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	Direct-Write Piezoelectric Polymeric Nanogenerator with High Energy Conversion Efficiency. Nano Letters, 2010, 10, 726-731.	9.1	1,205
2	Near-Field Electrospinning. Nano Letters, 2006, 6, 839-842.	9.1	659
3	A comprehensive review on piezoelectric energy harvesting technology: Materials, mechanisms, and applications. Applied Physics Reviews, 2018, 5, .	11.3	565
4	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
5	Piezoelectric nanofibers for energy scavenging applications. Nano Energy, 2012, 1, 356-371.	16.0	386
6	Functional gas sensing nanomaterials: A panoramic view. Applied Physics Reviews, 2020, 7, .	11.3	295
7	Insect-scale fast moving and ultrarobust soft robot. Science Robotics, 2019, 4, .	17.6	282
8	Continuous near-field electrospinning for large area deposition of orderly nanofiber patterns. Applied Physics Letters, 2008, 93, .	3.3	264
9	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
10	Silicon-processed microneedles. Journal of Microelectromechanical Systems, 1999, 8, 78-84.	2.5	199
11	Microelectromechanical filters for signal processing. Journal of Microelectromechanical Systems, 1998, 7, 286-294.	2.5	198
12	3D-printed microelectronics for integrated circuitry and passive wireless sensors. Microsystems and Nanoengineering, 2015, 1, .	7.0	192
13	Graphene and carbon nanotube (CNT) in MEMS/NEMS applications. Microelectronic Engineering, 2015, 132, 192-206.	2.4	191
14	3D printed microfluidics and microelectronics. Microelectronic Engineering, 2018, 189, 52-68.	2.4	162
15	Electrothermal responses of lineshape microstructures. Sensors and Actuators A: Physical, 1996, 55, 35-41.	4.1	158
16	Human Pulse Diagnosis for Medical Assessments Using a Wearable Piezoelectret Sensing System. Advanced Functional Materials, 2018, 28, 1803413.	14.9	151
17	A thermal-bubble-actuated micronozzle-diffuser pump. Journal of Microelectromechanical Systems, 2002, 11, 665-671.	2.5	145
18	A Flexible Piezoelectret Actuator/Sensor Patch for Mechanical Humanâ€“Machine Interfaces. ACS Nano, 2019, 13, 7107-7116.	14.6	137

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19	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
20	Laserâ€Induced Molybdenum Carbideâ€“Graphene Composites for 3D Foldable Paper Electronics. Advanced Materials, 2018, 30, e1800062.	21.0	135
21	Highâ€Voltage Supercapacitors Based on Aqueous Electrolytes. ChemElectroChem, 2019, 6, 976-988.	3.4	133
22	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
23	Polymeric Nanofibers with Ultrahigh Piezoelectricity via Self-Orientation of Nanocrystals. ACS Nano, 2017, 11, 1901-1910.	14.6	124
24	Finger-powered microfluidic systems using multilayer soft lithography and injection molding processes. Lab on A Chip, 2014, 14, 3790.	6.0	121
25	Vacuum packaging technology using localized aluminum/silicon-to-glass bonding. Journal of Microelectromechanical Systems, 2002, 11, 556-565.	2.5	119
26	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
27	Active frequency tuning for micro resonators by localized thermal stressing effects. Sensors and Actuators A: Physical, 2001, 91, 326-332.	4.1	112
28	A simulation program for the sensitivity and linearity of piezoresistive pressure sensors. Journal of Microelectromechanical Systems, 1999, 8, 514-522.	2.5	110
29	UV-assisted chemiresistors made with gold-modified ZnO nanorods to detect ozone gas at room temperature. Mikrochimica Acta, 2019, 186, 418.	5.0	109
30	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
31	A Review of On-Chip Micro Supercapacitors for Integrated Self-Powering Systems. Journal of Microelectromechanical Systems, 2017, 26, 949-965.	2.5	106
32	A micro strain gauge with mechanical amplifier. Journal of Microelectromechanical Systems, 1997, 6, 313-321.	2.5	104
33	Stereolithography (SLA) 3D printing of ascorbic acid loaded hydrogels: A controlled release study. International Journal of Pharmaceutics, 2020, 584, 119428.	5.2	101
34	Polymeric microneedle fabrication using a microinjection molding technique. Microsystem Technologies, 2007, 13, 517-522.	2.0	98
35	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
36	Laser-sculptured ultrathin transition metal carbide layers for energy storage and energy harvesting applications. Nature Communications, 2019, 10, 3112.	12.8	91

