

Jianmin Miao

List of Publications by Year in descending order

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237
papers

6,685
citations

53660

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74018

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240
docs citations

240
times ranked

7183
citing authors

#	ARTICLE	IF	CITATIONS
1	An intrinsically stretchable humidity sensor based on anti-drying, self-healing and transparent organohydrogels. <i>Materials Horizons</i> , 2019, 6, 595-603.	6.4	297
2	Ultrastretchable and Stable Strain Sensors Based on Antifreezing and Self-Healing Ionic Organohydrogels for Human Motion Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9405-9414.	4.0	285
3	A practical guide for the fabrication of microfluidic devices using glass and silicon. <i>Biomicrofluidics</i> , 2012, 6, 16505-1650516.	1.2	281
4	Probing Charged Impurities in Suspended Graphene Using Raman Spectroscopy. <i>ACS Nano</i> , 2009, 3, 569-574.	7.3	196
5	Extremely Deformable, Transparent, and High-Performance Gas Sensor Based on Ionic Conductive Hydrogel. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2364-2373.	4.0	180
6	Highly Stretchable and Transparent Thermistor Based on Self-Healing Double Network Hydrogel. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 19097-19105.	4.0	168
7	Studies of digital microscopic holography with applications to microstructure testing. <i>Applied Optics</i> , 2001, 40, 5046.	2.1	165
8	Characterization of masking layers for deep wet etching of glass in an improved HF/HCl solution. <i>Surface and Coatings Technology</i> , 2005, 198, 314-318.	2.2	157
9	Facile Synthesis of 3D Graphene Flowers for Ultrasensitive and Highly Reversible Gas Sensing. <i>Advanced Functional Materials</i> , 2016, 26, 7462-7469.	7.8	149
10	Improved Selectivity and Sensitivity of Gas Sensing Using a 3D Reduced Graphene Oxide Hydrogel with an Integrated Microheater. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27502-27510.	4.0	132
11	On the wet etching of Pyrex glass. <i>Sensors and Actuators A: Physical</i> , 2008, 143, 154-161.	2.0	130
12	Aspect-Ratio-Dependent Copper Electrodeposition Technique for Very High Aspect-Ratio Through-Hole Plating. <i>Journal of the Electrochemical Society</i> , 2006, 153, G552.	1.3	126
13	From Biological Cilia to Artificial Flow Sensors: Biomimetic Soft Polymer Nanosensors with High Sensing Performance. <i>Scientific Reports</i> , 2016, 6, 32955.	1.6	117
14	3D superhydrophobic reduced graphene oxide for activated NO ₂ sensing with enhanced immunity to humidity. <i>Journal of Materials Chemistry A</i> , 2018, 6, 478-488.	5.2	116
15	Imaging analysis of digital holography. <i>Optics Express</i> , 2005, 13, 2444.	1.7	115
16	Artificial fish skin of self-powered micro-electromechanical systems hair cells for sensing hydrodynamic flow phenomena. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150322.	1.5	113
17	Chemically functionalized 3D graphene hydrogel for high performance gas sensing. <i>Journal of Materials Chemistry A</i> , 2016, 4, 8130-8140.	5.2	106
18	Flexible and Surface-Mountable Piezoelectric Sensor Arrays for Underwater Sensing in Marine Vehicles. <i>IEEE Sensors Journal</i> , 2013, 13, 3918-3925.	2.4	99

