

# Jianmin Miao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

196  
papers

5,035  
citations

38  
h-index

63  
g-index

240  
ext. papers

6,000  
ext. citations

4  
avg, IF

5.76  
L-index

#	Paper	IF	Citations
196	Harbor seal whisker inspired self-powered piezoelectric sensor for detecting the underwater flow angle of attack and velocity. <i>Measurement: Journal of the International Measurement Confederation</i> , <b>2021</b> , 172, 108866	4.6	4
195	A new sensor inspired by the lateral-line system of fish using the self-powered d33 mode piezoelectric diaphragm for hydrodynamic sensing. <i>Mechanical Systems and Signal Processing</i> , <b>2020</b> , 141, 106476	7.8	7
194	PVDF Nanofiber Sensor for Vibration Measurement in a String. <i>Sensors</i> , <b>2019</b> , 19,	3.8	16
193	ŞKaŞ -Band Symmetric V-Shaped Meander-Line Slow Wave Structure. <i>IEEE Transactions on Plasma Science</i> , <b>2019</b> , 47, 4650-4657	1.3	17
192	An intrinsically stretchable humidity sensor based on anti-drying, self-healing and transparent organohydrogels. <i>Materials Horizons</i> , <b>2019</b> , 6, 595-603	14.4	178
191	Highlighting the uniqueness in dielectrophoretic enrichment of circulating tumor cells. <i>Electrophoresis</i> , <b>2019</b> , 40, 1457-1477	3.6	12
190	A flyover style microfluidic chip for highly purified magnetic cell separation. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 129, 175-181	11.8	31
189	Gravity-Independent Oscillate Boiling. <i>Microgravity Science and Technology</i> , <b>2019</b> , 31, 767-773	1.6	0
188	A New Self-Powered Sensor Using the Radial Field Piezoelectric Diaphragm in d Mode for Detecting Underwater Disturbances. <i>Sensors</i> , <b>2019</b> , 19,	3.8	8
187	In-phase synchronization between two auto-oscillating bubbles. <i>Physical Review Fluids</i> , <b>2019</b> , 4,	2.8	3
186	MEMS/NEMS-Enabled Energy Harvesters as Self-Powered Sensors. <i>SpringerBriefs in Applied Sciences and Technology</i> , <b>2019</b> , 1-30	0.4	3
185	Ultrastretchable and Stable Strain Sensors Based on Antifreezing and Self-Healing Ionic Organohydrogels for Human Motion Monitoring. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 9405-9414	9.5	175
184	Self-Steerable Propulsion of Disk-Like Micro-Craft with Dual Off-Center Nanoengines. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 1657-1662	6.1	4
183	Extremely Deformable, Transparent, and High-Performance Gas Sensor Based on Ionic Conductive Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 2364-2373	9.5	124
182	Diffraction grating integrated on micromachined stepper motor for diversity implementation in imaging spectroscopy <b>2018</b> ,		1
181	On-Wafer Microstrip Meander-Line Slow-Wave Structure at Ka-Band. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 2142-2148	2.9	23
180	3D superhydrophobic reduced graphene oxide for activated NO <sub>2</sub> sensing with enhanced immunity to humidity. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 478-488	13	84

