Toshiyuki Tsuchiya

List of Publications by Citations

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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.

199 papers

1,652 citations

19 h-index

35 g-index

250 ext. papers

1,955 ext. citations

1.8 avg, IF

4.55 L-index

#	Paper	IF	Citations
199	Specimen size effect on tensile strength of surface-micromachined polycrystalline silicon thin films. <i>Journal of Microelectromechanical Systems</i> , 1998 , 7, 106-113	2.5	272
198	Moving mask UV lithography for three-dimensional structuring. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, 199-206	2	98
197	Tensile testing of insulating thin films; humidity effect on tensile strength of SiO2 films. <i>Sensors and Actuators A: Physical</i> , 2000 , 82, 286-290	3.9	72
196	Cross comparison of thin-film tensile-testing methods examined using single-crystal silicon, polysilicon, nickel, and titanium films. <i>Journal of Microelectromechanical Systems</i> , 2005 , 14, 1178-1186	2.5	66
195	Integrated heart/cancer on a chip to reproduce the side effects of anti-cancer drugs in vitro. <i>RSC Advances</i> , 2017 , 7, 36777-36786	3.7	60
194	Young's modulus, fracture strain, and tensile strength of sputtered titanium thin films. <i>Thin Solid Films</i> , 2005 , 484, 245-250	2.2	60
193	Noise-induced chaos in the electrostatically actuated MEMS resonators. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011 , 375, 2903-2910	2.3	48
192	A z-axis differential capacitive SOI accelerometer with vertical comb electrodes. <i>Sensors and Actuators A: Physical</i> , 2004 , 116, 378-383	3.9	47
191	Polysilicon vibrating gyroscope vacuum-encapsulated in an on-chip micro chamber. <i>Sensors and Actuators A: Physical</i> , 2001 , 90, 49-55	3.9	47
190	Mixing speed-controlled gold nanoparticle synthesis with pulsed mixing microfluidic system. <i>Microfluidics and Nanofluidics</i> , 2010 , 9, 1165-1174	2.8	34
189	. Journal of Microelectromechanical Systems, 2012 , 21, 586-595	2.5	30
188	Tensile Strength and Fracture Toughness of Surface Micromachined Polycrystalline Silicon Thin Films Prepared Under Various Conditions. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 505, 285		24
187	Micromachined Tactile Sensor for Soft-Tissue Compliance Detection. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 635-645	2.5	23
186	Tensile testing of silicon thin films. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2005 , 28, 665-674	3	23
185	Electrostatic Tensile Testing Device With Nanonewton and Nanometer Resolution and Its Application to \$hbox{C}_{60}\$ Nanowire Testing. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 523-529	2.5	22
184	Tensile and Tensile-Mode Fatigue Testing of Microscale Specimens in Constant Humidity Environment. <i>Experimental Mechanics</i> , 2010 , 50, 509-516	2.6	22
183	Tensile testing system for sub-micrometer thick films. <i>Sensors and Actuators A: Physical</i> , 2002 , 97-98, 492-496	3.9	22

(2007-1996)