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37	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
38	A water-powered osmotic microactuator. Journal of Microelectromechanical Systems, 2002, 11, 736-742.	2.5	86
39	Selfâ€Assembly of Largeâ€Area 2D Polycrystalline Transition Metal Carbides for Hydrogen Electrocatalysis. Advanced Materials, 2018, 30, e1805188.	21.0	84
40	Thermal Bubble Formation on Polysilicon Micro Resistors. Journal of Heat Transfer, 1998, 120, 735-742.	2.1	82
41	Rapid assembly of multilayer microfluidic structures via 3D-printed transfer molding and bonding. Microsystems and Nanoengineering, 2016, 2, 16063.	7.0	81
42	MICROSCALE THERMAL BUBBLE FORMATION: THERMOPHYSICAL PHENOMENA AND APPLICATIONS. Microscale Thermophysical Engineering, 1998, 2, 71-85.	1.2	79
43	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
44	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
45	Bimorph Piezoelectric Micromachined Ultrasonic Transducers. Journal of Microelectromechanical Systems, 2016, 25, 326-336.	2.5	70
46	High-Voltage Flexible Microsupercapacitors Based on Laser-Induced Graphene. ACS Applied Materials & Interfaces, 2018, 10, 26357-26364.	8.0	70
47	Flexible PET/EVA-based piezoelectret generator for energy harvesting in harsh environments. Nano Energy, 2017, 37, 268-274.	16.0	69
48	Unidirectional mechanical cellular stimuli via micropost array gradients. Soft Matter, 2011, 7, 4606.	2.7	68
49	Kirigami-inspired, highly stretchable micro-supercapacitor patches fabricated by laser conversion and cutting. Microsystems and Nanoengineering, 2018, 4, 36.	7.0	68
50	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
51	Electrostatic footpads enable agile insect-scale soft robots with trajectory control. Science Robotics, 2021, 6, .	17.6	66
52	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
53	NO2 gas sensors based on CVD tungsten diselenide monolayer. Applied Surface Science, 2020, 529, 147110.	6.1	61
54	Micro-to-macro fluidic interconnectors with an integrated polymer sealant. Journal of Micromechanics and Microengineering, 2001, 11, 577-581.	2.6	60

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55	Lead iodide nanosheets for piezoelectric energy conversion and strain sensing. Nano Energy, 2018, 49, 7-13.	16.0	59
56	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
57	Continuous flow multi-stage microfluidic reactors via hydrodynamic microparticle railing. Lab on A Chip, 2012, 12, 4168.	6.0	56
58	Microfluidic dielectrophoresis illuminates the relationship between microbial cell envelope polarizability and electrochemical activity. Science Advances, 2019, 5, eaat5664.	10.3	56
59	3D printed microfluidic devices for circulating tumor cells (CTCs) isolation. Biosensors and Bioelectronics, 2020, 150, 111900.	10.1	56
60	Transient Thermal Bubble Formation on Polysilicon Micro-Resisters. Journal of Heat Transfer, 2002, 124, 375-382.	2.1	55
61	Characterization of selective polysilicon deposition for mems resonator tuning. Journal of Microelectromechanical Systems, 2003, 12, 193-200.	2.5	52
62	Water-activated disposable and long shelf life microbatteries. Sensors and Actuators A: Physical, 2004, 111, 79-86.	4.1	52
63	Wearable woven supercapacitor fabrics with high energy density and load-bearing capability. Scientific Reports, 2017, 7, 14324.	3.3	52
64	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
65	Gold nanoparticle based plasmonic sensing for the detection of SARS-CoV-2 nucleocapsid proteins. Biosensors and Bioelectronics, 2022, 195, 113669.	10.1	51
66	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
67	Room temperature fast synthesis of zinc oxide nanowires by inductive heating. Applied Physics Letters, 2007, 90, 093101.	3.3	49
68	ALD titanium nitride on vertically aligned carbon nanotube forests for electrochemical supercapacitors. Sensors and Actuators A: Physical, 2016, 240, 160-166.	4.1	49
69	A Solarâ€Blind UV Detector Based on Grapheneâ€Microcrystalline Diamond Heterojunctions. Small, 2017, 13, 1701328.	10.0	49
70	Thermal bubble powered microactuators. Microsystem Technologies, 1994, 1, 51-58.	2.0	48
71	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
72	Deep Reinforcement Learning for Digital Materials Design. , 2021, 3, 1433-1439.		46

