

# Masayuki Sohgawa

## List of Publications by Year in descending order

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69  
papers

409  
citations

840776

11  
h-index

888059

17  
g-index

69  
all docs

69  
docs citations

69  
times ranked

221  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of heater-integrated MEMS tactile sensor for evaluation of warm and cold sensation by touching glass. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2022, 215, .	0.4	1
2	Improvement of Durability of Insulation Film for Low-voltage Electrostatic Tactile Display. IEEJ Transactions on Sensors and Micromachines, 2022, 142, 85-90.	0.1	0
3	Redesigned Microcantilevers for Sensitivity Improvement of Microelectromechanical System Tactile Sensors. Journal of Robotics and Mechatronics, 2022, 34, 677-682.	1.0	0
4	Fabrication of Heater-Integrated MEMS Tactile Sensor for Evaluation of Warm and Cold Sensation by Touching Glass. IEEJ Transactions on Sensors and Micromachines, 2021, 141, 343-348.	0.1	0
5	Development of quartz crystal complex capacitive sensor with microelectrode array for sensitization. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2021, 214, e23356.	0.4	0
6	Sensitivity Enhancement of MEMS Tactile Sensor by Redesign of Microcantilever and Strain Gauge. , 2021, , .		0
7	Detection of Rigid Object Embedded in Skin Model Using Tactile Sensor for Palpation. , 2021, , .		0
8	Tactile sensor using a microcantilever embedded in fluoroelastomer with resistance to cleaning and antiseptic solutions. Sensors and Actuators A: Physical, 2020, 301, 111774.	4.1	6
9	Label-free, chronological and selective detection of aggregation and fibrillization of amyloid $\beta$ protein in serum by microcantilever sensor immobilizing cholesterol-incorporated liposome. Biotechnology and Bioengineering, 2020, 117, 2469-2478.	3.3	4
10	Detection of Gripping State Using Tactile Sensors Installed on Handgrip for Tools. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 228-234.	0.1	1
11	Multi-frequency Quartz Oscillator Based Liquid Concentration Sensor with External Magnetic Field for Ion Discrimination. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 349-353.	0.1	0
12	Tactile Sensor with High-Density Microcantilever and Multiple PDMS Bumps for Contact Detection. Journal of Robotics and Mechatronics, 2020, 32, 297-304.	1.0	3
13	Contactless Monitoring of Water Treatment Process Using Quartz Oscillator Based Liquid Sensor. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 251-255.	0.1	0
14	Detection Area Evaluation of Tactile Sensor Using Microcantilever Embedded in Elastomer. IEEJ Transactions on Sensors and Micromachines, 2020, 140, 272-277.	0.1	1
15	Preface to the Special Issue on "Sensors/Sensing Systems of IoT for Future". IEEJ Transactions on Sensors and Micromachines, 2020, 140, 221-221.	0.1	0
16	A New Detection of Biomarker Molecule of $\alpha$ -Synuclein for Parkinson Disease by Phospholipid Liposome-Immobilized Cantilever Microsensor with Temperature Stabilization. , 2019, , .		2
17	Fabrication and Evaluation of Quartz Oscillator Based Viscosity / Concentration Sensor for a Drop Sensing. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 81-84.	0.1	0
18	Measurement by Tactile Sensor and FEM Analysis of Multi-layered Flexible Model for Skin Diagnosis. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 149-154.	0.1	2