179	Optimized Polyvinylidene Fluoride Nanofiber Webs for Flexible Energy Harvesters. <i>Proceedings (mdpi)</i> , <b>2018</b> , 2, 857	0.3	1
178	Flexible Graphitized Polyacrylonitrile Nanofiber Bundles for Strain Sensors <b>2018</b> ,		2
177	Investigation of a Thin-film Quasi-reference Electrode Fabricated by Combined Sputtering-evaporation Approach. <i>Electroanalysis</i> , <b>2018</b> , 31, 560	3	2
176	Hydrogel-CNT Biomimetic Cilia for Flow Sensing <b>2018</b> ,		2
175	In-plane Rotational Tuning of Polymer Diffraction Grating for Diverse Imaging Spectroscopy <b>2018</b> ,		1
174	Nanoparticles-Modified Chemical Sensor Fabricated on a Flexible Polymer Substrate for Cadmium(II) Detection. <i>Polymers</i> , <b>2018</b> , 10,	4.5	5
173	Oscillate Boiling from Electrical Microheaters. <i>Physical Review Applied</i> , <b>2018</b> , 10,	4.3	10
172	Wafer-Level Integration of Replicated Polymer Micro-Optics With Micromechanical Systems. <i>IEEE Photonics Technology Letters</i> , <b>2018</b> , 30, 2017-2020	2.2	1
171	Characterization on Three-Dimensional Trajectory of Disk-Like Gold-Nickel-Platinum Nanomotor Using Digital Holographic Imaging. <i>ChemistrySelect</i> , <b>2018</b> , 3, 9634-9640	1.8	3
170	Three-dimensional hierarchical and superhydrophobic graphene gas sensor with good immunity to humidity <b>2018</b> ,		4
169	Highly Stretchable and Transparent Thermistor Based on Self-Healing Double Network Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 19097-19105	9.5	119
168	Engineering biomimetic hair bundle sensors for underwater sensing applications <b>2018</b> ,		7
167	Design and Fabrication of a Stretchable Circuit Board for Wireless Posture Measurement. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 399-402	4.4	5
166	Enhanced electrostatic vibrational energy harvesting using integrated opposite-charged electrets. <i>Journal of Micromechanics and Microengineering</i> , <b>2017</b> , 27, 044002	2	32
165	MEMS/NEMS-Enabled Vibrational Energy Harvesting for Self-Powered and Wearable Electronics <b>2017</b> , 271-297		1
164	Polymer MEMS sensor for flow monitoring in biomedical device applications <b>2017</b> ,		2
163	Flexible liquid crystal polymer-based electrochemical sensor for in-situ detection of zinc(II) in seawater. <i>Mikrochimica Acta</i> , <b>2017</b> , 184, 3007-3015	5.8	20
162	Fabrication and performance characterization of miniature axial fans. <i>Microsystem Technologies</i> , <b>2017</b> , 23, 5717-5725	1.7	

161	MEMS Tunable Diffraction Grating for Spaceborne Imaging Spectroscopic Applications. <i>Sensors</i> , <b>2017</b> , 17,	3.8	12
160	Hemispherical array of sensors with contractively wrapped polymer petals for flow sensing. <i>Smart Materials and Structures</i> , <b>2017</b> , 26, 115008	3.4	2
159	Biomimetic hydrogel-CNT network induced enhancement of fluid-structure interactions for ultrasensitive nanosensors. <i>NPG Asia Materials</i> , <b>2017</b> , 9, e440-e440	10.3	18
158	Electrospun polyvinylidene fluoride nanofiber mats for self-powered sensors <b>2017</b> ,		3
157	Flexible Hydrogel Capacitive Pressure Sensor for Underwater Applications. <i>Proceedings (mdpi)</i> , <b>2017</b> , 1, 360	0.3	5
156	Cupula-Inspired Hyaluronic Acid-Based Hydrogel Encapsulation to Form Biomimetic MEMS Flow Sensors. <i>Sensors</i> , <b>2017</b> , 17,	3.8	13
155	Biomimetic Survival Hydrodynamics and Flow Sensing. <i>Annual Review of Fluid Mechanics</i> , <b>2016</b> , 48, 1-24	22	65
154	Development of a MEMS-based electrochemical aptasensor for norovirus detection. <i>Micro and Nano Letters</i> , <b>2016</b> , 11, 582-585	0.9	15
153	Crocodile-inspired dome-shaped pressure receptors for passive hydrodynamic sensing. <i>Bioinspiration and Biomimetics</i> , <b>2016</b> , 11, 056007	2.6	16
152	Facile Synthesis of 3D Graphene Flowers for Ultrasensitive and Highly Reversible Gas Sensing. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 7462-7469	15.6	116
151	From Biological Cilia to Artificial Flow Sensors: Biomimetic Soft Polymer Nanosensors with High Sensing Performance. <i>Scientific Reports</i> , <b>2016</b> , 6, 32955	4.9	82
150	Hydrogen-peroxide-fuelled platinum–nickel–Cu–8 microrocket with steerable propulsion using an eccentric nanoengine. <i>RSC Advances</i> , <b>2016</b> , 6, 102513-102518	3.7	5
149	A Wideband Microfabricated Ka-Band Planar Helix Slow-Wave Structure. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2900-2906	2.9	15
148	Large-Area Sub-Wavelength Optical Patterning via Long-Range Ordered Polymer Lens Array. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 16368-78	9.5	10
147	A novel two-degree-of-freedom MEMS electromagnetic vibration energy harvester. <i>Journal of Micromechanics and Microengineering</i> , <b>2016</b> , 26, 035020	2	62
146	Disk-like nanojets with steerable trajectory using platinum nozzle nanoengines. <i>RSC Advances</i> , <b>2016</b> , 6, 3399-3405	3.7	10
145	Nanofibril scaffold assisted MEMS artificial hydrogel neuromasts for enhanced sensitivity flow sensing. <i>Scientific Reports</i> , <b>2016</b> , 6, 19336	4.9	60
144	MEMS artificial neuromast arrays for hydrodynamic control of soft-robots <b>2016</b> ,		4