182	Tensile Testing of Polycrystalline Silicon Thin Films Using Electrostatic Force Grip <i>IEEJ Transactions on Sensors and Micromachines</i> , 1996 , 116, 441-446	0.2	22
181	High-cycle fatigue of micromachined single-crystal silicon measured using high-resolution patterned specimens. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 075004	2	20
180	Micro/nanoimprinting of glass under high temperature using a CVD diamond mold. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 065013	2	19
179	. Journal of Microelectromechanical Systems, 2010 , 19, 1058-1069	2.5	18
178	Low-Cycle to Ultrahigh-Cycle Fatigue Lifetime Measurement of Single-Crystal-Silicon Specimens Using a Microresonator Test Device. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 830-839	2.5	17
177	Simulation of mechanical properties of epoxy-based chemically amplified resist by coarse-grained molecular dynamics. <i>Polymer</i> , 2012 , 53, 4834-4842	3.9	17
176	A three-dimensional microstructuring technique exploiting the positive photoresist property. Journal of Micromechanics and Microengineering, 2010 , 20, 065005	2	16
175	A Differential Capacitive Three-Axis SOI Accelerometer using Vertical Comb Electrodes 2007,		16
174	Graphene film development on flexible substrate using a new technique: temperature dependency of gauge factor for graphene-based strain sensors. <i>Sensor Review</i> , 2016 , 36, 140-147	1.4	16
173	A multiple Degrees of Freedom Equivalent Circuit for a Comb-Drive Actuator. <i>Japanese Journal of Applied Physics</i> , 2009 , 48, 124504	1.4	15
172	. Journal of Microelectromechanical Systems, 2007 , 16, 746-752	2.5	15
171	Crystal orientation-dependent fatigue characteristics in micrometer-sized single-crystal silicon. <i>Microsystems and Nanoengineering</i> , 2016 , 2, 16027	7.7	14
170	Microfabricated emitter array for an ionic liquid electrospray thruster. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 06GN18	1.4	13
169	Fatigue of 1th-scale gold by vibration with reduced resonant frequency. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 556, 429-436	5.3	13
168	Effects of anisotropic elasticity on stress concentration in micro mechanical structures fabricated on (001) single-crystal silicon films. <i>Journal of Applied Physics</i> , 2009 , 105, 093524	2.5	13
167	Tensile Strength of Silicon Nanowires Batch-Fabricated into Electrostatic MEMS Testing Device. <i>Applied Sciences (Switzerland)</i> , 2018 , 8, 880	2.6	12
166	Mechanical calibration of MEMS springs with sub-micro-Newton force resolution. <i>Sensors and Actuators A: Physical</i> , 2008 , 143, 136-142	3.9	12
165	Thin-Film Characterization Using the Bulge Test. Advanced Micro & Nanosystems, 2007, 67-121		12

164	. Journal of Microelectromechanical Systems, 2015 , 24, 1856-1867	2.5	11
163	High-cycle fatigue of micromachined single crystal silicon measured using a parallel fatigue test system. <i>IEICE Electronics Express</i> , 2007 , 4, 288-293	0.5	11
162	Vibrating gyroscope consisting of three layers of polysilicon thin films. <i>Sensors and Actuators A: Physical</i> , 2000 , 82, 114-119	3.9	11
161	Direct measurement of transversely isotropic DNA nanotube by forcedistance curve-based atomic force microscopy. <i>Micro and Nano Letters</i> , 2015 , 10, 513-517	0.9	10
160	Multiple Patterning with Process Optimization Method for Maskless DMD-Based Grayscale Lithography. <i>Procedia Engineering</i> , 2015 , 120, 1091-1094		10
159	Polycrystalline silicon thin films with hydrofluoric acid permeability for underlying oxide etching and vacuum encapsulation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 1853-1858	2.9	10
158	ALA-induced fluorescence detection with photoresist-based microfluidic cell sorter for bladder cancer diagnosis. <i>Sensors and Actuators B: Chemical</i> , 2015 , 213, 547-557	8.5	9
157	Design and fabrication of a differential capacitive three-axis SOI accelerometer using vertical comb electrodes. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2009 , 4, 345-351	1	9
156	Frequency response of in-plane coupled resonators for investigating the acceleration sensitivity of MEMS tuning fork gyroscopes. <i>Microsystem Technologies</i> , 2012 , 18, 797-803	1.7	8
155	Fatigue characteristics of polycrystalline silicon thin-film membrane and its dependence on humidity. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 035032	2	8
154	Effect of substrate bias voltage on tensile properties of single crystal silicon microstructure fully coated with plasma CVD diamond-like carbon film. <i>Applied Surface Science</i> , 2018 , 443, 48-54	6.7	7
153	On-chip fabrication of alkali-metal vapor cells utilizing an alkali-metal source tablet. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 115003	2	7
152	Reliability Characterization of MEMS Materials. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2005 , 125, 289-293	0.2	7
151	DNA origami assembly on patterned silicon by AFM based lithography 2013,		6
150	High-temperature tensile testing machine for investigation of brittlefluctile transition behavior of single crystal silicon microstructure. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 06FP04	1.4	6
149	Micro machined tactile sensor for soft tissue compliance detection. <i>Procedia Chemistry</i> , 2009 , 1, 84-87		6
148	Measurement of anisotropic fatigue life in micrometre-scale single-crystal silicon specimens. <i>Micro and Nano Letters</i> , 2010 , 5, 49	0.9	6
147	Design Construction of Beam Structured Vertical Drive SMA Thin Film Actuator for Small Tactile Display. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2008 , 128, 151-160	0.2	6