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73	Formation of Silicon-Gold Eutectic Bond Using Localized Heating Method. Japanese Journal of Applied Physics, 1998, 37, L1412-L1414.	1.5	45
74	High-Performance PVC Gel for Adaptive Micro-Lenses with Variable Focal Length. Scientific Reports, 2017, 7, 2068.	3.3	45
75	Highly responsive curved aluminum nitride pMUT. , 2014, , .		44
76	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
77	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
78	Localized heating induced chemical vapor deposition for one-dimensional nanostructure synthesis. Journal of Applied Physics, 2010, 107, .	2.5	42
79	Near-field electrospinning enhances the energy harvesting of hollow PVDF piezoelectric fibers. RSC Advances, 2015, 5, 85073-85081.	3.6	42
80	Formation and characterization of silicon/carbon nanotube/silicon heterojunctions by local synthesis and assembly. Applied Physics Letters, 2006, 89, 163510.	3.3	41
81	Microrelays With Bidirectional Electrothermal Electromagnetic Actuators and Liquid Metal Wetted Contacts. Journal of Microelectromechanical Systems, 2007, 16, 700-708.	2.5	41
82	Ultrathin Coaxial Fiber Supercapacitors Achieving High Energy and Power Densities. ACS Applied Materials & Interfaces, 2017, 9, 39391-39398.	8.0	41
83	Magnetic-Based Indoor Localization Using Smartphone via a Fusion Algorithm. IEEE Sensors Journal, 2019, 19, 6477-6485.	4.7	41
84	A Naturally Integrated Smart Textile for Wearable Electronics Applications. Advanced Materials Technologies, 2020, 5, 1900781.	5.8	40
85	Microplastic Lens Array Fabricated by a Hot Intrusion Process. Journal of Microelectromechanical Systems, 2004, 13, 1063-1071.	2.5	39
86	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
87	MEMS pressure sensors for aerospace applications. , 0, , .		37
88	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
89	Wearable breath monitoring via a hot-film/calorimetric airflow sensing system. Biosensors and Bioelectronics, 2020, 163, 112288.	10.1	37
90	High quality factor nanocrystalline diamond micromechanical resonators limited by thermoelastic damping. Applied Physics Letters, 2014, 104, .	3.3	36

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91	Hydrodynamic resettability for a microfluidic particulate-based arraying system. Lab on A Chip, 2012, 12, 5051.	6.0	33
92	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
93	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
94	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
95	In vitro cardiomyocyte-driven biogenerator based on aligned piezoelectric nanofibers. Nanoscale, 2016, 8, 7278-7286.	5.6	32
96	Characterizing Photon Reabsorption in Quantum Dot-Polymer Composites for Use as Displacement Sensors. ACS Nano, 2017, 11, 2075-2084.	14.6	32
97	Human pulses reveal health conditions by a piezoelectret sensor via the approximate entropy analysis. Nano Energy, 2019, 58, 528-535.	16.0	30
98	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
99	Chemical vapor deposition of 3D graphene/carbon nanotubes networks for hybrid supercapacitors. Sensors and Actuators A: Physical, 2020, 304, 111886.	4.1	29
100	A direct-write piezoelectric PVDF nanogenerator. , 2009, , .		28
101	Self-lifting artificial insect wings via electrostatic flapping actuators. , 2015, , .		27
102	Piezoelectricity-Induced Schottky Barrier Height Variations in AlGaN/GaN High Electron Mobility Transistors. IEEE Electron Device Letters, 2015, 36, 902-904.	3.9	27
103	Fabrication of Si-based three-dimensional microbatteries: A review. Frontiers of Mechanical Engineering, 2017, 12, 459-476.	4.3	27
104	3D Printing-Based Integrated Water Quality Sensing System. Sensors, 2017, 17, 1336.	3.8	27
105	Microcrystalline diamond micromechanical resonators with quality factor limited by thermoelastic damping. Applied Physics Letters, 2013, 102, .	3.3	26
106	Self-curved diaphragms by stress engineering for highly responsive pMUT. , 2015, , .		26
107	Flexible micro-supercapacitors prepared using direct-write nanofibers. RSC Advances, 2017, 7, 11724-11731.	3.6	26
108	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