143	Biomimetic flow sensors for biomedical flow sensing in intravenous tubes <b>2016</b> ,		1
142	Chemically functionalized 3D graphene hydrogel for high performance gas sensing. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 8130-8140	13	84
141	Miniaturized chemical sensor with bio-inspired micropillar working electrode array for lead detection. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 233, 249-256	8.5	18
140	Design of a Sheet-Beam Electron-Optical System for a Microfabricated $\text{W}\text{W}\text{S}$ -Band Traveling-Wave Tube Using a Cold Cathode. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 3725-3732	2.9	12
139	Spiral electrode d33 mode piezoelectric diaphragm combined with proof mass as energy harvester. <i>Journal of Micromechanics and Microengineering</i> , <b>2015</b> , 25, 035004	2	6
138	Enhanced visualization of fine needles under sonographic guidance using a MEMS actuator. <i>Sensors</i> , <b>2015</b> , 15, 3107-15	3.8	7
137	Production of centimeter-scale gradient patterns by graded elastomeric tip array. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6991-7000	9.5	8
136	Design and implementation of an out-of-plane electrostatic vibration energy harvester with dual-charged electret plates. <i>Microelectronic Engineering</i> , <b>2015</b> , 135, 32-37	2.5	37
135	Improved Selectivity and Sensitivity of Gas Sensing Using a 3D Reduced Graphene Oxide Hydrogel with an Integrated Microheater. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 27502-10	9.5	108
134	MEMS sensors for assessing flow-related control of an underwater biomimetic robotic stingray. <i>Bioinspiration and Biomimetics</i> , <b>2015</b> , 10, 036008	2.6	34
133	Sandwich-structured two-dimensional MEMS electret power generator for low-level ambient vibrational energy harvesting. <i>Sensors and Actuators A: Physical</i> , <b>2015</b> , 228, 95-103	3.9	40
132	Production of centimeter-scale sub-wavelength nanopatterns by controlling the light path of adhesive photomasks. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 6796-6808	7.1	5
131	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> , <b>2015</b> , 26, 38-46	2.3	32
130	Artificial fish skin of self-powered micro-electromechanical systems hair cells for sensing hydrodynamic flow phenomena. <i>Journal of the Royal Society Interface</i> , <b>2015</b> , 12, 20150322	4.1	82
129	Microstructural investigation of through-silicon via fabrication by pulse-reverse electroplating for high density nanoelectronics. <i>International Journal of Nanotechnology</i> , <b>2014</b> , 11, 178	1.5	
128	Horizontally suspended carbon nanotube bundles patterned on silicon trench sidewalls. <i>International Journal of Nanotechnology</i> , <b>2014</b> , 11, 222	1.5	1
127	Charging and characterization of non-patterned organic micro electret arrays. <i>Journal of Micromechanics and Microengineering</i> , <b>2014</b> , 24, 085004	2	
126	A three-dimensional electret-based micro power generator for low-level ambient vibrational energy harvesting. <i>Journal of Micromechanics and Microengineering</i> , <b>2014</b> , 24, 065022	2	41