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19	Biomimetic Survival Hydrodynamics and Flow Sensing. Annual Review of Fluid Mechanics, 2016, 48, 1-24.	10.8	97
20	A novel two-degree-of-freedom MEMS electromagnetic vibration energy harvester. Journal of Micromechanics and Microengineering, 2016, 26, 035020.	1.5	90
21	Gate-All-Around Junctionless Nanowire MOSFET With Improved Low-Frequency Noise Behavior. IEEE Electron Device Letters, 2011, 32, 1752-1754.	2.2	80
22	Nanofibril scaffold assisted MEMS artificial hydrogel neuromasts for enhanced sensitivity flow sensing. Scientific Reports, 2016, 6, 19336.	1.6	80
23	Aligned carbon nanotubes for through-wafer interconnects. Applied Physics Letters, 2007, 91, .	1.5	74
24	Through-wafer electroplated copper interconnect with ultrafine grains and high density of nanotwins. Applied Physics Letters, 2007, 90, 033111.	1.5	72
25	Fabrication and characterization of fine pitch on-chip copper interconnects for advanced wafer level packaging by a high aspect ratio through AZ9260 resist electroplating. Journal of Micromechanics and Microengineering, 2007, 17, 1078-1086.	1.5	72
26	Microfabricated microneedle with porous tip for drug delivery. Journal of Micromechanics and Microengineering, 2006, 16, 958-964.	1.5	71
27	Defect-free wet etching through pyrex glass using Cr/Au mask. Microsystem Technologies, 2006, 12, 935-939.	1.2	70
28	Strategies in deep wet etching of Pyrex glass. Sensors and Actuators A: Physical, 2007, 133, 395-400.	2.0	70
29	Touch at a distance sensing: lateral-line inspired MEMS flow sensors. Bioinspiration and Biomimetics, 2014, 9, 046011.	1.5	69
30	A Ruthenium-Based Multimetal-Contact RF MEMS Switch With a Corrugated Diaphragm. Journal of Microelectromechanical Systems, 2008, 17, 1447-1459.	1.7	64
31	Structure and migration of (112) step on (111) twin boundaries in nanocrystalline copper. Journal of Applied Physics, 2008, 104, .	1.1	57
32	Stress control in masking layers for deep wet micromachining of Pyrex glass. Sensors and Actuators A: Physical, 2005, 117, 286-292.	2.0	56
33	Design considerations in micromachined silicon microphones. Microelectronics Journal, 2002, 33, 21-28.	1.1	54
34	A flyover style microfluidic chip for highly purified magnetic cell separation. Biosensors and Bioelectronics, 2019, 129, 175-181.	5.3	54
35	Sensitivity-improved silicon condenser microphone with a novel single deeply corrugated diaphragm. Sensors and Actuators A: Physical, 2001, 92, 257-262.	2.0	53
36	Micro-machined piezoelectric membrane-based immunosensor array. Biosensors and Bioelectronics, 2008, 24, 638-643.	5.3	53

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37	A three-dimensional electret-based micro power generator for low-level ambient vibrational energy harvesting. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 065022.	1.5	51
38	Design and implementation of an out-of-plane electrostatic vibration energy harvester with dual-charged electret plates. <i>Microelectronic Engineering</i> , 2015, 135, 32-37.	1.1	51
39	Fabrication of piezoelectric MEMS devices-from thin film to bulk PZT wafer. <i>Journal of Electroceramics</i> , 2010, 24, 25-32.	0.8	50
40	High Sensitivity, Miniature, Full 2-D Anemometer Based on MEMS Hot-Film Sensors. <i>IEEE Sensors Journal</i> , 2013, 13, 1914-1920.	2.4	50
41	Micromachined thick film piezoelectric ultrasonic transducer array. <i>Sensors and Actuators A: Physical</i> , 2006, 130-131, 485-490.	2.0	49
42	Sandwich-structured two-dimensional MEMS electret power generator for low-level ambient vibrational energy harvesting. <i>Sensors and Actuators A: Physical</i> , 2015, 228, 95-103.	2.0	49
43	Enhanced electrostatic vibrational energy harvesting using integrated opposite-charged electrets. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 044002.	1.5	47
44	Optimization of sputtered Cr/Au thin film for diaphragm-based MEMS applications. <i>Thin Solid Films</i> , 2009, 517, 4921-4925.	0.8	46
45	Enhancement of electrokinetically driven microfluidic T-mixer using frequency modulated electric field and channel geometry effects. <i>Electrophoresis</i> , 2009, 30, 3144-3152.	1.3	45
46	Giant Flexoelectric Polarization in a Micromachined Ferroelectric Diaphragm. <i>Advanced Functional Materials</i> , 2013, 23, 124-132.	7.8	45
47	MEMS sensors for assessing flow-related control of an underwater biomimetic robotic stingray. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 036008.	1.5	45
48	Fabrication and characterization of piezoelectric micromachined ultrasonic transducers with thick composite PZT films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005, 52, 2289-2297.	1.7	44
49	Characterization of a nanocrystalline NiTiHf high temperature shape memory alloy thin film. <i>Scripta Materialia</i> , 2005, 52, 983-987.	2.6	43
50	Mechanical and microstructural characterization of high aspect ratio through-wafer electroplated copper interconnects. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 1749-1757.	1.5	43
51	Dynamic characterization of MEMS diaphragm using time averaged in-line digital holography. <i>Optics Communications</i> , 2007, 280, 285-290.	1.0	43
52	Soft polymer membrane micro-sensor arrays inspired by the mechanosensory lateral line on the blind cavefish. <i>Journal of Intelligent Material Systems and Structures</i> , 2015, 26, 38-46.	1.4	43
53	Acoustic transducers with a perforated damping backplate based on PZT/silicon wafer bonding technique. <i>Sensors and Actuators A: Physical</i> , 2009, 149, 277-283.	2.0	42
54	Micromachined ultrasonic transducers and arrays based on piezoelectric thick film. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 91, 107-117.	1.1	41