#	ARTICLE	IF	CITATIONS
19	Development of Quartz Oscillator Based Liquid Concentration Sensor for Contactless Monitoring of Solution in Bottle. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 169-174.	0.1	0
20	Fabrication and Characterization of Microcantilever for Detection of Vibration Sensation in Tactile Sensing. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 375-380.	0.1	0
21	Electromotive Manipulator Control by Detection of Proximity, Contact, and Slipping Using MEMS Multiaxial Tactile Sensor. Electrical Engineering in Japan (English Translation of Denki Gakkai) Tj ETQq1 1 0.7843140gBT /Overclock 10	0.1	0
22	Miniaturization and High-Density Arrangement of Microcantilevers in Proximity and Tactile Sensor for Dexterous Gripping Control. Micromachines, 2018, 9, 301.	2.9	13
23	Texture Evaluation for Planed Surface of Polyoxymethylene Resin by Measuring Surface Shape and Color with Light and Strain Sensitive Tactile Sensor. IEEJ Transactions on Sensors and Micromachines, 2018, 138, 250-256.	0.1	2
24	Development of Dual Channel Type Contactless Liquid Sensor using a Quartz Oscillator Circuit. IEEJ Transactions on Sensors and Micromachines, 2018, 138, 37-40.	0.1	3
25	Evaluation of Millimeter-wave Radar Sensor in Water Level Monitoring System for Flood Disaster Prevention. IEEJ Transactions on Sensors and Micromachines, 2018, 138, 461-465.	0.1	0
26	Fabrication of a true-Gaussian-shaped quartz crystal resonator. Sensors and Actuators A: Physical, 2017, 260, 58-61.	4.1	1
27	A Cantilever-based Biosensor for Real-time Monitoring of Interactions between Amyloid $\beta$ (1 $\mu$ m <sup>40</sup> ) and Membranes Comprised of Phosphatidylcholine Lipids with Different Hydrophobic Acyl Chains. Electroanalysis, 2017, 29, 722-729.	2.9	4
28	Measurement Techniques with Frequency-Modulated Probe Light for Proximity and Tactile Combo Sensor. IEEJ Transactions on Sensors and Micromachines, 2017, 137, 146-150.	0.1	1
29	Deposition and Characterization of Al <sub>2</sub> O <sub>3</sub> and BiFeO <sub>3</sub> Thin Films on Titanium Substrates for Tough MEMS Devices. IEEJ Transactions on Sensors and Micromachines, 2017, 137, 46-47.	0.1	0
30	Evaluation of the Heating Characteristics of Miniature QCR-based Thermogravimetric Sensor in Vacuum. IEEJ Transactions on Sensors and Micromachines, 2017, 137, 180-184.	0.1	0
31	Shape Optimization of Combo Sensor using Quartz Crystal Resonator for Liquid Analysis. IEEJ Transactions on Sensors and Micromachines, 2016, 136, 343-347.	0.1	1
32	Basic study for tactile and visual texture measurement by multimodal MEMS sensor with force and light sensitivity. , 2015, , .		3
33	Detection of Amyloid Beta Fibril Growth by Liposome-Immobilized Micro-Cantilever With NiCr Thin-Film Strain Gauge. IEEE Sensors Journal, 2015, 15, 7135-7141.	4.7	9
34	Non-contact Sensor for Measurement of Liquid Concentration based on Quartz Oscillator. IEEJ Transactions on Sensors and Micromachines, 2015, 135, 210-213.	0.1	4
35	Microheater-integrated Quartz Crystal Microbalance Array for Thermal Desorption Spectroscopy. IEEJ Transactions on Sensors and Micromachines, 2015, 135, 112-113.	0.1	0
36	Tactile Sensor Using Micro-cantilever with BiFeO <sub>3</sub> Piezoelectric Film. IEEJ Transactions on Sensors and Micromachines, 2015, 135, 158-164.	0.1	2

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37	Texture measurement and identification of object surface by MEMS tactile sensor. , 2014, , .		4
38	Multimodal measurement of proximity and touch force by light- and strain-sensitive multifunctional MEMS sensor. , 2014, , .		15
39	Multifunctional tactile sensors using MEMS cantilevers. , 2014, , .		0
40	Numerical Calculation and Experimental Verification of a Quartz-crystal-resonator-based Methanol Concentration Sensor. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 224-228.	0.1	4
41	Proximity and Tactile Sensing Using a Single MEMS Sensor with Photo- and Strain Sensitivities. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 229-234.	0.1	11
42	Active Touch Sensing by Multi-axial Force Measurement Using High-Resolution Tactile Sensor with Microcantilevers. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 58-63.	0.1	16
43	Micromachining of Titanium using a Desktop DRIE. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 96-99.	0.1	8
44	Preparation of epitaxial BiFeO <sub>3</sub> thin films on La-SrTiO <sub>3</sub> substrate by using magnetic-field-assisted pulsed laser deposition. Journal of the Korean Physical Society, 2013, 62, 1041-1045.	0.7	5
45	Identification of various kinds of papers using multi-axial tactile sensor with micro-cantilevers. , 2013, , .		6
46	Force intensity and direction measurement in real time using miniature tactile sensor with microcantilevers embedded in PDMS. , 2013, , .		1
47	Fabrication and Noise Reduction of the Miniature Tactile Sensor Using Through-Silicon-Via Connection with Signal Amplifier. Japanese Journal of Applied Physics, 2013, 52, 06GL08.	1.5	10
48	Repetition Rate Dependence of Ferroelectric Properties of Polycrystalline BiFeO <sub>3</sub> Films Prepared by Pulsed Laser Deposition Method. Ferroelectrics, 2013, 453, 1-7.	0.6	4
49	Review of Texture Measurement of Object Surface by Tactile Sensor with Inclined Micro-cantilevers. IEEJ Transactions on Sensors and Micromachines, 2013, 133, 147-154.	0.1	5
50	Heterogeneous Integration of LSI Amplifier and the Tactile Sensor Using Stacking and Through-Si-Via Techniques. Materials Research Society Symposia Proceedings, 2012, 1427, 14.	0.1	1
51	Ferroelectric and Piezoelectric Properties of Polycrystalline BiFeO <sub>3</sub> Thin Films Prepared by Pulsed Laser Deposition under Magnetic Field. Japanese Journal of Applied Physics, 2012, 51, 09MD05.	1.5	10
52	Tactile sensor array using microcantilever with nickel-chromium alloy thin film of low temperature coefficient of resistance and its application to slippage detection. Sensors and Actuators A: Physical, 2012, 186, 32-37.	4.1	69
53	Miniature Ultrasonic and Tactile Sensors for Dexterous Robot. Transactions on Electrical and Electronic Materials, 2012, 13, 215-220.	1.9	4
54	Ferroelectric and Piezoelectric Properties of Polycrystalline BiFeO <sub>3</sub> Thin Films Prepared by Pulsed Laser Deposition under Magnetic Field. Japanese Journal of Applied Physics, 2012, 51, 09MD05.	1.5	9