125	Touch at a distance sensing: lateral-line inspired MEMS flow sensors. <i>Bioinspiration and Biomimetics</i> , <b>2014</b> , 9, 046011	2.6	40
124	Biotin-streptavidin binding interactions of dielectric filled silicon bulk acoustic resonators for smart label-free biochemical sensor applications. <i>Sensors</i> , <b>2014</b> , 14, 4585-98	3.8	6
123	<b>2014</b> ,		4
122	Flexible and Surface-Mountable Piezoelectric Sensor Arrays for Underwater Sensing in Marine Vehicles. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 3918-3925	4	70
121	Proof mass effects on spiral electrode d33 mode piezoelectric diaphragm-based energy harvester <b>2013</b> ,		5
120	Whisker-like geometries and their force reduction properties <b>2013</b> ,		7
119	d33 mode piezoelectric diaphragm based acoustic transducer with high sensitivity. <i>Sensors and Actuators A: Physical</i> , <b>2013</b> , 189, 93-99	3.9	20
118	Void formation over limiting current density and impurity analysis of TSV fabricated by constant-current pulse-reverse modulation. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 1943-1953	1.2	23
117	Localized synthesis of horizontally suspended carbon nanotubes. <i>Carbon</i> , <b>2013</b> , 57, 259-266	10.4	11
116	Electrokinetic Transport of Microparticles in the Microfluidic Enclosure Domain <b>2013</b> , 319-326		
115	High Sensitivity, Miniature, Full 2-D Anemometer Based on MEMS Hot-Film Sensors. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 1914-1920	4	40
114	Giant Flexoelectric Polarization in a Micromachined Ferroelectric Diaphragm. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 124-132	15.6	38
113	Through-silicon via fabrication with pulse-reverse electroplating for high density nanoelectronics <b>2013</b> ,		2
112	Facile growth of horizontally suspended carbon nanotubes. <i>Materials Letters</i> , <b>2012</b> , 81, 165-168	3.3	2
111	Growth mechanism of carbon nanotubes: a nano Czochralski model. <i>Nanoscale Research Letters</i> , <b>2012</b> , 7, 356	5	7
110	Piezoresistive Sensing Performance of Junctionless Nanowire FET. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1759-1761	4.4	6
109	Displacement and resonance behaviors of a piezoelectric diaphragm driven by a double-sided spiral electrode. <i>Smart Materials and Structures</i> , <b>2012</b> , 21, 055001	3.4	8
108	A practical guide for the fabrication of microfluidic devices using glass and silicon. <i>Biomicrofluidics</i> , <b>2012</b> , 6, 16505-1650516	3.2	224