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55	Fabrication of Si microstructures using focused ion beam implantation and reactive ion etching. Journal of Micromechanics and Microengineering, 2008, 18, 035003.	1.5	38
56	Numerical and Experimental Investigation of Thermomechanical Deformation in High-Aspect-Ratio Electroplated Through-Silicon Vias. Journal of the Electrochemical Society, 2008, 155, H981.	1.3	38
57	High Aspect Ratio Vertical Through-Vias for 3D MEMS Packaging Applications by Optimized Three-Step Deep RIE. Journal of the Electrochemical Society, 2008, 155, H85.	1.3	38
58	Fabrication of High Aspect Ratio 35µm Pitch Through-Wafer Copper Interconnects by Electroplating for 3-D Wafer Stacking. Electrochemical and Solid-State Letters, 2006, 9, G305.	2.2	37
59	Study of surface treatment processes for improvement in the wettability of silicon-based materials used in high aspect ratio through-via copper electroplating. Applied Surface Science, 2007, 253, 8637-8646.	3.1	37
60	Micro-piezoelectric immunoassay chip for simultaneous detection of Hepatitis B virus and α-fetoprotein. Sensors and Actuators B: Chemical, 2011, 151, 370-376.	4.0	37
61	Silicon nanopillars based 3D stacked microchannel heat sinks concept for enhanced heat dissipation applications in MEMS packaging. Sensors and Actuators A: Physical, 2008, 141, 685-694.	2.0	36
62	Preparation of BST ferroelectric thin film by metal organic decomposition for infrared sensor. Sensors and Actuators A: Physical, 2004, 110, 371-377.	2.0	35
63	Optimization of an amorphous silicon mask PECVD process for deep wet etching of Pyrex glass. Surface and Coatings Technology, 2005, 192, 43-47.	2.2	35
64	Ultrasound radiating performances of piezoelectric micromachined ultrasonic transmitter. Applied Physics Letters, 2005, 86, 033508.	1.5	35
65	On-Wafer Microstrip Meander-Line Slow-Wave Structure at Ka-Band. IEEE Transactions on Electron Devices, 2018, 65, 2142-2148.	1.6	35
66	Piezoelectric thick films and their application in MEMS. Journal of the European Ceramic Society, 2007, 27, 3759-3764.	2.8	34
67	Effect of SF6 flow rate on the etched surface profile and bottom grass formation in deep reactive ion etching process. Journal of Physics: Conference Series, 2006, 34, 577-582.	0.3	32
68	Analytical modeling for bulk-micromachined condenser microphones. Journal of the Acoustical Society of America, 2006, 120, 750-761.	0.5	28
69	d33 mode piezoelectric diaphragm based acoustic transducer with high sensitivity. Sensors and Actuators A: Physical, 2013, 189, 93-99.	2.0	28
70	Void formation over limiting current density and impurity analysis of TSV fabricated by constant-current pulse-reverse modulation. Microelectronics Reliability, 2013, 53, 1943-1953.	0.9	28
71	PVDF Nanofiber Sensor for Vibration Measurement in a String. Sensors, 2019, 19, 3739.	2.1	27
72	Ka-Band Symmetric V-Shaped Meander-Line Slow Wave Structure. IEEE Transactions on Plasma Science, 2019, 47, 4650-4657.	0.6	27

