Yuji Suzuki

List of Publications by Year
in descending order

133	2,303	279701	233338
papers	citations	23 h-index	45 g-index

134	134	134	1807
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress in MEMS electret generator for energy harvesting. IEEJ Transactions on Electrical and Electronic Engineering, 2011, 6, 101-111.	0.8	330
2	A MEMS electret generator with electrostatic levitation for vibration-driven energy-harvesting applications. Journal of Micromechanics and Microengineering, 2010, 20, 104002.	1.5	251
3	The development of a high-performance perfluorinated polymer electret and its application to micro power generation. Journal of Micromechanics and Microengineering, 2008, 18, 104011.	1.5	221
4	Microelectromechanical Systemsâ€“Based Feedback Control of Turbulence for Skin Friction Reduction. Annual Review of Fluid Mechanics, 2009, 41, 231-251.	10.8	147
5	Nano-cluster-enhanced high-performance perfluoro-polymer electrets for energy harvesting. Journal of Micromechanics and Microengineering, 2011, 21, 125016.	1.5	80
6	Effect of wall surface reaction on a methane-air premixed flame in narrow channels with different wall materials. Proceedings of the Combustion Institute, 2013, 34, 3395-3402.	2.4	79
7	Friction drag reduction achievable by near-wall turbulence manipulation at high Reynolds numbers. Physics of Fluids, 2005, 17, 011702-011702-4.	1.6	68
8	Micropit surfaces designed for accelerating osteogenic differentiation of murine mesenchymal stem cells via enhancing focal adhesion and actin polymerization. Biomaterials, 2014, 35, 2245-2252.	5.7	67
9	Experimental study of micro-scale premixed flame in quartz channels. Proceedings of the Combustion Institute, 2009, 32, 3083-3090.	2.4	66
10	Trench-filled cellular parylene electret for piezoelectric transducer. Applied Physics Letters, 2012, 100, .	1.5	57
11	Electret charging method based on soft X-ray photoionization for MEMS transducers. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1291-1298.	1.8	57
12	Surface structure determines dynamic wetting. Scientific Reports, 2015, 5, 8474.	1.6	54
13	Microelectrostrictive Actuator With Large Out-of-Plane Deformation for Flow-Control Application. Journal of Microelectromechanical Systems, 2007, 16, 753-764.	1.7	46
14	Radical quenching of metal wall surface in a methane-air premixed flame. Combustion and Flame, 2015, 162, 4036-4045.	2.8	44
15	Quenching mechanism study of oscillating flame in micro channels using phase-locked OH-PLIF. Proceedings of the Combustion Institute, 2011, 33, 3267-3273.	2.4	43
16	Large-amplitude MEMS electret generator with nonlinear spring. , 2010, , .		38
17	Development of a micro catalytic combustor using high-precision ceramic tape casting. Journal of Micromechanics and Microengineering, 2006, 16, S198-S205.	1.5	36
18	High-temperature micro catalytic combustor with Pd/nano-porous alumina. Proceedings of the Combustion Institute, 2009, 32, 3019-3026.	2.4	29

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19	Adhesion-Based Cell Sorter With Antibody-Coated Amino-Functionalized-Parylene Surface. Journal of Microelectromechanical Systems, 2008, 17, 611-622.	1.7	26
20	MEMS electret energy harvester with embedded bistable electrostatic spring for broadband response. Journal of Micromechanics and Microengineering, 2018, 28, 104001.	1.5	26
21	Development of Micro Catalytic Combustor with Pt/Al2O3 Thin Films. JSME International Journal Series B, 2004, 47, 522-527.	0.3	25
22	Effect of end group of amorphous perfluoro-polymer electrets on electron trapping. Science and Technology of Advanced Materials, 2018, 19, 486-494.	2.8	25
23	A Lamination Micro Mixer for .MU.-Immunomagnetic Cell Sorter. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2005, 48, 425-435.	0.3	24
24	Drag Reduction of Turbulence Air Channel Flow with Distributed Micro Sensors and Actuators. Journal of Fluid Science and Technology, 2008, 3, 137-148.	0.2	23
25	High-speed electret charging using vacuum UV photoionization. Applied Physics Letters, 2011, 98, .	1.5	23
26	Improved Capacitance Model Involving Fringing Effects for Electret-Based Rotational Energy Harvesting Devices. IEEE Transactions on Electron Devices, 2018, 65, 1597-1603.	1.6	22
27	Low-profile rotational electret generator using print circuit board for energy harvesting from arm swing. , 2018, , .		20
28	Active Control of Swirling Coaxial Jet Mixing with Manipulation of Large-Scale Vortical Structures. Flow, Turbulence and Combustion, 2011, 86, 399-418.	1.4	18
29	X-shaped-spring enhanced MEMS electret generator for energy harvesting. , 2013, , .		18
30	MEMS vibration electret energy harvester with combined electrodes. , 2014, , .		18
31	Electromechanical Modeling of Micro Electret Generator for Energy Harvesting. , 2007, , .		17
32	Study on the discrete dielectrophoresis for particleâ€“cell separation. Electrophoresis, 2020, 41, 991-1001.	1.3	17
33	Wall chemical effect of metal surfaces on DME/air cool flame in a micro flow reactor. Proceedings of the Combustion Institute, 2019, 37, 5655-5662.	2.4	15
34	Optimal Shape Design of Compact Heat Exchangers Based on Adjoint Analysis of Momentum and Heat Transfer. Journal of Thermal Science and Technology, 2010, 5, 24-35.	0.6	14
35	Effect of nonlinear external circuit on electrostatic damping force of micro electret generator. , 2009, , .		13
36	Title is missing!. Flow, Turbulence and Combustion, 2000, 63, 415-442.	1.4	12