107	Tunable piezoresistance and noise in gate-all-around nanowire field-effect-transistor. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 063106	3.4	11
106	Gate-All-Around Junctionless Nanowire MOSFET With Improved Low-Frequency Noise Behavior. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 1752-1754	4.4	57
105	Temperature control of microheaters for localized carbon nanotube synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2011</b> , 11, 10498-502	1.3	
104	Investigation of influence of synthesis parameters on length and purity of the carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2011</b> , 11, 10682-6	1.3	
103	Reduction of squeeze-film damping in a wafer-level encapsulated RF MEMS DC shunt switch. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 171, 118-125	3.9	2
102	Microcantilever sensors with embedded piezoresistive transistor read-out: Design and characterization. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 171, 178-185	3.9	7
101	Micro-piezoelectric immunoassay chip for simultaneous detection of Hepatitis B virus and $\beta$ -fetoprotein. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 151, 370-376	8.5	29
100	Growth of horizontally aligned dense carbon nanotubes from trench sidewalls. <i>Nanotechnology</i> , <b>2011</b> , 22, 265614	3.4	12
99	Gate-bias-controlled sensitivity and SNR enhancement in a nanowire FET pressure sensor. <i>Journal of Micromechanics and Microengineering</i> , <b>2011</b> , 21, 105007	2	4
98	Mechanical and Microstructural Characterization of Through-Silicon Via Fabricated with Constant Current Pulse-Reverse Modulation. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, D323	3.9	5
97	Elastic MEMS probe card based on the PDMS substrate. <i>Journal of Micromechanics and Microengineering</i> , <b>2010</b> , 20, 055038	2	8
96	Investigation of influence of synthesis parameters on length and purity of the CNTs grown by thermal chemical vapor deposition <b>2010</b> ,		1
95	Fabrication of piezoelectric MEMS devices-from thin film to bulk PZT wafer. <i>Journal of Electroceramics</i> , <b>2010</b> , 24, 25-32	1.5	38
94	Modified Skvor/Starr approach in the mechanical-thermal noise analysis of condenser microphone. <i>Journal of the Acoustical Society of America</i> , <b>2009</b> , 126, 2301-5	2.2	5
93	Local synthesis of aligned carbon nanotube bundle arrays by using integrated micro-heaters for interconnect applications. <i>Nanotechnology</i> , <b>2009</b> , 20, 295303	3.4	15
92	Investigation of Carbon Nanotube Growth on Multimetal Layers for Advanced Interconnect Applications in Microelectronic Devices. <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, K23	3.9	4
91	Synthesis of regular nano-pitched carbon nanotube array by using nanosphere lithography for interconnect applications. <i>Materials Letters</i> , <b>2009</b> , 63, 867-869	3.3	5
90	Enhancement of electrokinetically driven microfluidic T-mixer using frequency modulated electric field and channel geometry effects. <i>Electrophoresis</i> , <b>2009</b> , 30, 3144-52	3.6	36

89	A wafer-scale encapsulated RF MEMS switch with a stress-reduced corrugated diaphragm. <i>Sensors and Actuators A: Physical</i> , <b>2009</b> , 151, 237-243	3.9	17
88	The stress analysis of Si MEMS devices by micro-Raman technique. <i>Thin Solid Films</i> , <b>2009</b> , 517, 4905-4908	2.2	10
87	Optimization of sputtered Cr/Au thin film for diaphragm-based MEMS applications. <i>Thin Solid Films</i> , <b>2009</b> , 517, 4921-4925	2.2	41
86	Acoustic transducers with a perforated damping backplate based on PZT/silicon wafer bonding technique. <i>Sensors and Actuators A: Physical</i> , <b>2009</b> , 149, 277-283	3.9	34
85	Probing charged impurities in suspended graphene using Raman spectroscopy. <i>ACS Nano</i> , <b>2009</b> , 3, 569-746	4.7	177
84	Self-assembled ferrofluid lithography: patterning micro and nanostructures by controlling magnetic nanoparticles. <i>Nanotechnology</i> , <b>2009</b> , 20, 495301	3.4	22
83	Friction characteristics of the curved sidewall surfaces of a rotary MEMS device in oscillating motion. <i>Journal of Micromechanics and Microengineering</i> , <b>2009</b> , 19, 065020	2	4
82	Performance Enhancement by Substrate Perforation for a Wafer-Level Encapsulated RF MEMS DC Shunt Switch <b>2009</b> ,		1
81	Design optimization of condenser microphone: a design of experiment perspective. <i>Journal of the Acoustical Society of America</i> , <b>2009</b> , 125, 3641-9	2.2	2
80	Fabrication of carbon-nanotube enhanced piezoelectric membrane for biosensor application. <i>International Journal of Nanotechnology</i> , <b>2009</b> , 6, 762	1.5	1
79	Fabrication of Si microstructures using focused ion beam implantation and reactive ion etching. <i>Journal of Micromechanics and Microengineering</i> , <b>2008</b> , 18, 035003	2	34
78	Numerical and Experimental Investigation of Thermomechanical Deformation in High-Aspect-Ratio Electroplated Through-Silicon Vias. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, H981	3.9	29
77	Biosensors based on flexural mode piezo-diaphragm <b>2008</b> ,		3
76	A MEMS Device for Studying the Friction Behavior of Micromachined Sidewall Surfaces. <i>Journal of Microelectromechanical Systems</i> , <b>2008</b> , 17, 921-933	2.5	21
75	Critical electrode size in measurement of coefficient of films via spatial distribution of piezoelectric displacement. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 035306	3	19
74	Structure and migration of (112) step on (111) twin boundaries in nanocrystalline copper. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 113717	2.5	37
73	High Aspect Ratio Vertical Through-Vias for 3D MEMS Packaging Applications by Optimized Three-Step Deep RIE. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, H85	3.9	34
72	A Ruthenium-Based Multimetal-Contact RF MEMS Switch With a Corrugated Diaphragm. <i>Journal of Microelectromechanical Systems</i> , <b>2008</b> , 17, 1447-1459	2.5	57