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73	Control of stress in highly doped polysilicon multi-layer diaphragm structure. <i>Surface and Coatings Technology</i> , 2001, 141, 96-102.	2.2	26
74	A study on the viscous damping effect for diaphragm-based acoustic MEMS applications. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 2253-2263.	1.5	26
75	Influence of deep RIE tolerances on comb-drive actuator performance. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 970-976.	1.3	25
76	Cupula-Inspired Hyaluronic Acid-Based Hydrogel Encapsulation to Form Biomimetic MEMS Flow Sensors. <i>Sensors</i> , 2017, 17, 1728.	2.1	25
77	Patterning of diamond microstructures on Si substrate by bulk and surface micromachining. <i>Journal of Materials Processing Technology</i> , 2003, 132, 73-81.	3.1	24
78	Self-assembled ferrofluid lithography: patterning micro and nanostructures by controlling magnetic nanoparticles. <i>Nanotechnology</i> , 2009, 20, 495301.	1.3	24
79	Development of a MEMS-based electrochemical aptasensor for norovirus detection. <i>Micro and Nano Letters</i> , 2016, 11, 582-585.	0.6	24
80	Crocodile-inspired dome-shaped pressure receptors for passive hydrodynamic sensing. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 056007.	1.5	24
81	Phase transformation in NiTiHf shape memory alloy thin films. <i>Thin Solid Films</i> , 2008, 516, 5393-5396.	0.8	23
82	Miniaturized chemical sensor with bio-inspired micropillar working electrode array for lead detection. <i>Sensors and Actuators B: Chemical</i> , 2016, 233, 249-256.	4.0	23
83	A Wideband Microfabricated Ka-Band Planar Helix Slow-Wave Structure. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 2900-2906.	1.6	23
84	Flexible liquid crystal polymer-based electrochemical sensor for in-situ detection of zinc(II) in seawater. <i>Mikrochimica Acta</i> , 2017, 184, 3007-3015.	2.5	23
85	Highlighting the uniqueness in dielectrophoretic enrichment of circulating tumor cells. <i>Electrophoresis</i> , 2019, 40, 1457-1477.	1.3	23
86	Deep implantation of nitrogen into GaAs for selective three-dimensional microstructuring. <i>Journal of Applied Physics</i> , 1992, 72, 2700-2704.	1.1	22
87	A MEMS Device for Studying the Friction Behavior of Micromachined Sidewall Surfaces. <i>Journal of Microelectromechanical Systems</i> , 2008, 17, 921-933.	1.7	22
88	Critical electrode size in measurement of d_{33} coefficient of films via spatial distribution of piezoelectric displacement. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 035306.	1.3	22
89	Biomimetic hydrogel-CNT network induced enhancement of fluid-structure interactions for ultrasensitive nanosensors. <i>NPG Asia Materials</i> , 2017, 9, e440-e440.	3.8	22
90	A wafer-scale encapsulated RF MEMS switch with a stress-reduced corrugated diaphragm. <i>Sensors and Actuators A: Physical</i> , 2009, 151, 237-243.	2.0	19