(2009-2008)

146	Design and Simulation of a Tactile Sensor for Soft-Tissue Compliance Detection. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2008 , 128, 186-192	0.2	6
145	Tensile fracture of integrated single-crystal silicon nanowire using MEMS electrostatic testing device. <i>Procedia Structural Integrity</i> , 2016 , 2, 1405-1412	1	6
144	Fracture strength of silicon torsional mirror resonators fully coated with submicrometer-thick PECVD DLC film. <i>Sensors and Actuators A: Physical</i> , 2019 , 286, 28-34	3.9	6
143	Tuning porosity and radial mechanical properties of DNA origami nanotubes via crossover design. Japanese Journal of Applied Physics, 2017 , 56, 06GJ02	1.4	5
142	Geometrical compensation for mode-matching of a (100) silicon ring resonator for a vibratory gyroscope. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SDDL06	1.4	5
141	Dry etching and low-temperature direct bonding process of lithium niobate wafer for fabricating micro/nano channel device 2017 ,		5
140	Formation of gold nanoparticle dimers on silicon by sacrificial DNA origami technique. <i>Micro and Nano Letters</i> , 2017 , 12, 854-859	0.9	5
139	Improvement of tensile strength of freestanding single crystal silicon microstructures using localized harsh laser treatment. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 06JM03	1.4	5
138	Dynamic sensitivity matrix measurement for single-mass SOI 3-axis accelerometer 2012,		5
137	Effect of surface morphology and crystal orientations on fracture strength of thin film (110) single crystal silicon 2013 ,		5
136	Effect of Surface Morphology and Crystal Orientations on Tensile Fracture Property of (110) Single Crystal Silicon. <i>Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A</i> , 2013 , 79, 1191-1200		5
135	Cross comparison of fatigue lifetime testing on silicon thin film specimens 2011,		5
134	Analysis of Valveless Piezoelectric Micropump using Electrical Equivalent Circuit Model 2007,		5
133	Fracture behavior of single crystal silicon with thermal oxide layer. <i>Engineering Fracture Mechanics</i> , 2016 , 163, 523-532	4.2	4
132	Ultrasensitive surface-enhanced Raman spectroscopy using directionally arrayed gold nanoparticle dimers 2015 ,		4
131	Large-displacement electrostatic deformable mirror using movable bottom electrodes 2014,		4
130	Sequential and Selective Self-Assembly of Micro Components by DNA Grafted Polymer 2009,		4
129	Development and experimental validation of automatic conversion procedure from mechanical to electrical connection for MEMS equivalent circuit. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2009 , 4, 352-357	1	4