71	Silicon nanopillars based 3D stacked microchannel heat sinks concept for enhanced heat dissipation applications in MEMS packaging. <i>Sensors and Actuators A: Physical</i> , <b>2008</b> , 141, 685-694	3.9	31
70	On the wet etching of Pyrex glass. <i>Sensors and Actuators A: Physical</i> , <b>2008</b> , 143, 154-161	3.9	103
69	Effect of improved wettability of silicon-based materials with electrolyte for void free copper deposition in high aspect ratio through-vias. <i>Thin Solid Films</i> , <b>2008</b> , 516, 5194-5200	2.2	7
68	Micromachined ultrasonic transducers and arrays based on piezoelectric thick film. <i>Applied Physics A: Materials Science and Processing</i> , <b>2008</b> , 91, 107-117	2.6	28
67	Micro-machined piezoelectric membrane-based immunosensor array. <i>Biosensors and Bioelectronics</i> , <b>2008</b> , 24, 638-43	11.8	42
66	Phase transformation in NiTiHf shape memory alloy thin films. <i>Thin Solid Films</i> , <b>2008</b> , 516, 5393-5396	2.2	21
65	Study of surface treatment processes for improvement in the wettability of silicon-based materials used in high aspect ratio through-via copper electroplating. <i>Applied Surface Science</i> , <b>2007</b> , 253, 8637-8646	6.7	30
64	Dynamic characterization of MEMS diaphragm using time averaged in-line digital holography. <i>Optics Communications</i> , <b>2007</b> , 280, 285-290	2	31
63	Piezoelectric thick films and their application in MEMS. <i>Journal of the European Ceramic Society</i> , <b>2007</b> , 27, 3759-3764	6	29
62	Strategies in deep wet etching of Pyrex glass. <i>Sensors and Actuators A: Physical</i> , <b>2007</b> , 133, 395-400	3.9	55
61	Deformation analysis in microstructures and micro-devices. <i>Microelectronics Reliability</i> , <b>2007</b> , 47, 2226-2230	10	
60	A study on the viscous damping effect for diaphragm-based acoustic MEMS applications. <i>Journal of Micromechanics and Microengineering</i> , <b>2007</b> , 17, 2253-2263	2	23
59	Aligned carbon nanotubes for through-wafer interconnects. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 042108	3.4	59
58	Concept and Analytical analysis of Silicon micro/nanopillars based 3-D stacked microchannel heat sink for advanced heat dissipation applications <b>2007</b> ,		1
57	Through-wafer electroplated copper interconnect with ultrafine grains and high density of nanotwins. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 033111	3.4	63
56	Deep wet etching-through 1mm pyrex glass wafer for microfluidic applications <b>2007</b> ,		1
55	Fabrication and characterization of fine pitch on-chip copper interconnects for advanced wafer level packaging by a high aspect ratio through AZ9260 resist electroplating. <i>Journal of Micromechanics and Microengineering</i> , <b>2007</b> , 17, 1078-1086	2	61
54	Influence of deep RIE tolerances on comb-drive actuator performance. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 970-976	3	19