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109	Moisture-induced autonomous surface potential oscillations for energy harvesting. Nature Communications, 2021, 12, 5287.	12.8	26
110	Soft magnetic composites for highly deformable actuators by four-dimensional electrohydrodynamic printing. Composites Part B: Engineering, 2022, 231, 109596.	12.0	26
111	Thermal challenges in MEMS applications: phase change phenomena and thermal bonding processes. Microelectronics Journal, 2003, 34, 179-185.	2.0	25
112	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
113	3D microfluidic gradient generator for combination antimicrobial susceptibility testing. Microsystems and Nanoengineering, 2020, 6, 92.	7.0	25
114	On the performance of array antennas with mechanical distortion errors considering element numbers. International Journal of Electronics, 2017, 104, 462-484.	1.4	24
115	Defectâ€Induced Gas Adsorption on Graphene Transistors. Advanced Materials Interfaces, 2018, 5, 1701640.	3.7	24
116	Finger-powered fluidic actuation and mixing via MultiJet 3D printing. Lab on A Chip, 2020, 20, 3375-3385.	6.0	24
117	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
118	Directâ€Write Complementary Graphene Field Effect Transistors and Junctions via Nearâ€Field Electrospinning. Small, 2014, 10, 1920-1925.	10.0	23
119	A fast-moving electrostatic crawling insect. , 2017, , .		23
120	Broadband ring-shaped PMUTS based on an acoustically induced resonance. , 2017, , .		23
121	Microfluidic bead-based diodes with targeted circular microchannels for low Reynolds number applications. Lab on A Chip, 2014, 14, 1585-1594.	6.0	22
122	An accurate equivalent circuit for the clamped circular multiple-electrode PMUT with residual stress. , 2013, , .		20
123	Energy harvesting with piezoelectric poly(Î³-benzyl-l-glutamate) fibers prepared through cylindrical near-field electrospinning. RSC Advances, 2014, 4, 21563.	3.6	20
124	Rapid Silicon-to-Steel Bonding by Induction Heating for MEMS Strain Sensors. Journal of Microelectromechanical Systems, 2012, 21, 497-506.	2.5	19
125	A two-port piezoelectric micromachined ultrasonic transducer. , 2014, , .		19
126	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

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127	Breathable 3D Supercapacitors Based on Activated Carbon Fiber Veil. Advanced Materials Technologies, 2018, 3, 1800209.	5.8	19
128	Piezoelectric Micromachined Ultrasonic Transducers With Pinned Boundary Structure. Journal of Microelectromechanical Systems, 2020, 29, 585-591.	2.5	19
129	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
130	Micromachined microbial fuel cells. , 0, , .		18
131	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
132	Synthesis of Singleâ€Layer Graphene on Nickel Using a Droplet CVD Process. Advanced Materials Interfaces, 2017, 4, 1600783.	3.7	18
133	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
134	Large array electrospun PVDF nanogenerators on a flexible substrate. , 2011, , .		17
135	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
136	A 5-mm Untethered Crawling Robot via Self-Excited Electrostatic Vibration. IEEE Transactions on Robotics, 2022, 38, 719-730.	10.3	17
137	Bimorph Pinned Piezoelectric Micromachined Ultrasonic Transducers for Space Imaging Applications. Journal of Microelectromechanical Systems, 2021, 30, 650-658.	2.5	17
138	Characterizations of contact and sheet resistances of vertically aligned carbon nanotube forests with intrinsic bottom contacts. Nanotechnology, 2011, 22, 365704.	2.6	16
139	Shoepad nanogenerator based on electrospun PVDF nanofibers. Microsystem Technologies, 2019, 25, 3151-3156.	2.0	16
140	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
141	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
142	Multiple electrode piezoelectric micromachined ultrasonic transducers. , 2014, , .		13
143	PRE-curved PVDF/PI unimorph structures for biomimic soft crawling actuators. , 2018, , .		13
144	A micromachined W-band iris filter. , 2005, , .		12

