

Yoshio Mita

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8930964/publications.pdf>

Version: 2024-02-01

83
papers

747
citations

840776

11
h-index

580821

25
g-index

83
all docs

83
docs citations

83
times ranked

683
citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced etching of silicon based on deep reactive ion etching for silicon high aspect ratio microstructures and three-dimensional micro- and nanostructures. <i>Microelectronics Journal</i> , 2005, 36, 673-677.	2.0	253
2	Design, Fabrication, and Control of MEMS-Based Actuator Arrays for Air-Flow Distributed Micromanipulation. <i>Journal of Microelectromechanical Systems</i> , 2006, 15, 912-926.	2.5	82
3	A zero-power sensing MEMS shock sensor with a latch-reset mechanism for multi-threshold events monitoring. <i>Sensors and Actuators A: Physical</i> , 2019, 295, 1-10.	4.1	32
4	FPGA-Based Decentralized Control of Arrayed MEMS for Microrobotic Application. <i>IEEE Transactions on Industrial Electronics</i> , 2007, 54, 1926-1936.	7.9	29
5	Contour lithography methods for DRIE fabrication of nanometre-µm-millimetre-scale coexisting microsystems. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, S135-S141.	2.6	25
6	Noninvasive Localization of IGBT Faults by High-Sensitivity Magnetic Probe With RF Stimulation. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018, 67, 745-753.	4.7	21
7	Aspect Ratio Dependent Scalloping Attenuation in Drie and an Application to Low-Loss Fiber-Optical Switches. , 0, , .		18
8	Opportunities of CMOS-MEMS integration through LSI foundry and open facility. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 06GA03.	1.5	16
9	Increasing cell-µm device adherence using cultured insect cells for receptor-based biosensors. <i>Royal Society Open Science</i> , 2018, 5, 172366.	2.4	16
10	Test Structure for Characterizing Low Voltage Coplanar EWOD System. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2009, 22, 88-95.	1.7	12
11	Tunable third harmonic generation in the vacuum ultraviolet region using dielectric nanomembranes. <i>APL Photonics</i> , 2020, 5, 066103.	5.7	12
12	On-Chip CMOS-MEMS-Based Electroosmotic Flow Micropump Integrated With High-Voltage Generator. <i>Journal of Microelectromechanical Systems</i> , 2020, 29, 86-94.	2.5	11
13	Experimental evaluation of high voltage hold-off capability of post-process mesa-isolated series standard CMOS transistors. , 2013, , .		10
14	A heat balanced sigma-µm uncooled bolometer. <i>Measurement Science and Technology</i> , 2014, 25, 065101.	2.6	10
15	A Highly Simple Failure Detection Method for Electrostatic Microactuators: Application to Automatic Testing and Accelerated Lifetime Estimation. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2006, 19, 35-42.	1.7	9
16	On-Chip High-Voltage Charge Pump With MEMS Post-Processed Standard 5-V CMOS on SOI for Electroosmotic Flow Micropumps. <i>IEEE Electron Device Letters</i> , 2018, 39, 851-854.	3.9	9
17	On-chip High-voltage Silicon Photovoltaic Cell Array Made by a CMOS Post-processed Device Isolation Method for Driving a MEMS Actuator in a Remote Manner. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2016, 136, 24-30.	0.1	9
18	A MEMS array for pneumatic conveyor and its control based on distributed system. , 0, , .		8