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91	A new sensor inspired by the lateral-line system of fish using the self-powered d33 mode piezoelectric diaphragm for hydrodynamic sensing. Mechanical Systems and Signal Processing, 2020, 141, 106476.	4.4	19
92	Local synthesis of aligned carbon nanotube bundle arrays by using integrated micro-heaters for interconnect applications. Nanotechnology, 2009, 20, 295303.	1.3	17
93	Piezoresistive Sensing Performance of Junctionless Nanowire FET. IEEE Electron Device Letters, 2012, 33, 1759-1761.	2.2	16
94	Effect of Clamping Ring Materials and Chuck Temperature on the Formation of Silicon Nanograss in Deep RIE. Journal of the Electrochemical Society, 2006, 153, G771.	1.3	15
95	Growth of horizontally aligned dense carbon nanotubes from trench sidewalls. Nanotechnology, 2011, 22, 265614.	1.3	15
96	Design of a Sheet-Beam Electron-Optical System for a Microfabricated π -Band Traveling-Wave Tube Using a Cold Cathode. IEEE Transactions on Electron Devices, 2016, 63, 3725-3732.	1.6	15
97	Harbor seal whisker inspired self-powered piezoelectric sensor for detecting the underwater flow angle of attack and velocity. Measurement: Journal of the International Measurement Confederation, 2021, 172, 108866.	2.5	15
98	Membrane microcantilever arrays fabrication with PZT thin films for nanorange movement. Microsystem Technologies, 2005, 11, 1121-1126.	1.2	14
99	Fabrication and characterization of DRIE-micromachined electrostatic microactuators for hard disk drives. Microsystem Technologies, 2006, 13, 11-19.	1.2	14
100	Whisker-like geometries and their force reduction properties. , 2013, , .		14
101	Localized synthesis of horizontally suspended carbon nanotubes. Carbon, 2013, 57, 259-266.	5.4	14
102	Oscillate Boiling from Electrical Microheaters. Physical Review Applied, 2018, 10, .	1.5	14
103	Reduction of diffraction effect for fabrication of very high aspect ratio microchannels in SU-8 over large area by soft cushion technology. Microsystem Technologies, 2005, 11, 519-525.	1.2	13
104	The stress analysis of Si MEMS devices by micro-Raman technique. Thin Solid Films, 2009, 517, 4905-4908.	0.8	13
105	Tunable piezoresistance and noise in gate-all-around nanowire field-effect-transistor. Applied Physics Letters, 2012, 100, 063106.	1.5	13
106	Large-Area Sub-Wavelength Optical Patterning via Long-Range Ordered Polymer Lens Array. ACS Applied Materials & Interfaces, 2016, 8, 16368-16378.	4.0	13
107	MEMS Tunable Diffraction Grating for Spaceborne Imaging Spectroscopic Applications. Sensors, 2017, 17, 2372.	2.1	13
108	A New Self-Powered Sensor Using the Radial Field Piezoelectric Diaphragm in d33 Mode for Detecting Underwater Disturbances. Sensors, 2019, 19, 962.	2.1	13

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109	Disk-like nanojets with steerable trajectory using platinum nozzle nanoengines. RSC Advances, 2016, 6, 3399-3405.	1.7	12
110	Microcantilever sensors with embedded piezoresistive transistor read-out: Design and characterization. Sensors and Actuators A: Physical, 2011, 171, 178-185.	2.0	11
111	Measurement of longitudinal piezoelectric coefficient of film with scanning-modulated interferometer. Sensors and Actuators A: Physical, 2006, 128, 327-332.	2.0	10
112	Deformation analysis in microstructures and micro-devices. Microelectronics Reliability, 2007, 47, 2226-2230.	0.9	10
113	Production of Centimeter-Scale Gradient Patterns by Graded Elastomeric Tip Array. ACS Applied Materials & Interfaces, 2015, 7, 6991-7000.	4.0	10
114	Electrochemically Fabricated High-Barrier Schottky Contacts on n-InP and Their Application for Metal-Semiconductor-Metal Photodetectors. Journal of the Electrochemical Society, 1996, 143, 1945-1948.	1.3	9
115	Elastic MEMS probe card based on the PDMS substrate. Journal of Micromechanics and Microengineering, 2010, 20, 055038.	1.5	9
116	Growth mechanism of carbon nanotubes: a nano Czochralski model. Nanoscale Research Letters, 2012, 7, 356.	3.1	9
117	Displacement and resonance behaviors of a piezoelectric diaphragm driven by a double-sided spiral electrode. Smart Materials and Structures, 2012, 21, 055001.	1.8	9
118	Investigation of a Thin-film Quasi-reference Electrode Fabricated by Combined Sputtering-evaporation Approach. Electroanalysis, 2019, 31, 560-566.	1.5	9
119	Fabrication of High Aspect Ratio 35 μm Pitch Interconnects for Next Generation 3-D Wafer-Level Packaging by Through-Wafer Copper Electroplating. , 0, , .		8
120	Effect of improved wettability of silicon-based materials with electrolyte for void free copper deposition in high aspect ratio through-vias. Thin Solid Films, 2008, 516, 5194-5200.	0.8	8
121	Spiral electrode d33 mode piezoelectric diaphragm combined with proof mass as energy harvester. Journal of Micromechanics and Microengineering, 2015, 25, 035004.	1.5	8
122	Enhanced Visualization of Fine Needles Under Sonographic Guidance Using a MEMS Actuator. Sensors, 2015, 15, 3107-3115.	2.1	8
123	Hydrogen-peroxide-fuelled platinum-nickel-SU-8 microrocket with steerable propulsion using an eccentric nanoengine. RSC Advances, 2016, 6, 102513-102518.	1.7	8
124	Investigation of Carbon Nanotube Growth on Multimetal Layers for Advanced Interconnect Applications in Microelectronic Devices. Journal of the Electrochemical Society, 2009, 156, K23.	1.3	7
125	Gate-bias-controlled sensitivity and SNR enhancement in a nanowire FET pressure sensor. Journal of Micromechanics and Microengineering, 2011, 21, 105007.	1.5	7
126	Proof mass effects on spiral electrode d33 mode piezoelectric diaphragm-based energy harvester. , 2013, , .		7