128	Manipulation system for nano/micro components integration via transportation and self-assembly. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008,		4
127	. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008 ,		4
126	Formation of porous grain boundaries in polycrystalline silicon thin films. <i>Journal of Applied Physics</i> , 2002 , 91, 9408-9413	2.5	4
125	Mixing Speed- and Temperature-Controlled Microreactor for Gold Nanoparticle Synthesis. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2010 , 130, 292-299	0.2	4
124	Constructing higher order DNA origami arrays using DNA junctions of anti-parallel/parallel double crossovers. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 06GL04	1.4	4
123	Time-Resolved Micro-Raman Stress Spectroscopy for Single-Crystal Silicon Resonators Using a MEMS Optical Chopper. <i>Journal of Microelectromechanical Systems</i> , 2016 , 25, 188-196	2.5	3
122	Experimental verification of frequency decoupling effect on acceleration sensitivity in tuning fork gyroscopes using in-plane coupled resonators. <i>Microsystem Technologies</i> , 2014 , 20, 403-411	1.7	3
121	Tensile test of a silicon microstructure fully coated with submicrometer-thick diamond like carbon film using plasma enhanced chemical vapor deposition method. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 06GN01	1.4	3
120	MEMS mirrors for automotive applications 2017,		3
119	Effect of crystallographic orientation on tensile fractures of (100) and (110) silicon microstructures fabricated from silicon-on-insulator wafers. <i>Micro and Nano Letters</i> , 2015 , 10, 678-682	0.9	3
119		0.9	3
	fabricated from silicon-on-insulator wafers. <i>Micro and Nano Letters</i> , 2015 , 10, 678-682	0.9	
118	fabricated from silicon-on-insulator wafers. <i>Micro and Nano Letters</i> , 2015 , 10, 678-682 2014 , Investigation of Molecular Diffusivity of Photoresist Membrane using Coarse-Grained Molecular	0.9	3
118	fabricated from silicon-on-insulator wafers. <i>Micro and Nano Letters</i> , 2015 , 10, 678-682 2014 , Investigation of Molecular Diffusivity of Photoresist Membrane using Coarse-Grained Molecular Dynamics Simulation. <i>Procedia Engineering</i> , 2012 , 47, 402-405 Analysis of acceleration sensitivity in frequency decoupled MEMS tuning fork gyroscope. <i>Procedia</i>	0.9	3
118 117 116	Tabricated from silicon-on-insulator wafers. Micro and Nano Letters, 2015, 10, 678-682 2014, Investigation of Molecular Diffusivity of Photoresist Membrane using Coarse-Grained Molecular Dynamics Simulation. Procedia Engineering, 2012, 47, 402-405 Analysis of acceleration sensitivity in frequency decoupled MEMS tuning fork gyroscope. Procedia Engineering, 2011, 25, 51-54	0.9	3 3
118 117 116	2014, Investigation of Molecular Diffusivity of Photoresist Membrane using Coarse-Grained Molecular Dynamics Simulation. <i>Procedia Engineering</i> , 2012, 47, 402-405 Analysis of acceleration sensitivity in frequency decoupled MEMS tuning fork gyroscope. <i>Procedia Engineering</i> , 2011, 25, 51-54 Local stress analysis of single crystalline silicon resonator using micro Raman spectroscopy 2011,	0.9	3 3 3
118 117 116 115	2014, Investigation of Molecular Diffusivity of Photoresist Membrane using Coarse-Grained Molecular Dynamics Simulation. <i>Procedia Engineering</i> , 2012, 47, 402-405 Analysis of acceleration sensitivity in frequency decoupled MEMS tuning fork gyroscope. <i>Procedia Engineering</i> , 2011, 25, 51-54 Local stress analysis of single crystalline silicon resonator using micro Raman spectroscopy 2011, Sacrificial microchannel sealing by glass-frit reflow for Chip Scale Atomic Magnetometer 2011, Capacitive micromachined ultrasonic transducers with novel membrane design. <i>Procedia Chemistry</i> ,	0.9	3 3 3 3

(2009-2008)