53	Mechanical and microstructural characterization of high aspect ratio through-wafer electroplated copper interconnects. <i>Journal of Micromechanics and Microengineering</i> , <b>2007</b> , 17, 1749-1757	2	33
52	Characterization of Nano-grained High Aspect Ratio Through-wafer Copper Interconnect Column <b>2007</b> ,		2
51	Analytical modeling for bulk-micromachined condenser microphones. <i>Journal of the Acoustical Society of America</i> , <b>2006</b> , 120, 750-761	2.2	23
50	Effect of Clamping Ring Materials and Chuck Temperature on the Formation of Silicon Nanograss in Deep RIE. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, G771	3.9	13
49	Fabrication of High Aspect Ratio 35 $\mu$ m Pitch Through-Wafer Copper Interconnects by Electroplating for 3-D Wafer Stacking. <i>Electrochemical and Solid-State Letters</i> , <b>2006</b> , 9, G305		30
48	Mechanical and microstructure characterization of high aspect ratio electroplated through-wafer copper interconnects <b>2006</b> ,		1
47	Effect of SF6 flow rate on the etched surface profile and bottom grass formation in deep reactive ion etching process. <i>Journal of Physics: Conference Series</i> , <b>2006</b> , 34, 577-582	0.3	31
46	Microfabricated microneedle with porous tip for drug delivery. <i>Journal of Micromechanics and Microengineering</i> , <b>2006</b> , 16, 958-964	2	61
45	Enhanced analytical model for micromachined microphones. <i>Journal of Physics: Conference Series</i> , <b>2006</b> , 34, 847-852	0.3	0
44	Micromachined thick film piezoelectric ultrasonic transducer array. <i>Sensors and Actuators A: Physical</i> , <b>2006</b> , 130-131, 485-490	3.9	36
43	Measurement of longitudinal piezoelectric coefficient of film with scanning-modulated interferometer. <i>Sensors and Actuators A: Physical</i> , <b>2006</b> , 128, 327-332	3.9	7
42	Aspect-Ratio-Dependent Copper Electrodeposition Technique for Very High Aspect-Ratio Through-Hole Plating. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, G552	3.9	107
41	Defect-free wet etching through pyrex glass using Cr/Au mask. <i>Microsystem Technologies</i> , <b>2006</b> , 12, 935-939	2.7	50
40	Fabrication and characterization of DRIE-micromachined electrostatic microactuators for hard disk drives. <i>Microsystem Technologies</i> , <b>2006</b> , 13, 11-19	1.7	14
39	A miniaturized silicon-based ground Ring Guarded patch resonator and filter. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2005</b> , 15, 478-480	2.6	2
38	Fabrication and characterization of piezoelectric micromachined ultrasonic transducers with thick composite PZT films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2005</b> , 52, 2289-97	3.2	35
37	Imaging analysis of digital holography. <i>Optics Express</i> , <b>2005</b> , 13, 2444-52	3.3	83
36	Wafer-level packaging of pressure sensor using SU8 photoresist <b>2005</b> ,		4