#	ARTICLE	IF	CITATIONS
19	Remote power feed and control of MEMS with 58 V silicon photovoltaic cell made by a CMOS post-process dry release and device isolation method. , 2014, , .		8
20	Hotspot Liquid Microfluidic Cooling: Comparing The Efficiency between Horizontal Flow and Vertical Flow. Journal of Physics: Conference Series, 2016, 773, 012066.	0.4	8
21	An integrated CMOS-MEMS probe having two-tips per cantilever for individual contact sensing and kelvin measurement with two cantilevers. , 2013, , .		7
22	Electron-beam lithography with character projection technique for high-throughput exposure with line-edge quality control. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2016, 15, 031606.	0.9	7
23	Progress and opportunities in high-voltage microactuator powering technology towards one-chip MEMS. Japanese Journal of Applied Physics, 2018, 57, 04FA05.	1.5	7
24	An On-Chip Micromachined Test Structure to Study the Tribological Behavior of Deep-RIE MEMS Sidewall Surfaces. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 187-195.	1.7	7
25	15-year educational experience on autonomous electronic information devices by flipped classroom and try&you yourself methods. IET Circuits, Devices and Systems, 2017, 11, 321-329.	1.4	6
26	High-uniformity centimeter-wide Si etching method for MEMS devices with large opening elements. Japanese Journal of Applied Physics, 2018, 57, 04FC03.	1.5	6
27	PbS Quantum Dot / ZnO Nanowires Hybrid Test Structures for Infrared Photodetector. , 2019, , .		6
28	Circularly polarized vacuum ultraviolet coherent light generation using a square lattice photonic crystal nanomembrane. Optica, 2020, 7, 855.	9.3	6
29	“silicon on PDMS”; SOI extra thin active layer transferred to organic film for flexible applications. , 2007, , .		5
30	Microscale ultrahigh-frequency resonant wireless powering for capacitive and resistive MEMS actuators. Sensors and Actuators A: Physical, 2018, 275, 75-87.	4.1	5
31	Micro-scale Electrostatic Attach-detach Device for Self-reconfigurable Modular Robotic System. , 2020, , .		5
32	Fabrication of PbS QD/Silicon Hybrid Infrared Photodiode for LSI Platform. IEEJ Transactions on Sensors and Micromachines, 2018, 138, 307-311.	0.1	5
33	A three-dimensional silicon shadowmask for patterning on trenches with vertical walls. , 2009, , .		4
34	Odor-sensitive field effect transistor (OSFET) based on insect cells expressing insect odorant receptors. , 2017, , .		4
35	Fabrication of PbS quantum dots and silicon device for near-infrared detection. , 2017, , .		4
36	Integrated 0–30 V switching driver circuit fabricated by mesa isolation postprocess of standard 5–V CMOS LSI for MEMS actuator applications. Microsystem Technologies, 2018, 24, 503-510.	2.0	4

#	ARTICLE	IF	CITATIONS
37	A bulk knife-edged as-deposition self-patterning structure for Greek-cross and organic thin film transistors. , 2006, , .		3
38	Deep-Trench Vertical Si Photodiodes for Improved Efficiency and Crosstalk. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 386-391.	2.9	3
39	“MEMS de Piano”- an experimental course of design, fabrication, and testing of MEMS oscillator. , 2014, , .		3
40	Microfabricated test structures for thermal gas sensor. , 2016, , .		3
41	Study on silicon device of microrobot system for heterogeneous integration. , 2018, , .		3
42	An on-chip test structure for studying the frictional behavior of deep-RIE MEMS sidewall surfaces. , 2018, , .		3
43	Stick-to-Analyze Zeta Potential Measurement Chip with Integrated Electroosmotic Micropump and Liquid Flow Sensor. , 2019, , .		3
44	Improvement of ZnO/Si Heterojunctions With a Coaxial Circular Transmission Line Model Applicable to Both Ohmic and Schottky. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 256-261.	1.7	3
45	Power-Regulated Thermal Actuator Based on UV-Patterned Polyimides for a Ciliary Motion System. IEEJ Transactions on Sensors and Micromachines, 2013, 133, 77-84.	0.1	3
46	A scalable, optically-driven, high-voltage switch for remote MEMS device operation fabricated with a standard CMOS process. IEICE Electronics Express, 2017, 14, 20161174-20161174.	0.8	3
47	Electrical critical dimension measurement method by integration of test structure into MEMS devices. , 0, , .		2
48	Deep-trench vertical si photodiode towards active-device integrated OMEMS. , 2006, , .		2
49	Wireless driven EWOD technology for a MEMS pond skater. , 2008, , .		2
50	A test structure of bypass diodes for on-chip high-voltage silicon photovoltaic cell array. , 2014, , .		2
51	Demonstration of 0â€“30V comb-drive MEMS actuator by integrated switching circuit with post-mesa-isolated standard 5V CMOS transistors. , 2016, , .		2
52	3D micro fractal pipettes for capillary based robotic liquid handling. Review of Scientific Instruments, 2020, 91, 086104.	1.3	2
53	Influence of Pretreatment on Adhesion Quality of Supercritical-fluid-deposited Cu Film on Si. Sensors and Materials, 2019, 31, 2481.	0.5	2
54	Area-selective Cu Film Growth on TiN and SiO ₂ by Supercritical Fluid Deposition. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 31-36.	0.1	2

