolation. Biosensors and Bioelectronics, 2020, 150, 111900.	10.1	56
26	A Naturally Integrated Smart Textile for Wearable Electronics Applications. Advanced Materials Technologies, 2020, 5, 1900781.	5.8	40
27	3D microfluidic gradient generator for combination antimicrobial susceptibility testing. Microsystems and Nanoengineering, 2020, 6, 92.	7.0	25
28	Finger-powered fluidic actuation and mixing via MultiJet 3D printing. Lab on A Chip, 2020, 20, 3375-3385.	6.0	24
29	Non-Contact Surface Temperature Sensing Based on a Single Bimorph pMUTs Array. , 2020, , .		9
30	Wearable breath monitoring via a hot-film/calorimetric airflow sensing system. Biosensors and Bioelectronics, 2020, 163, 112288.	10.1	37
31	An electronic nose using a single graphene FET and machine learning for water, methanol, and ethanol. Microsystems and Nanoengineering, 2020, 6, 50.	7.0	88
32	NO2 gas sensors based on CVD tungsten diselenide monolayer. Applied Surface Science, 2020, 529, 147110.	6.1	61
33	Influence of chamber design on the gas sensing performance of graphene field-effect-transistor. SN Applied Sciences, 2020, 2, 1.	2.9	7
34	Piezoelectric Micromachined Ultrasonic Transducers With Pinned Boundary Structure. Journal of Microelectromechanical Systems, 2020, 29, 585-591.	2.5	19
35	Chemical vapor deposition of 3D graphene/carbon nanotubes networks for hybrid supercapacitors. Sensors and Actuators A: Physical, 2020, 304, 111886.	4.1	29
36	Pulsed Wave Doppler Ultrasound Using 3.7 MHz Pmuts Toward Wearable Blood Flow Measurements. , 2020, , .		3

#	Article	IF	Citations
37	Functional gas sensing nanomaterials: A panoramic view. Applied Physics Reviews, 2020, 7, .	11.3	295
38	Electromagnetic interference shielding with laser induced molybdenum carbide-graphene paper. Materials Letters, 2020, 271, 127784.	2.6	10
39	Stereolithography (SLA) 3D printing of ascorbic acid loaded hydrogels: A controlled release study. International Journal of Pharmaceutics, 2020, 584, 119428.	5.2	101
40	Laser-sculptured ultrathin transition metal carbide layers for energy storage and energy harvesting applications. Nature Communications, 2019, 10, 3112.	12.8	91
41	Insect-scale fast moving and ultrarobust soft robot. Science Robotics, 2019, 4, .	17.6	282
42	Piezoelectret Mechanocatalysts for Direct Water Splitting via Ultrasonication. , 2019, , .		0
43	A Paper-Based Disposable Strain Sensor by Direct Laser Printing. , 2019, , .		0
44	Manipulating the Moving Trajectory of Insect-Scale Piezoelectric Soft Robots by Frequency. , 2019, , .		6
45	Monitoring Vital Signs of Respiration and Heart Beat Simultaneously via a Single Flexible Piezoelectret Sensor. , 2019, , .		1
46	Pinned Boundary Piezoelectric Micromachined Ultrasonic Transducers. , 2019, , .		3
47	A Fast-Moving Micro Crawling Robot with Direct Electromagnetic Driving Mechanism. , 2019, , .		4
48	Fully Transparent Piezoelectric Ultrasonic Transducer with 3D Printed Substrate. , 2019, , .		8
49	Wafer-Scale Fabrication of Sub-10 nm TiO2-Ga2O3 n-p Heterojunctions with Efficient Photocatalytic Activity by Atomic Layer Deposition. Nanoscale Research Letters, 2019, 14, 163.	5.7	12
50	Self-constructed side-by-side nanofiber photocatalyst via oppositely charged electrospinning and its photocatalytic degradation of rhodamine B. New Journal of Chemistry, 2019, 43, 15405-15412.	2.8	8
51	Time and Cost Effective Fabrication of Stretchable Micro-Supercapacitor Patches Using a Vinyl Cutter. , 2019, , .		1
52	Waterproof, Omnidirectionally Stretchable Electronics with Multilayer Patterns Via Rapid, Photolithography-Free Fabrication. , 2019, , .		1
53	Human pulses reveal health conditions by a piezoelectret sensor via the approximate entropy analysis. Nano Energy, 2019, 58, 528-535.	16.0	30
54	UV-assisted chemiresistors made with gold-modified ZnO nanorods to detect ozone gas at room temperature. Mikrochimica Acta, 2019, 186, 418.	5.0	109