35	Stress control in masking layers for deep wet micromachining of Pyrex glass. <i>Sensors and Actuators A: Physical</i> , <b>2005</b> , 117, 286-292	3.9	47
34	Optimization of an amorphous silicon mask PECVD process for deep wet etching of Pyrex glass. <i>Surface and Coatings Technology</i> , <b>2005</b> , 192, 43-47	4.4	25
33	Analysis of highly doping with boron from spin-on diffusing source. <i>Surface and Coatings Technology</i> , <b>2005</b> , 198, 309-313	4.4	4
32	Characterization of masking layers for deep wet etching of glass in an improved HF/HCl solution. <i>Surface and Coatings Technology</i> , <b>2005</b> , 198, 314-318	4.4	128
31	Characterization of a nanocrystalline NiTiHf high temperature shape memory alloy thin film. <i>Scripta Materialia</i> , <b>2005</b> , 52, 983-987	5.6	36
30	Membrane microcantilever arrays fabrication with PZT thin films for nanorange movement. <i>Microsystem Technologies</i> , <b>2005</b> , 11, 1121-1126	1.7	12
29	Reduction of diffraction effect for fabrication of very high aspect ratio microchannels in SU-8 over large area by soft cushion technology. <i>Microsystem Technologies</i> , <b>2005</b> , 11, 519-525	1.7	10
28	Characterization of deep wet etching of glass <b>2005</b> , 6037, 77		1
27	Ultrasound radiating performances of piezoelectric micromachined ultrasonic transmitter. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 033508	3.4	25
26	NANOTIPS COLD-END CONTACT FOR MICROCOOLING SYSTEMS. <i>International Journal of Nanoscience</i> , <b>2005</b> , 04, 701-707	0.6	
25	DYNAMIC BEHAVIORS OF HIGH-G MEMS ACCELEROMETER INCORPORATED WITH NOVEL MICRO-FLEXURES. <i>International Journal of Software Engineering and Knowledge Engineering</i> , <b>2005</b> , 15, 225-230	1	3
24	Preparation of BST ferroelectric thin film by metal organic decomposition for infrared sensor. <i>Sensors and Actuators A: Physical</i> , <b>2004</b> , 110, 371-377	3.9	29
23	High-energy ion implantation: an alternative technology for micromachining three-dimensional GaAs structures. <i>Sensors and Actuators A: Physical</i> , <b>2004</b> , 114, 505-509	3.9	4
22	Hybrid analysis of micromachined silicon thin film based on digital microscopic holography <b>2004</b> ,		2
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19	Digital microholointerferometer: development and validation. <i>Optical Engineering</i> , <b>2003</b> , 42, 2218	1.1	4
18	Design considerations in micromachined silicon microphones. <i>Microelectronics Journal</i> , <b>2002</b> , 33, 21-28	1.8	44

17	Deep nitrogen implantation for GaAs microstructuring using pulsed electrochemical etching. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 2923-2928	2.5	1
16	Development and validation of digital microholographic interferometric system for micromechanical testing <b>2002</b> , 4778, 11		1
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9	Patterning of diamond microstructures on Si substrate by bulk and surface micromachining <b>2000</b> , 4230, 164		
8	Study on convex-corner undercutting formed by masked-maskless etching in aqueous KOH. <i>Journal of Micromechanics and Microengineering</i> , <b>2000</b> , 10, 309-313	2	5
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6	Buried selectively etchable microstructures in GaAs using deep nitrogen implantation. <i>Radiation Effects and Defects in Solids</i> , <b>1993</b> , 126, 365-368	0.9	
5	Deep implantation of nitrogen into GaAs for selective three-dimensional microstructuring. <i>Journal of Applied Physics</i> , <b>1992</b> , 72, 2700-2704	2.5	19
4	Fabrication of high aspect ratio 35 $\mu\text{m}/\text{m}$ pitch interconnects for next generation 3-D wafer level packaging by through-wafer copper electroplating		5
3	Modeling of Carbon Nanotube Vertical Interconnects as Transmission Lines		3
2	Integrated RF MEMS inductors on thick silicon oxide layers fabricated using SiDeox process		2
1	A new design of electrostatic microactuator for hard disk drives		1