110	Crystal orientation dependence of fatigue characteristics in single crystal silicon measured using a rotating micro resonator. <i>Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS)</i> , 2008 ,		3	
109	Young Modulus Measurement for Polysilicon Thin Film by Tensile Testing. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2003 , 123, 577-582	0.2	3	
108	Out-of-plane Bending Vibration Fracture Test of Polycrystalline Silicon Thin-film Membrane. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2012 , 132, 224-229	0.2	3	
107	Component Modeling of 2DOF Comb Transducer for Equivalent Circuit Using Built-in Displacement Detection. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2010 , 130, 443-449	0.2	3	
106	Fracture behavior of single-crystal silicon microstructure coated with stepwise bias-graded a-C:H film. <i>Surface and Coatings Technology</i> , 2021 , 405, 126559	4.4	3	
105	Rhombic-Shaped Nanostructures and Mechanical Properties of 2D DNA Origami Constructed with Different Crossover/Nick Designs. <i>Small</i> , 2018 , 14, 1702028	11	3	
104	Numerical Investigation of Steady and Transient Ion Beam Extraction Mechanisms for Electrospray Thrusters. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2018 , 16, 110-115	0.3	3	
103	Novel microfluidic device integrated with a fluidic-capacitor to mimic heart beating for generation of functional liver organoids. <i>Electronics and Communications in Japan</i> , 2019 , 102, 41-49	0.4	2	
102	Single-Crystal Lithium Niobate Piezoelectric Disk Gyroscope 2020 ,		2	
101	Analytical investigation of the feasibility of sacrificial microchannel sealing for Chip-Scale Atomic Magnetometers. <i>Microsystem Technologies</i> , 2014 , 20, 357-365	1.7	2	
100	Direct characterization of radial modulus of DNA nanotube by AFM nanoindentation 2015,		2	
99	Rotational motion effect on sensitivity matrix of MEMS three-axis accelerometer for realization of concurrent calibration using vibration table 2013 ,		2	
98	Microfabrication of Embedding a Flexible Parylene-Based Microelectrode Array within Body-on-a-Chip. <i>Proceedings (mdpi)</i> , 2017 , 1, 302	0.3	2	
97	Selective assembly of DNA nanostructure bridging onto a trenched silicon substrate 2015 ,		2	
96	Sacrillial microchannel sealing by glass-frit relbw for chip scale atomic magnetometer. <i>Electronics and Communications in Japan</i> , 2013 , 96, 58-66	0.4	2	
95	Configurable assembly of DNA origami on MEMS by microfluidic device 2011,		2	
94	Epoxy-based permeable membrane fabrication for 3D microfluidic device 2011 ,		2	
93	Free-standing C60 nanowire fabricated using XeF2 sacrificial dry etching. <i>Journal of Micro/Nanolithography, MEMS, and MOEMS</i> , 2009 , 8, 013020	0.7	2	

92	High-speed pulsed mixing with high-frequency switching of micropump driving and its application to nanoparticle synthesis 2011 ,		2
91	Fatigue Testing of Polycrystalline Silicon Thin-Film Membrane Using Out-of-Plane Bending Vibration. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 11PA02	1.4	2
90	Parameter optimization method for fabricating 3D microstructures embedded in single-layer negative-tone photoresist 2009 ,		2
89	Embedded double-layered microchannel fabrication for microfluidic devices using developer permeability of negative thick-film resists. <i>Procedia Engineering</i> , 2010 , 5, 854-857		2
88	Moving-Mask UV Lithography for 3-Dimensional Positive-And Negative-Tone Thick Photoresist Microstructuring 2007 ,		2
87	Evaluation of Mechanical Properties of MEMS Materials and Their Standardization. <i>Advanced Micro & Nanosystems</i> , 2007 , 1-25		2
86	MNM-3A-4 Crystallographic anisotropy analysis in fracture of micro-sized (110) single crystal silicon using Weibull statistics. <i>The Proceedings of the Symposium on Micro-Nano Science and Technology</i> , 2010 , 2010.2, 149-150	О	2
85	Surface Roughness Modification of Free Standing Single Crystal Silicon Microstructures Using KrF Excimer Laser Treatment for Mechanical Performance Improvement. <i>Journal of Surface Engineered Materials and Advanced Technology</i> , 2015 , 05, 28-41	0.2	2
84	Laser-driven optothermal microactuator operated in water. <i>Applied Optics</i> , 2020 , 59, 1627-1632	1.7	2
83	Surface-enhanced Raman spectroscopy with gold nanoparticle dimers created by sacrificial DNA origami technique. <i>Micro and Nano Letters</i> , 2020 , 15, 384-389	0.9	2
82	Spin transport in a lateral spin valve with a suspended Cu channel. Scientific Reports, 2020, 10, 10699	4.9	2
81	MEMS deformable mirror actuated by electrostatic piston array 2016 ,		2
80	A Planar Single-Actuator Bi-Stable Switch Based on Latch-Lock Mechanism 2019 ,		1
79	Ferroelectric Extended Nanofluidic Channels for Room-Temperature Microfuel Cells. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900252	6.8	1
78	FET properties of single-walled carbon nanotubes individually assembled utilizing single strand DNA 2015 ,		1
77	Microfluidic device to interconnect multiple organs via fluidic circulation: Towards body-on-a-chip 2015 ,		1
76	Scale-factor analysis of a geometrically compensated (100) single-crystal silicon vibratory ring gyroscope 2020 ,		1
75	Electrode Design of Single Crystal Lithium Niobate Piezoelectric Disk Gyroscope 2020 ,		1