#	Article	IF	Citations
55	Superior visible light photocatalysis and low-operating temperature VOCs sensor using cubic Ag(0)-MoS2 loaded g-CN 3D porous hybrid. Applied Materials Today, 2019, 16, 193-203.	4.3	50
56	A Flexible Piezoelectret Actuator/Sensor Patch for Mechanical Humanâ€“Machine Interfaces. ACS Nano, 2019, 13, 7107-7116.	14.6	137
57	Metalloâ€Hydrogelâ€Assisted Synthesis and Direct Writing of Transition Metal Dichalcogenides. Advanced Functional Materials, 2019, 29, 1807612.	14.9	12
58	Atomic Layer Deposition of TiO2 Nanocoatings on ZnO Nanowires for Improved Photocatalytic Stability. International Journal of Photoenergy, 2019, 2019, 1-8.	2.5	4
59	Largely Enhancing Luminous Efficacy, Color-Conversion Efficiency, and Stability for Quantum-Dot White LEDs Using the Two-Dimensional Hexagonal Pore Structure of SBA-15 Mesoporous Particles. ACS Applied Materials & Interfaces, 2019, 11, 18808-18816.	8.0	47
60	Magnetic-Based Indoor Localization Using Smartphone via a Fusion Algorithm. IEEE Sensors Journal, 2019, 19, 6477-6485.	4.7	41
61	Mass Loadingâ€Independent Energy Storage with Reduced Graphene Oxide and Carbon Fiber. ChemElectroChem, 2019, 6, 6009-6015.	3.4	7
62	Shoepad nanogenerator based on electrospun PVDF nanofibers. Microsystem Technologies, 2019, 25, 3151-3156.	2.0	16
63	Microfluidic dielectrophoresis illuminates the relationship between microbial cell envelope polarizability and electrochemical activity. Science Advances, 2019, 5, eaat5664.	10.3	56
64	Highâ€Voltage Supercapacitors Based on Aqueous Electrolytes. ChemElectroChem, 2019, 6, 976-988.	3.4	133
65	Defectâ€Induced Gas Adsorption on Graphene Transistors. Advanced Materials Interfaces, 2018, 5, 1701640.	3.7	24
66	A review on chemiresistive room temperature gas sensors based on metal oxide nanostructures, graphene and 2D transition metal dichalcogenides. Mikrochimica Acta, 2018, 185, 213.	5.0	502
67	Ultrafast Growth of Large 2D Silver Nanosheets by Highly Ordered Biological Template at Air/Gel Interface. Advanced Materials Interfaces, 2018, 5, 1701491.	3.7	15
68	Lead iodide nanosheets for piezoelectric energy conversion and strain sensing. Nano Energy, 2018, 49, 7-13.	16.0	59
69	Direct Synthesis of a Covalently Selfâ€Assembled Peptide Nanogel from a Tyrosineâ€Rich Peptide Monomer and Its Biomineralized Hybrids. Angewandte Chemie - International Edition, 2018, 57, 5630-5634.	13.8	33
70	Direct Synthesis of a Covalently Selfâ€Assembled Peptide Nanogel from a Tyrosineâ€Rich Peptide Monomer and Its Biomineralized Hybrids. Angewandte Chemie, 2018, 130, 5732-5736.	2.0	6
71	Real-time and high accuracy frequency measurements for intermediate frequency narrowband signals. Review of Scientific Instruments, 2018, 89, 014704.	1.3	1
72	3D printed microfluidics and microelectronics. Microelectronic Engineering, 2018, 189, 52-68.	2.4	162

#	Article	IF	Citations
73	Microscopic mechanisms of deformation transfer in high dynamic range branched nanoparticle deformation sensors. Nature Communications, 2018, 9, 1155.	12.8	4
74	Model, Design, and Testing of Field Mill Sensors for Measuring Electric Fields Under High-Voltage Direct-Current Power Lines. IEEE Transactions on Industrial Electronics, 2018, 65, 608-615.	7.9	62
75	A New Type of Bionics Based Piezoelectric Heartbeat Sensor Used in Pulse-Taking for Health Warning. , 2018, , .		1
76	A New Type of Hydrophilic QCM Dew Point Sensor. , 2018, , .		0
77	A comprehensive review on piezoelectric energy harvesting technology: Materials, mechanisms, and applications. Applied Physics Reviews, 2018, 5, .	11.3	565
78	Asymmetric charge transfer phenomenon and its mechanism in self-excited electrostatic actuator. , 2018, , .		4
79	Kirigami-inspired, highly stretchable micro-supercapacitor patches fabricated by laser conversion and cutting. Microsystems and Nanoengineering, 2018, 4, 36.	7.0	68