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127	Biotin-Streptavidin Binding Interactions of Dielectric Filled Silicon Bulk Acoustic Resonators for Smart Label-Free Biochemical Sensor Applications. <i>Sensors</i> , 2014, 14, 4585-4598.	2.1	7
128	Production of centimeter-scale sub-wavelength nanopatterns by controlling the light path of adhesive photomasks. <i>Journal of Materials Chemistry C</i> , 2015, 3, 6796-6808.	2.7	7
129	Nanoparticles-Modified Chemical Sensor Fabricated on a Flexible Polymer Substrate for Cadmium(II) Detection. <i>Polymers</i> , 2018, 10, 694.	2.0	7
130	Engineering biomimetic hair bundle sensors for underwater sensing applications. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	7
131	Designing and modelling of a grating-based displacement micro-transducer. <i>Nanotechnology</i> , 2001, 12, 308-315.	1.3	6
132	Micromachining of three-dimensional GaAs membrane structures using high-energy nitrogen implantation. <i>Journal of Micromechanics and Microengineering</i> , 2003, 13, 35-39.	1.5	6
133	Synthesis of regular nano-pitched carbon nanotube array by using nanosphere lithography for interconnect applications. <i>Materials Letters</i> , 2009, 63, 867-869.	1.3	6
134	Design and Fabrication of a Stretchable Circuit Board for Wireless Posture Measurement. <i>IEEE Electron Device Letters</i> , 2017, 38, 399-402.	2.2	6
135	Flexible Hydrogel Capacitive Pressure Sensor for Underwater Applications. <i>Proceedings (mdpi)</i> , 2017, 1, .	0.2	6
136	In-phase synchronization between two auto-oscillating bubbles. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	6
137	Study on convex-corner undercutting formed by masked-maskless etching in aqueous KOH. <i>Journal of Micromechanics and Microengineering</i> , 2000, 10, 309-313.	1.5	5
138	<title>Characterization of microstructures with in-line digital micro-holo-interferometry</title>. , 2001, 4275, 53.		5
139	Wafer-level packaging of pressure sensor using SU8 photoresist. , 2005, , .		5
140	Analysis of highly doping with boron from spin-on diffusing source. <i>Surface and Coatings Technology</i> , 2005, 198, 309-313.	2.2	5
141	Biosensors based on flexural mode piezo-diaphragm. , 2008, , .		5
142	Modified Åkvor/Starr approach in the mechanical-thermal noise analysis of condenser microphone. <i>Journal of the Acoustical Society of America</i> , 2009, 126, 2301-2305.	0.5	5
143	Mechanical and Microstructural Characterization of Through-Silicon Via Fabricated with Constant Current Pulse-Reverse Modulation. <i>Journal of the Electrochemical Society</i> , 2010, 157, D323.	1.3	5
144	Electrospun polyvinylidene fluoride nanofiber mats for self-powered sensors. , 2017, , .		5