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55	Fabrication of a Flexible Array for Tactile Sensors with Microcantilevers and the Measurement of the Distribution of Normal and Shear Forces. Japanese Journal of Applied Physics, 2011, 50, 06GM02.	1.5	5
56	Crosstalk Reduction of Tactile Sensor Array with Projected Cylindrical Elastomer over Sensing Element. Japanese Journal of Applied Physics, 2011, 50, 06GM08.	1.5	11
57	Preparation of BiFe <sub>0.9</sub> Co <sub>0.1</sub> O <sub>3</sub> Films by Pulsed Laser Deposition under Magnetic Field. Japanese Journal of Applied Physics, 2011, 50, 09NB03.	1.5	10
58	Fabrication of a Flexible Array for Tactile Sensors with Microcantilevers and the Measurement of the Distribution of Normal and Shear Forces. Japanese Journal of Applied Physics, 2011, 50, 06GM02.	1.5	6
59	Crosstalk Reduction of Tactile Sensor Array with Projected Cylindrical Elastomer over Sensing Element. Japanese Journal of Applied Physics, 2011, 50, 06GM08.	1.5	12
60	Confirmation of Gripping Status Classification using an Array of Micro Cantilever Type Tactile Sensor. Transactions of the Society of Instrument and Control Engineers, 2011, 47, 40-42.	0.2	4
61	Ferroelectric Properties of Bi <sub>1.1</sub> Fe <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub> Thin Films Prepared by Chemical Solution Deposition Using Iterative Rapid Thermal Annealing in N <sub>2</sub> and O <sub>2</sub> . Japanese Journal of Applied Physics, 2010, 49, 09MB05.	1.5	14
62	Stability Improvement of Tactile Sensor of Normal and Shear Stresses Using Ni-Cr Thin Film Gauge. IEEJ Transactions on Sensors and Micromachines, 2009, 129, 411-416.	0.1	22
63	Fabrication and Normal/Shear Stress Responses of Tactile Sensors of Polymer/Si Cantilevers Embedded in PDMS and Urethane Gel Elastomers. IEEJ Transactions on Sensors and Micromachines, 2008, 128, 193-197.	0.1	20
64	Fabrication and Characterization of Normal and Shear Stresses Sensitive Tactile Sensors by Using Inclined Micro-cantilevers Covered with Elastomer. Materials Research Society Symposia Proceedings, 2007, 1052, 1.	0.1	11
65	Studies on Curvature Deformation Control of Bilayer Cantilever Fabricated by Surface Micromachining of SOI Wafer. Materials Research Society Symposia Proceedings, 2006, 969, 1.	0.1	6
66	Contactless Characterization of Fixed Charges in HfO <sub>2</sub> Thin Film from Photoreflectance. Japanese Journal of Applied Physics, 2005, 44, 2409-2414.	1.5	3
67	Characterization of Ferroelectric Thin Film/SiO <sub>2</sub> /Si Structure by Photoreflectance. Ferroelectrics, 2004, 303, 119-123.	0.6	0
68	Nondestructive and Contactless Monitoring Technique of Si Surface Stress by Photoreflectance. Japanese Journal of Applied Physics, 2001, 40, 2844-2848.	1.5	11