80	Hydrogen Electrocatalysis: Selfâ€Assembly of Largeâ€Area 2D Polycrystalline Transition Metal Carbides for Hydrogen Electrocatalysis (Adv. Mater. 50/2018). Advanced Materials, 2018, 30, 1870385.	21.0	3
81	Health Monitoring: Human Pulse Diagnosis for Medical Assessments Using a Wearable Piezoelectret Sensing System (Adv. Funct. Mater. 40/2018). Advanced Functional Materials, 2018, 28, 1870292.	14.9	2
82	Selfâ€Assembly of Largeâ€Area 2D Polycrystalline Transition Metal Carbides for Hydrogen Electrocatalysis. Advanced Materials, 2018, 30, e1805188.	21.0	84
83	Energy Harvesters Incorporating Silk from the Taiwan-Native Spider Nephila pilipes. ACS Applied Energy Materials, 2018, , .	5.1	5
84	Auâ€“TiO₂-Loaded Cubic g-C₃N₄ Nanohybrids for Photocatalytic and Volatile Organic Amine Sensing Applications. ACS Applied Materials & Interfaces, 2018, 10, 34087-34097.	8.0	132
85	Energy Harvester and Cell Proliferation from Biocompatible PMLG Nanofibers Prepared Using Near-Field Electrospinning and Electrospray Technology. Journal of Nanoscience and Nanotechnology, 2018, 18, 156-164.	0.9	5
86	Sonochemical and mechanical stirring synthesis of liquid metal nanograss structures for lowâ€cost SERS substrates. Journal of Raman Spectroscopy, 2018, 49, 1301-1310.	2.5	11
87	Functional Carbon Nanofibers with Semiâ€Embedded Titanium Oxide Particles via Electrospinning. Macromolecular Rapid Communications, 2018, 39, e1800102.	3.9	10
88	Laserâ€Induced Molybdenum Carbideâ€“Graphene Composites for 3D Foldable Paper Electronics. Advanced Materials, 2018, 30, e1800062.	21.0	135
89	PRE-curved PVDF/PI unimorph structures for biomimic soft crawling actuators. , 2018, , .		13
90	Paper Electronics: Laserâ€Induced Molybdenum Carbideâ€“Graphene Composites for 3D Foldable Paper Electronics (Adv. Mater. 26/2018). Advanced Materials, 2018, 30, 1870192.	21.0	4

#	Article	IF	Citations
91	Human Pulse Diagnosis for Medical Assessments Using a Wearable Piezoelectret Sensing System. Advanced Functional Materials, 2018, 28, 1803413.	14.9	151
92	Biomimetic, Flexible, and Self-Healable Printed Silver Electrode by Spontaneous Self-Layering Phenomenon of a Gelatin Scaffold. ACS Applied Materials & Interfaces, 2018, 10, 25666-25672.	8.0	14
93	High-Voltage Flexible Microsupercapacitors Based on Laser-Induced Graphene. ACS Applied Materials & Interfaces, 2018, 10, 26357-26364.	8.0	70
94	Breathable 3D Supercapacitors Based on Activated Carbon Fiber Veil. Advanced Materials Technologies, 2018, 3, 1800209.	5.8	19
95	A DC drive electrostatic comb actuator based on self-excited vibration. , 2018, , .		1
96	A QCM Dew Point Sensor With Active Temperature Control Using Thermally Conductive Electrodes. IEEE Sensors Journal, 2018, 18, 5715-5722.	4.7	6
97	A Wireless Passive Pressure and Temperature Sensor via a Dual LC Resonant Circuit in Harsh Environments. Journal of Microelectromechanical Systems, 2017, 26, 351-356.	2.5	57
98	Characterizing Photon Reabsorption in Quantum Dot-Polymer Composites for Use as Displacement Sensors. ACS Nano, 2017, 11, 2075-2084.	14.6	32
99	Polymeric Nanofibers with Ultrahigh Piezoelectricity via Self-Orientation of Nanocrystals. ACS Nano, 2017, 11, 1901-1910.	14.6	124
100	Synthesis of Singleâ€Layer Graphene on Nickel Using a Droplet CVD Process. Advanced Materials Interfaces, 2017, 4, 1600783.	3.7	18
101	Flexible micro-supercapacitors prepared using direct-write nanofibers. RSC Advances, 2017, 7, 11724-11731.	3.6	26
102	High aspect ratio-titanium dioxide-stabilized zinc oxide nanowires for photocatalytic hydrogen gas harvester. , 2017, , .		1
103	A fast-moving electrostatic crawling insect. , 2017, , .		23
104	A 1000-Volt planar micro-supercapacitor by direct-write laser engraving of polymers. , 2017, , .		4
105	A silicon carbide differential output pressure sensor by concentrically matched capacitance. , 2017, , .		3
106	Broadband ring-shaped PMUTS based on an acoustically induced resonance. , 2017, , .		23