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145	MEMS/NEMS-Enabled Energy Harvesters as Self-Powered Sensors. SpringerBriefs in Applied Sciences and Technology, 2019, , 1-30.	0.2	5
146	Self-Steerable Propulsion of Disk-Like Micro-Craft with Dual Off-Center Nanoengines. ACS Applied Energy Materials, 2019, 2, 1657-1662.	2.5	5
147	<title>NiTi shape memory alloy thin film based microgripper</title>. , 2001, , .		4
148	Digital microholointerferometer: development and validation. Optical Engineering, 2003, 42, 2218.	0.5	4
149	High-energy ion implantation: an alternative technology for micromachining three-dimensional GaAs structures. Sensors and Actuators A: Physical, 2004, 114, 505-509.	2.0	4
150	Friction characteristics of the curved sidewall surfaces of a rotary MEMS device in oscillating motion. Journal of Micromechanics and Microengineering, 2009, 19, 065020.	1.5	4
151	Facile growth of horizontally suspended carbon nanotubes. Materials Letters, 2012, 81, 165-168.	1.3	4
152	Out-of-plane micro triple-hot-wire anemometer based on Pyrex bubble for airflow sensing. , 2014, , .		4
153	MEMS artificial neuromast arrays for hydrodynamic control of soft-robots. , 2016, , .		4
154	Characterization on Three-dimensional Trajectory of Disk-like Gold-Nickel-Platinum Nanomotor Using Digital Holographic Imaging. ChemistrySelect, 2018, 3, 9634-9640.	0.7	4
155	Three-dimensional hierarchical and superhydrophobic graphene gas sensor with good immunity to humidity. , 2018, , .		4
156	Integrated RF MEMS inductors on thick silicon oxide layers fabricated using SiDeox process. , 0, , .		3
157	DYNAMIC BEHAVIORS OF HIGH-G MEMS ACCELEROMETER INCORPORATED WITH NOVEL MICRO-FLEXURES. International Journal of Software Engineering and Knowledge Engineering, 2005, 15, 225-230.	0.6	3
158	Modeling of Carbon Nanotube Vertical Interconnects as Transmission Lines. , 0, , .		3
159	Deep wet etching-through 1mm pyrex glass wafer for microfluidic applications. , 2007, , .		3
160	Characterization of Nano-grained High Aspect Ratio Through-wafer Copper Interconnect Column. , 2007, , .		3
161	Design optimization of condenser microphone: A design of experiment perspective. Journal of the Acoustical Society of America, 2009, 125, 3641-3649.	0.5	3
162	Fabrication of carbon-nanotube enhanced piezoelectric membrane for biosensor application. International Journal of Nanotechnology, 2009, 6, 762.	0.1	3

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163	Reduction of squeeze-film damping in a wafer-level encapsulated RF MEMS DC shunt switch. <i>Sensors and Actuators A: Physical</i> , 2011, 171, 118-125.	2.0	3
164	Polymer MEMS sensor for flow monitoring in biomedical device applications. , 2017, , .		3
165	Hemispherical array of sensors with contractively wrapped polymer petals for flow sensing. <i>Smart Materials and Structures</i> , 2017, 26, 115008.	1.8	3
166	Flexible Graphitized Polyacrylonitrile Nanofiber Bundles for Strain Sensors. , 2018, , .		3
167	Deep nitrogen implantation for GaAs microstructuring using pulsed electrochemical etching. <i>Journal of Applied Physics</i> , 2002, 92, 2923-2928.	1.1	2
168	A new design of electrostatic microactuator for hard disk drives. , 0, , .		2
169	A novel silicon-based CBCPW-fed CBCPS ring resonator. , 0, , .		2
170	Hybrid analysis of micromachined silicon thin film based on digital microscopic holography. , 2004, , .		2
171	Characterization of deep wet etching of glass. , 2005, 6037, 77.		2
172	A miniaturized silicon-based ground Ring Guarded patch resonator and filter. <i>IEEE Microwave and Wireless Components Letters</i> , 2005, 15, 478-480.	2.0	2
173	Concept and Analytical analysis of Silicon micro/nanopillars based 3-D stacked microchannel heat sink for advanced heat dissipation applications. , 2007, , .		2
174	Performance Enhancement by Substrate Perforation for a Wafer-Level Encapsulated RF MEMS DC Shunt Switch. , 2009, , .		2
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