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145	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
146	Metalloâ€Hydrogelâ€Assisted Synthesis and Direct Writing of Transition Metal Dichalcogenides. Advanced Functional Materials, 2019, 29, 1807612.	14.9	12
147	A low voltage-powered soft electromechanical stimulation patch for haptics feedback in human-machine interfaces. Biosensors and Bioelectronics, 2021, 193, 113616.	10.1	12
148	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
149	3D supercapacitor using nickel electroplated vertical aligned carbon nanotube array electrode. , 2010, , .		11
150	Energy harvesting from cerebrospinal fluid pressure fluctuations for self-powered neural implants. Biomedical Microdevices, 2017, 19, 32.	2.8	11
151	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
152	Programmable Tactile Feedback Patterns for Cognitive Assistance by Flexible Electret Actuators. Advanced Functional Materials, 2022, 32, .	14.9	11
153	Functional Carbon Nanofibers with Semiâ€Embedded Titanium Oxide Particles via Electrospinning. Macromolecular Rapid Communications, 2018, 39, e1800102.	3.9	10
154	Electromagnetic interference shielding with laser induced molybdenum carbide-graphene paper. Materials Letters, 2020, 271, 127784.	2.6	10
155	Improved Ring-Down Time and Axial Resolution of pMUTs via a Phase-Shift Excitation Scheme. , 2021, , .		10
156	A Pulsed Wave Doppler Ultrasound Blood Flowmeter by PMUTs. Journal of Microelectromechanical Systems, 2021, 30, 680-682.	2.5	10
157	A Plastic W-Band MEMS Tunable Filter. , 2006, , .		9
158	On-Chip Cryopreservation of Living Cells. Journal of the Association for Laboratory Automation, 2010, 15, 99-106.	2.8	9
159	Dual-electrode bimorph pmut arrays for handheld therapeutic medical devices. , 2016, , .		9
160	Non-Contact Surface Temperature Sensing Based on a Single Bimorph pMUTs Array. , 2020, , .		9
161	Selective polysilicon deposition for frequency tuning of MEMS resonators. , 0, , .		8
162	Nickel nano-composite film for MEMS applications. , 0, , .		8

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163	Necrofabricated plastic 95-ghz rectangular waveguide. , 0, , .		8
164	Pick, break, and placement of one-dimensional nanostructures for direct assembly and integration. Applied Physics Letters, 2010, 96, 153101.	3.3	8
165	Resonant-frequency tuning of angular vertical comb-driven microscanner. Micro and Nano Systems Letters, 2014, 2, .	3.7	8
166	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
167	Fully Transparent Piezoelectric Ultrasonic Transducer with 3D Printed Substrate. , 2019, , .		8
168	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
169	Ultrasond-Induced Haptic Sensations Via PMUTS. , 2021, , .		8
170	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
171	An equivalent circuit model for curved piezoelectric micromachined ultrasonic transducers with spherical-shape diaphragms. , 2014, , .		7
172	Capacitive micromachined ultrasonic transducer for ultra-low pressure measurement: Theoretical study. AIP Advances, 2015, 5, .	1.3	7
173	Mass Loadingâ€Independent Energy Storage with Reduced Graphene Oxide and Carbon Fiber. ChemElectroChem, 2019, 6, 6009-6015.	3.4	7
174	Influence of chamber design on the gas sensing performance of graphene field-effect-transistor. SN Applied Sciences, 2020, 2, 1.	2.9	7
175	Electrolyte based on-demand and disposable microbattery. , 0, , .		6
176	Piezoelectric actuation of a direct write electrospun PVDF fiber. , 2010, , .		6
177	Enhanced coupling of piezoelectric micromachined ultrasonic transducers with initial static deflection. , 2013, , .		6
178	Poly (vinylidene fluoride) piezoelectric nanofibers fabricated by non-uniform field electrospinning. International Journal of Nanomanufacturing, 2015, 11, 297.	0.3	6
179	High aspect-ratio 3D microstructures via near-field electrospinning for energy storage applications. , 2016, , .		6
180	Self-Assembly of Silver Nanowire Ring Structures Driven by the Compressive Force of a Liquid Droplet. Langmuir, 2017, 33, 3367-3372.	3.5	6

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181	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
182	A QCM Dew Point Sensor With Active Temperature Control Using Thermally Conductive Electrodes. IEEE Sensors Journal, 2018, 18, 5715-5722.	4.7	6
183	Manipulating the Moving Trajectory of Insect-Scale Piezoelectric Soft Robots by Frequency. , 2019, , .		6
184	A Single Chip Directional Loudspeaker Based on PMUTS. , 2021, , .		6
185	Localized plastic bonding for micro assembly, packaging and liquid encapsulation. , 0, , .		5
186	Silicon nanowire-based nanoactuator. , 0, , .		5
187	Surface micromachined glass and polysilicon microchannels using MUMPs. , 0, , .		5
188	A polypyrrole-carbon-nanotube (PPy-MWNT) nanocomposite glucose sensor. , 0, , .		5
189	Bi-directional micro relays with liquid-metal wetted contacts. , 0, , .		5
190	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
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