107	Energy harvesting from cerebrospinal fluid pressure fluctuations for self-powered neural implants. Biomedical Microdevices, 2017, 19, 32.	2.8	11
108	Flexible PET/EVA-based piezoelectret generator for energy harvesting in harsh environments. Nano Energy, 2017, 37, 268-274.	16.0	69

#	Article	IF	Citations
109	Self-Assembly of Silver Nanowire Ring Structures Driven by the Compressive Force of a Liquid Droplet. Langmuir, 2017, 33, 3367-3372.	3.5	6
110	Multichip LED Modules With V-Groove Surfaces for Light Extraction Efficiency Enhancements Considering Roughness Scattering. IEEE Transactions on Electron Devices, 2017, 64, 182-188.	3.0	17
111	Wearable woven supercapacitor fabrics with high energy density and load-bearing capability. Scientific Reports, 2017, 7, 14324.	3.3	52
112	Ultrathin Coaxial Fiber Supercapacitors Achieving High Energy and Power Densities. ACS Applied Materials & Interfaces, 2017, 9, 39391-39398.	8.0	41
113	A Review of On-Chip Micro Supercapacitors for Integrated Self-Powering Systems. Journal of Microelectromechanical Systems, 2017, 26, 949-965.	2.5	106
114	A Solarâ€Blind UV Detector Based on Grapheneâ€Microcrystalline Diamond Heterojunctions. Small, 2017, 13, 1701328.	10.0	49
115	Untethered flight of a tiny balloon via self-sustained electrostatic actuators. , 2017, , .		1
116	High-Performance PVC Gel for Adaptive Micro-Lenses with Variable Focal Length. Scientific Reports, 2017, 7, 2068.	3.3	45
117	On the performance of array antennas with mechanical distortion errors considering element numbers. International Journal of Electronics, 2017, 104, 462-484.	1.4	24
118	Synthesis and integration of 2D Iron Phosphate sheets for energy storage devices. , 2017, , .		1
119	Fabrication of Si-based three-dimensional microbatteries: A review. Frontiers of Mechanical Engineering, 2017, 12, 459-476.	4.3	27
120	Instantaneous frequency extraction for resonant dew point sensor based on bandpass Î£Î” modulator with variable center frequency. , 2017, , .		0
121	3D Printing-Based Integrated Water Quality Sensing System. Sensors, 2017, 17, 1336.	3.8	27
122	A 2.34Î¼J/scan acoustic power scalable charge-redistribution pMUT interface system with on-chip aberration compensation for portable ultrasonic applications. , 2016, , .		3
123	High aspect-ratio 3D microstructures via near-field electrospinning for energy storage applications. , 2016, , .		6
124	Rapid assembly of multilayer microfluidic structures via 3D-printed transfer molding and bonding. Microsystems and Nanoengineering, 2016, 2, 16063.	7.0	81
125	Correction â€œBimorph Piezoelectric Micromachined Ultrasonic Transducersâ€•[Apr 16 326-336]. Journal of Microelectromechanical Systems, 2016, 25, 579-580.	2.5	0
126	ZIF-8 Cooperating in TiN/Ti/Si Nanorods as Efficient Anodes in Micro-Lithium-Ion-Batteries. ACS Applied Materials & Interfaces, 2016, 8, 3992-3999.	8.0	37

#	Article	IF	Citations
127	Bimorph Piezoelectric Micromachined Ultrasonic Transducers. Journal of Microelectromechanical Systems, 2016, 25, 326-336.	2.5	70
128	High Stability Induced by the TiN/Ti Interlayer in Three-Dimensional Si/Ge Nanorod Arrays as Anode in Micro Lithium Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 7806-7810.	8.0	19
129	Equivalent Circuit Models for Large Arrays of Curved and Flat Piezoelectric Micromachined Ultrasonic Transducers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 432-447.	3.0	38
130	ALD titanium nitride on vertically aligned carbon nanotube forests for electrochemical supercapacitors. Sensors and Actuators A: Physical, 2016, 240, 160-166.	4.1	49
131	In vitro cardiomyocyte-driven biogenerator based on aligned piezoelectric nanofibers. Nanoscale, 2016, 8, 7278-7286.	5.6	32
132	Dual-electrode bimorph pmut arrays for handheld therapeutic medical devices. , 2016, , .		9
133	3D-printed microelectronics for integrated circuitry and passive wireless sensors. Microsystems and Nanoengineering, 2015, 1, .	7.0	192