#	ARTICLE	IF	CITATIONS
55	Design and Fabrication of an Electrochemical Chip for Liquid-Phase Transmission Electron Microscopy. Microscopy (Oxford, England), 2022, , .	1.5	2
56	A contour-lithography method for rapid and precise deep-etched nano-MEMS structure fabrication. , 0, , .		1
57	High-aspect-ratio vertical surface profiler using sensitive displacement detection by optomechanical probe. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1
58	Evaluation of silicon fracture strength dependence on stealth dicing layers for “cleave-before-use” MEMS freestanding cantilever probes. , 2013, , .		1
59	Detection of micro-beads by impedance spectroscopy: Towards a wholly integrated electronic device for biological cells applications. , 2014, , .		1
60	Introduction to electronic information devices â€” Try-by-yourself-style lecture on autonomous electronic devices. , 2016, , .		1
61	A test structure to characterize transparent electrode array platform with TFTs for bio-chemical applications. , 2017, , .		1
62	Damage Assessment Structure of Test-Pad Post-Processing on CMOS LSIs. , 2019, , .		1
63	Coaxial Circular Test Structure Applicable to both Ohmic and Schottky Characteristics for ZnO/Si Heterojunctions Assessment. , 2020, , .		1
64	A Rapid, Reliable and Less-destructive On-chip Mass Measurement for 3D Composite Material Testing Microstructures. , 2020, , .		1
65	Drop-in test structure chip to visualize residual stress of Ru/Cu film grown by atomic layer deposition and supercritical fluid deposition. , 2020, , .		1
66	Two-Dimensionally Arrayed Double-Layer Electrode Device Which Enables Reliable and High-Thoroughput Electrortation. , 2021, , .		1
67	Manufacturing of 3D Helical Microswimmer by AFM Micromanipulation for Microfluidic Applications. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 248-255.	1.7	1
68	Micro-Fluidic Channel Integration on Thick-SOI LSI Device for Biological Application.. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 320-325.	0.1	1
69	Accelerated life time estimation of electrostatic microactuators. , 0, , .		0
70	Polarization-Transmissive Thin-Film Solar Cell with Photodiode Nanowires. , 2007, , .		0
71	A CMOS compatible low temperature process for photonic crystal MEMS scanner. , 2009, , .		0
72	A stiffness-defined silicon plane bending method to realize perfectly-curved surface formation for tunable parabolic mirrors. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
73	A blur-range test structure of collimation-controller-integrated silicon shadow mask for three-dimensional surface patterning with sputtering. , 2012, , .		0
74	Test structures for nano-gap fabrication process development for nano-electromechanical systems. , 2017, , .		0
75	Guest Editorial Special Section on the IEEE International Conference on Microelectronic Test Structures. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 190-191.	1.7	0
76	Test structure for electrical assessment of UV laser direct fine patterned material. , 2018, , .		0
77	High Throughput 16 NM Nanogap by Variable Shaped Beam Method Using F7000S-VD02 EB Lithography. , 2021, , .		0
78	Drop-In Test Structure to Evaluate Residual Stress in Conformally Grown Films. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 270-277.	1.7	0
79	A Contour-Lithography Method for Etching Nano-dimension and Large-dimension Openings. IEEJ Transactions on Sensors and Micromachines, 2006, 126, 235-240.	0.1	0
80	The surface responsivity of a SnO ₂ thin film gas sensing device for the highly sensitivity. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2019, 2019.10, 20am2PN315.	0.0	0
81	A Device for Localized Measurement of Small Particles with Electrode-Integrated Small Pores. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 271-276.	0.1	0
82	Tunable Third Harmonic Vacuum Ultraviolet Coherent Light Generation Using Dielectric Nanomembranes. , 2020, , .		0
83	PbS Colloidal Quantum Dots/ZnO/Si Hybrid Photodiode with Various Reverse Bias Voltages. IEEJ Transactions on Sensors and Micromachines, 2022, 142, 8-12.	0.1	0