(2014-2017)

74	Measurement and potential barrier evolution analysis of cold field emission in fracture fabricated Si nanogap. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 06GF06	1.4	1
73	High-speed pulsed mixing in a short distance with high-frequency switching of pumping from three inlets. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084003	2	1
72	Self-dependent Equivalent Circuit Modeling of Electrostatic Comb Transducers for Integrated MEMS. <i>International Federation for Information Processing</i> , 2012 , 94-109		1
71	2011,		1
7º	2011,		1
69	DNA-grafted-polymer mediated self-assembly of micro components 2010 ,		1
68	Equivalent circuit analysis of micromechanical resonator using comb transducer model with built-in displacement detection 2011 ,		1
67	Tensile testing of fullerene nano wire using electrostatic MEMS device 2009,		1
66	Nanogap-controllable self-assembly of gold nanoparticles using nanotrench template 2011,		1
65	Coarse-Grained Molecular Dynamics Simulation of Epoxy-Based Chemically-Amplified Resist for MEMS Application. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1415, 139		1
64	Silicon and Related Materials 2008 , 1-23		1
63	Reliability of MEMS Variable Optical Attenuator. Advanced Micro & Nanosystems, 2007, 239-266		1
62	Temperature Controlled Capillary Driven Sequential Stacking Self-Assembly using Two Different Adhesives 2007 ,		1
61	Uniaxial Tensile Test for MEMS Materials. Advanced Micro & Nanosystems, 2007, 123-161		1
60	Tensile Test of Bulk- and Surface-Micromachined 0.1-µm Thick Silicon Film using Electrostatic Force Grip System. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 687, 1		1
59	Mechanical and Electrical Clamping of DEP Assembled SWCNT Using Electroless Gold Deposition. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2012 , 132, 108-113	0.2	1
58	Effects of Etching Surface Roughness on the Fatigue Characteristics of Single-Crystal Silicon. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2014 , 134, 32-37	0.2	1
57	Study on Vibration-coupling Control of Out-of-plane Coupled Resonator for Anti-shock Tuning Fork Gyroscopes. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2014 , 134, 392-399	0.2	1