134	Capacitive micromachined ultrasonic transducer for ultra-low pressure measurement: Theoretical study. AIP Advances, 2015, 5, .	1.3	7
135	Influence of three-dimensional nanoparticle branching on the Youngâ€™s modulus of nanocomposites: Effect of interface orientation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6533-6538.	7.1	33
136	Self-lifting artificial insect wings via electrostatic flapping actuators. , 2015, , .		27
137	Synthetic preparation of novel 3D Si/TiO2â€“Ti2O3 composite nanorod arrays as anodes in lithium ion batteries. RSC Advances, 2015, 5, 37399-37404.	3.6	8
138	Self-curved diaphragms by stress engineering for highly responsive pMUT. , 2015, , .		26
139	A novel capacitive micromachined transducer for micro-pressure measurement. , 2015, , .		0
140	Poly (vinylidene fluoride) piezoelectric nanofibers fabricated by non-uniform field electrospinning. International Journal of Nanomanufacturing, 2015, 11, 297.	0.3	6
141	Significant piezoelectric and energy harvesting enhancement of poly(vinylidene fluoride)/polypeptide fiber composites prepared through near-field electrospinning. Journal of Materials Chemistry A, 2015, 3, 6835-6843.	10.3	66
142	Electrochemically synthesized and vertically aligned carbon nanotubeâ€“polypyrrole nanolayers for high energy storage devices. Sensors and Actuators A: Physical, 2015, 231, 65-73.	4.1	33
143	High Performance 3D Si/Ge Nanorods Array Anode Buffered by TiN/Ti Interlayer for Sodiumâ€ion Batteries. Advanced Functional Materials, 2015, 25, 1386-1392.	14.9	79
144	Highly Efficient Photocatalysts for Surface Hybridization of TiO₂ Nanofibers with Carbon Films. ChemPlusChem, 2015, 80, 827-831.	2.8	5

#	Article	IF	Citations
145	Batteries: High Performance 3D Si/Ge Nanorods Array Anode Buffered by TiN/Ti Interlayer for Sodium-Ion Batteries (Adv. Funct. Mater. 9/2015). Advanced Functional Materials, 2015, 25, 1385-1385.	14.9	1
146	Improved stability of perovskite solar cells in ambient air by controlling the mesoporous layer. Journal of Materials Chemistry A, 2015, 3, 16860-16866.	10.3	92
147	Highly active ruthenium oxide coating via ALD and electrochemical activation in supercapacitor applications. Journal of Materials Chemistry A, 2015, 3, 15568-15575.	10.3	107
148	Near-field electrospinning enhances the energy harvesting of hollow PVDF piezoelectric fibers. RSC Advances, 2015, 5, 85073-85081.	3.6	42
149	Piezoelectricity-Induced Schottky Barrier Height Variations in AlGaN/GaN High Electron Mobility Transistors. IEEE Electron Device Letters, 2015, 36, 902-904.	3.9	27
150	Direct-Write, Self-Aligned Electrospinning on Paper for Controllable Fabrication of Three-Dimensional Structures. ACS Applied Materials & Interfaces, 2015, 7, 27765-27770.	8.0	116
151	Graphene and carbon nanotube (CNT) in MEMS/NEMS applications. Microelectronic Engineering, 2015, 132, 192-206.	2.4	191
152	A two-port piezoelectric micromachined ultrasonic transducer. , 2014, , .		19
153	Multiple electrode piezoelectric micromachined ultrasonic transducers. , 2014, , .		13
154	Highly responsive curved aluminum nitride pMUT. , 2014, , .		44
155	An equivalent circuit model for curved piezoelectric micromachined ultrasonic transducers with spherical-shape diaphragms. , 2014, , .		7
156	Piezoelectric properties of PVDF nanofibers via non-uniform field electrospinning. , 2014, , .		1
157	Directâ€Write Complementary Graphene Field Effect Transistors and Junctions via Nearâ€Field Electrospinning. Small, 2014, 10, 1920-1925.	10.0	23
158	High quality factor nanocrystalline diamond micromechanical resonators limited by thermoelastic damping. Applied Physics Letters, 2014, 104, .	3.3	36
159	Microfluidic bead-based diodes with targeted circular microchannels for low Reynolds number applications. Lab on A Chip, 2014, 14, 1585-1594.	6.0	22
160	Photoelectrochemical and electrocatalytic properties of thermally oxidized copper oxide for efficient solar fuel production. Journal of Materials Chemistry A, 2014, 2, 7389-7401.	10.3	43
161	Energy harvesting with piezoelectric poly(Î³-benzyl-l-glutamate) fibers prepared through cylindrical near-field electrospinning. RSC Advances, 2014, 4, 21563.	3.6	20
162	Dual-mode hydrodynamic railing and arraying of microparticles for multi-stage signal detection in continuous flow biochemical microprocessors. Lab on A Chip, 2014, 14, 1405-1409.	6.0	25

#	Article	IF	Citations
163	Finger-powered microfluidic systems using multilayer soft lithography and injection molding processes. Lab on A Chip, 2014, 14, 3790.	6.0	121
164	Resonant-frequency tuning of angular vertical comb-driven microscanner. Micro and Nano Systems Letters, 2014, 2, .	3.7	8
165	A hybrid supercapacitor using vertically aligned CNT-polypyrrole nanocomposite. , 2014, , .		2
166	A two-port piezoelectric micromachined ultrasonic transducer. , 2014, , .		0
167	Uniformly Embedded Metal Oxide Nanoparticles in Vertically Aligned Carbon Nanotube Forests as Pseudocapacitor Electrodes for Enhanced Energy Storage. Nano Letters, 2013, 13, 3524-3530.	9.1	136
168	An autonomous impact resonator with metal beam between a pair of parallel-plate electrodes. Sensors and Actuators A: Physical, 2013, 199, 366-371.	4.1	23
169	Synthesis and Bidirectional Frequency Tuning of Cantilever-Shape Nano Resonators Using a Focused Ion Beam. ACS Applied Materials & Interfaces, 2013, 5, 9684-9690.	8.0	7
170	A bead-in-droplet solution exchange system via continuous flow microfluidic railing. , 2013, , .		2
171	Microcrystalline diamond micromechanical resonators with quality factor limited by thermoelastic damping. Applied Physics Letters, 2013, 102, .	3.3	26
172	Enhanced coupling of piezoelectric micromachined ultrasonic transducers with initial static deflection. , 2013, , .		6
173	An accurate equivalent circuit for the clamped circular multiple-electrode PMUT with residual stress. , 2013, , .		20
174	Impact of doping and microstructure on quality factor of CVD diamond micromechanical resonators. , 2012, , .		2
175	Hydrodynamic resettability for a microfluidic particulate-based arraying system. Lab on A Chip, 2012, 12, 5051.	6.0	33
176	Piezoelectric nanofibers for energy scavenging applications. Nano Energy, 2012, 1, 356-371.	16.0	386
177	A two-stage, self-aligned vertical densification process for as-grown CNT forests in supercapacitor applications. Sensors and Actuators A: Physical, 2012, 188, 261-267.	4.1	29
178	Direct-write single-walled carbon nanotube serpentines using micro chemical vapor deposition. , 2012, , .		1
179	Rapid Silicon-to-Steel Bonding by Induction Heating for MEMS Strain Sensors. Journal of Microelectromechanical Systems, 2012, 21, 497-506.	2.5	19
180	Continuous flow multi-stage microfluidic reactors via hydrodynamic microparticle railing. Lab on A Chip, 2012, 12, 4168.	6.0	56

#	Article	IF	Citations
181	Large array electrospun PVDF nanogenerators on a flexible substrate. , 2011, , .		17
182	Electrostatic oscillation of CNT bundles. , 2011, , .		0
183	Contact and sheet resisstances of carbon nanotube forest in gas sensing applications. , 2011, , .		2
184	Unidirectional mechanical cellular stimuli via micropost array gradients. Soft Matter, 2011, 7, 4606.	2.7	68
185	Micromachined W-band polymeric tunable iris filter. Microsystem Technologies, 2011, 17, 411-416.	2.0	3
186	Characterizations of contact and sheet resistances of vertically aligned carbon nanotube forests with intrinsic bottom contacts. Nanotechnology, 2011, 22, 365704.	2.6	16
187	On-Chip Cryopreservation of Living Cells. Journal of the Association for Laboratory Automation, 2010, 15, 99-106.	2.8	9
188	Pick, break, and placement of one-dimensional nanostructures for direct assembly and integration. Applied Physics Letters, 2010, 96, 153101.	3.3	8