56	Design Strategy of Electrode Patterns Based on Finite Element Analysis in Microfluidic Device for Trans-Epithelial Electrical Resistance (TEER) Measurement. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2020 , 140, 285-292	0.2	1
55	High-Yield Bridged Assembly of ssDNA-Modified SWCNT Using Dielectrophoresis. <i>International Journal of Automation Technology</i> , 2018 , 12, 29-36	0.8	1
54	Fatigue Testing of Polycrystalline Silicon Thin-Film Membrane Using Out-of-Plane Bending Vibration. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 11PA02	1.4	1
53	Integrated gut[Iver-on-a-chip platform as an in vitro human model of non-alcoholic fatty liver disease		1
52	Material Properties 2006 , 53-92		1
51	Tensile Testing of Insulating Thin Films Using Electrostatic Force Grip. <i>IEEJ Transactions on Sensors and Micromachines</i> , 1999 , 119, 290-294	0.2	1
50	Piezoelectric Disk Gyroscope Fabricated With Single-Crystal Lithium Niobate. <i>Journal of Microelectromechanical Systems</i> , 2021 , 30, 384-391	2.5	1
49	Investigation of the self-assembly process for discrete and polymerized bivalve DNA origami structures. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2016 , 11, S164	1	1
48	Photoresist Micro-Chamber for the Diffracted X-ray Tracking Method Recording Single-Molecule Conformational Changes. <i>Procedia Engineering</i> , 2016 , 168, 1394-1397		1
47	Effect of Crystallographic Orientations on Fractures and Slip Occurrences at 500 LC of (110) Single Crystal Silicon Microstructures. <i>Procedia Structural Integrity</i> , 2016 , 2, 1413-1420	1	1
46	Design strategy of electrode patterns based on finite element analysis in microfluidic device for Trans-Epithelial Electrical Resistance (TEER) measurement. <i>Electronics and Communications in Japan</i> , 2021 , 104, e12296	0.4	1
45	Effect of localized KrF excimer laser treatment on fracture behaviors of freestanding and single crystal silicon beams. <i>Microsystem Technologies</i> , 2016 , 22, 379-386	1.7	О
44	Effect of Surface Oxide Layer on Mechanical Properties of Single Crystalline Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1052, 1		О
43	Elastoplastic Indentation Contact Mechanics of Homogeneous Materials and CoatingBubstrate Systems. <i>Advanced Micro & Nanosystems</i> , 2007 , 27-65		О
42	Inertial Sensors. Advanced Micro & Nanosystems, 2007, 205-223		О
41	Mathematical Modeling and Analysis of MEMS Deformable Mirror Actuated by Electrostatic Piston Array. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2018 , 138, 66-73	0.2	O
40	Uniform needle-emitter arrays for ionic liquid electrospray thrusters with precise thrust control. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, SCCL06	1.4	О
39	Microfabricated alkali metal vapor cells filled with an on-chip dispensing component. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, SCCL01	1.4	O

(2008-2018)

38	Microchannel Fabrication Using A Photo-Patternable Adhesive Material for Recording Conformational Changes of KcsA Channel with the Diffracted X-ray Tracking Method. <i>Proceedings</i> (mdpi), 2018 , 2, 972	0.3	O
37	Effect of alternating a-C:H multilayer full coating on fracture behavior of single-crystal silicon-based microstructure in tensile and toughness tests. <i>Materials Science & Discourse A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 827, 142054	5.3	O
36	Mathematical Modeling and Analysis of MEMS Deformable Mirror Actuated by Electrostatic Piston Array. <i>Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi)</i> , 2018 , 204, 50-60	0.4	
35	Special issue on transducers and micro-nano technology. <i>Journal of Micromechanics and Microengineering</i> , 2017 , 27, 070301	2	
34	Photoresist-based Microfluidic Cell Sorter for Photodynamic Urine Diagnosis. <i>Procedia Engineering</i> , 2014 , 87, 62-65		
33	New compensation technique for the soft tissue stiffness measurements using two sensor probes configuration. <i>Procedia Engineering</i> , 2010 , 5, 1304-1307		
32	DNA Mediated Sequential Self-assembly of Au Nano-particles. <i>Journal of the Society of Powder Technology, Japan</i> , 2008 , 45, 156-161	0.3	
31	Reliability of a Capacitive Pressure Sensor. Advanced Micro & Nanosystems, 2007, 185-203		
30	Eco Scan MEMS Resonant Mirror. Advanced Micro & Nanosystems, 2007, 267-290		
29	On-Chip Testing of MEMS. Advanced Micro & Nanosystems, 2007, 163-183		
28	Design of A Soft X-ray Source with Periodic Microstructure Using Resonance Transition Radiation for Tabletop Synchrotron. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2008 , 3, 268-273	1	
27	Special Issue on Frontier in Sensors and Micromachines. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2008 , 3, 364-364	1	
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5