189	Localized heating induced chemical vapor deposition for one-dimensional nanostructure synthesis. Journal of Applied Physics, 2010, 107, .	2.5	42
190	Jetting frequency vs voltage frequency in the low-frequency pulsation mode of electrohydrodynamic printing. , 2010, , .		1
191	Annealing nano-to-micro contacts for improved contact resistance. , 2010, , .		3
192	Direct-Write Piezoelectric Polymeric Nanogenerator with High Energy Conversion Efficiency. Nano Letters, 2010, 10, 726-731.	9.1	1,205
193	3D supercapacitor using nickel electroplated vertical aligned carbon nanotube array electrode. , 2010, , .		11
194	Piezoelectric actuation of a direct write electrospun PVDF fiber. , 2010, , .		6
195	Synthesis of graphene using Micro Chemical Vapor Deposition. , 2010, , .		0
196	Direct pick, break, and placement of nanostructures and their integration with MEMS. , 2009, , .		0
197	A direct-write piezoelectric PVDF nanogenerator. , 2009, , .		28
198	A closed-form approach for frequency tunable comb resonators with curved finger contour. Sensors and Actuators A: Physical, 2008, 141, 523-529.	4.1	51

#	Article	IF	Citations
199	Rapid, localized synthesis of titanium-based nanoswords on MEMS. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	5
200	UV-enhanced oxygen sensing of zinc oxide nanowires. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	0
201	Titanium-based nanoswords: Synthesis and characterization. , 2008, , .		1
202	Continuous near-field electrospinning for large area deposition of orderly nanofiber patterns. Applied Physics Letters, 2008, 93, .	3.3	264
203	The Behaviors of Direct-Written Nanofibers on Patterned Substrate. , 2008, , .		3
204	Nonlinear behaviors of a comb drive actuator under electrically induced tensile and compressive stresses. Journal of Micromechanics and Microengineering, 2007, 17, 557-566.	2.6	18
205	Biomass-Powered Microbial-Pumped Micro-Fuel Cell. , 2007, , .		0
206	Room temperature fast synthesis of zinc oxide nanowires by inductive heating. Applied Physics Letters, 2007, 90, 093101.	3.3	49
207	Microrelays With Bidirectional Electrothermal Electromagnetic Actuators and Liquid Metal Wetted Contacts. Journal of Microelectromechanical Systems, 2007, 16, 700-708.	2.5	41
208	Chip-to-chip fluidic connectors via near-field electrospinning. , 2007, , .		4
209	Rapid synthesis of carbon nanotubes by bulk and localized inductive heating. , 2007, , .		3
210	A Plastic W-Band MEMS Phase Shifter. , 2007, , .		3
211	Polymeric microneedle fabrication using a microinjection molding technique. Microsystem Technologies, 2007, 13, 517-522.	2.0	98
212	A Plastic W-Band MEMS Tunable Filter. , 2006, , .		9
213	Near-Field Electrospinning. Nano Letters, 2006, 6, 839-842.	9.1	659
214	Formation and characterization of silicon/carbon nanotube/silicon heterojunctions by local synthesis and assembly. Applied Physics Letters, 2006, 89, 163510.	3.3	41
215	A Biosensor for Simazine Herbicides Detection Using Sub-cellular Plant Photosystems. , 2006, , .		1
216	In-Situ Frequency Tuning of Electrostatically Actuated Vibrating Nano Structures Using Focused Ion Beam. , 2006, , .		1

#	Article	IF	Citations
217	MEMS sensor material based on polypyrroleâ€“carbon nanotube nanocomposite: film deposition and characterization. Journal of Micromechanics and Microengineering, 2005, 15, 2019-2027.	2.6	43
218	A micromachined W-band iris filter. , 2005, , .		12
219	A Frequency-Tunable Comb Resonator Using Spring Tension and Compression Effects. , 2004, , 417.		1
220	Microplastic Lens Array Fabricated by a Hot Intrusion Process. Journal of Microelectromechanical Systems, 2004, 13, 1063-1071.	2.5	39
221	Water-activated disposable and long shelf life microbatteries. Sensors and Actuators A: Physical, 2004, 111, 79-86.	4.1	52
222	Thermal challenges in MEMS applications: phase change phenomena and thermal bonding processes. Microelectronics Journal, 2003, 34, 179-185.	2.0	25
223	Characterization of selective polysilicon deposition for mems resonator tuning. Journal of Microelectromechanical Systems, 2003, 12, 193-200.	2.5	52
224	Transient Thermal Bubble Formation on Polysilicon Micro-Resisters. Journal of Heat Transfer, 2002, 124, 375-382.	2.1	55
225	Vacuum packaging technology using localized aluminum/silicon-to-glass bonding. Journal of Microelectromechanical Systems, 2002, 11, 556-565.	2.5	119
226	A water-powered osmotic microactuator. Journal of Microelectromechanical Systems, 2002, 11, 736-742.	2.5	86
227	A thermal-bubble-actuated micronozzle-diffuser pump. Journal of Microelectromechanical Systems, 2002, 11, 665-671.	2.5	145
228	The application of nanosecond-pulsed laser welding technology in MEMS packaging with a shadow mask. Sensors and Actuators A: Physical, 2002, 97-98, 398-404.	4.1	74
229	Active microfluidic mixer and gas bubble filter driven by thermal bubble micropump. Sensors and Actuators A: Physical, 2002, 97-98, 665-671.	4.1	254
230	Active frequency tuning for micro resonators by localized thermal stressing effects. Sensors and Actuators A: Physical, 2001, 91, 326-332.	4.1	112
231	Micro-to-macro fluidic interconnectors with an integrated polymer sealant. Journal of Micromechanics and Microengineering, 2001, 11, 577-581.	2.6	60
232	Silicon-processed microneedles. Journal of Microelectromechanical Systems, 1999, 8, 78-84.	2.5	199
233	A simulation program for the sensitivity and linearity of piezoresistive pressure sensors. Journal of Microelectromechanical Systems, 1999, 8, 514-522.	2.5	110
234	Microelectromechanical filters for signal processing. Journal of Microelectromechanical Systems, 1998, 7, 286-294.	2.5	198

#	Article	IF	Citations
235	Formation of Silicon-Gold Eutectic Bond Using Localized Heating Method. Japanese Journal of Applied Physics, 1998, 37, L1412-L1414.	1.5	45
236	MICROSCALE THERMAL BUBBLE FORMATION: THERMOPHYSICAL PHENOMENA AND APPLICATIONS. Microscale Thermophysical Engineering, 1998, 2, 71-85.	1.2	79
237	Thermal Bubble Formation on Polysilicon Micro Resistors. Journal of Heat Transfer, 1998, 120, 735-742.	2.1	82
238	A micro strain gauge with mechanical amplifier. Journal of Microelectromechanical Systems, 1997, 6, 313-321.	2.5	104
239	Electrothermal responses of lineshape microstructures. Sensors and Actuators A: Physical, 1996, 55, 35-41.	4.1	158
240	Thermal bubble powered microactuators. Microsystem Technologies, 1994, 1, 51-58.	2.0	48
241	MEMS pressure sensors for aerospace applications. , 0, , .		37
242	Batch transfer of LIGA microstructures by selective electroplating and bonding. , 0, , .		1
243	Localized plastic bonding for micro assembly, packaging and liquid encapsulation. , 0, , .		5
244	Selective polysilicon deposition for frequency tuning of MEMS resonators. , 0, , .		8
245	Electrolyte based on-demand and disposable microbattery. , 0, , .		6
246	Micromachined microbial fuel cells. , 0, , .		18
247	A micro pitch and roll motion sensor. , 0, , .		0
248	Silicon nanowire-based nanoactuator. , 0, , .		5
249	Water activated disposable and long shelf life microbatteries. , 0, , .		2
250	Surface micromachined glass and polysilicon microchannels using MUMPs. , 0, , .		5
251	Frozen water for MEMS fabrication and packaging applications. , 0, , .		2
252	Nickel nano-composite film for MEMS applications. , 0, , .		8

#	Article	IF	Citations
253	Characterization of out-of-plane high frequency microresonators by AFM. , 0, , .		1
254	A bi-directional electrothermal electromagnetic actuator. , 0, , .		2
255	A vertically-supported two-axial torsional micromirror. , 0, , .		3
256	A polypyrrole-carbon-nanotube (PPy-MWNT) nanocomposite glucose sensor. , 0, , .		5
257	ZnO nanowires based UV photodiodes. , 0, , .		0
258	Bi-directional micro relays with liquid-metal wetted contacts. , 0, , .		5
259	Necrofabricated plastic 95-ghz rectangular waveguide. , 0, , .		8