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37	Electrostatic cloaking of surface structure for dynamic wetting. Science Advances, 2017, 3, e1602202.	4.7	12
38	Discovery of polymer electret material via de novo molecule generation and functional group enrichment analysis. Applied Physics Letters, 2021, 118, .	1.5	12
39	DME/Oxygen wall-stabilized premixed cool flame. Proceedings of the Combustion Institute, 2019, 37, 1749-1756.	2.4	11
40	A silicon microcavity selective emitter with smooth surfaces for thermophotovoltaic power generation. Journal of Micromechanics and Microengineering, 2010, 20, 104006.	1.5	10
41	Study on the influences of reduction temperature on nickel-yttria-stabilized zirconia solid oxide fuel cell anode using nickel oxide-film electrode. Journal of Power Sources, 2016, 328, 377-384.	4.0	10
42	Investigation of wall chemical effect using PLIF measurement of OH radical generated by pulsed electric discharge. Combustion and Flame, 2018, 196, 255-264.	2.8	9
43	Evaluation of H-atom adsorption on wall surfaces with a plasma molecular beam scattering technique. Proceedings of the Combustion Institute, 2019, 37, 5569-5576.	2.4	9
44	High Performance Recuperator With Oblique Wavy Walls. Journal of Heat Transfer, 2008, 130, .	1.2	8
45	IN-plane gap-closing mems vibration electret energy harvester on thick box layer. , 2015, , .		8
46	Solid-State Electron Affinity Analysis of Amorphous Fluorinated Polymer Electret. Journal of Physical Chemistry B, 2020, 124, 10507-10513.	1.2	8
47	Liquid Dielectrophoresis on Electret: A Novel Approach Towards CMOS-Driven Digital Microfludics. Journal of Adhesion Science and Technology, 2012, 26, 2025-2045.	1.4	7
48	Design and analysis of micro thermal switch using the near-field effect for space applications. International Journal of Thermal Sciences, 2018, 132, 161-167.	2.6	7
49	Development of A High-performance Amorphous Fluorinated Polymer Electret Based on Quantum Chemical Analysis. Journal of Physics: Conference Series, 2019, 1407, 012031.	0.3	7
50	Quantitative evaluation of wall chemical effect in hydrogen flame using two-photon absorption LIF. Proceedings of the Combustion Institute, 2021, 38, 2361-2370.	2.4	7
51	Ignition characteristics of premixed cool flames on a heated wall. Combustion and Flame, 2021, 231, 111476.	2.8	7
52	Parylene-based active micro space radiator with thermal contact switch. Applied Physics Letters, 2014, 104, .	1.5	6
53	High-temperature monolithic SiGe thermoelectric device directly heated by catalytic combustion. Applied Physics Letters, 2022, 120, .	1.5	6
54	Active Control of Coaxial Jet Mixing with Arrayed Micro Actuators. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 1417-1424.	0.2	5

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55	Liquid-crystal-enhanced electrostatic vibration generator. , 2016, , .		5
56	Active Control of Lifted Flames with Arrayed Micro Actuators. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2005, 71, 191-199.	0.2	4
57	Temperature Measurement with a Conditional Two-line OH-PLIF Technique in an Actively Controlled Coaxial Jet Flame. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 1678-1686.	0.2	4
58	Non-contact electrostatic micro-bearing using polymer electret. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	4
59	Liquid-tolerant electret using super-lyophobic pillar surface. , 2015, , .		4
60	Dual-Stage-Electrode-Enhanced Efficient SSHI for Rotational Electret Energy Harvester. , 2019, , .		4
61	Electrowetting-Dominated Instability of Cassie Droplets on Superlyophobic Pillared Surfaces. Langmuir, 2019, 35, 2013-2022.	1.6	4
62	A Spider-Web Design for Decreasing Eigen-Frequency With Increasing Amplitude in a PE/ME Composite Energy Convertor. IEEE Transactions on Industrial Electronics, 2021, 68, 5396-5404.	5.2	4
63	A discrete dielectrophoresis device for the separation of malariaâ€infected cells. Electrophoresis, 2022, 43, 1347-1356.	1.3	4
64	Energy Harvesting from Vibration Using Polymer Electret. , 2008, , .		3
65	H-TALIF measurement for wall radical quenching modelling in microscale combustion. Journal of Physics: Conference Series, 2018, 1052, 012040.	0.3	3
66	Mechanical Response Evaluation of High-Thermally-Stable-Grade Parylene Spring. , 2009, , .		2
67	Active control of coaxial jet mixing with manipulation of primary vortical structures by arrayed micro flap actuators. Journal of Turbulence, 2015, 16, 411-441.	0.5	2
68	MEMS comb-drive electret energy harvester charged after packaging. , 2016, , .		2
69	Adjoint-based shape optimization of fin geometry for heat transfer enhancement in solidification problem. Journal of Thermal Science and Technology, 2016, 11, JTST0040-JTST0040.	0.6	2
70	Effects of the cell and triangular microwell size on the cell-trapping efficacy and specificity. Journal of Mechanical Science and Technology, 2019, 33, 5571-5580.	0.7	2
71	Development of Flexible Wireless Wall Temperature Sensor for Combustion Studies. , 2019, 3, 1-4.		2
72	Developing Self-powered High Performance Sensors: Part II - Preliminary Study On PE-ME Coupling In A Vibration Energy Convertor. , 2020, , .		2

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73	Development of Combustor/Heat Exchanger-Integrated Thermoelectric Power Generation System for Autonomous Robots. Journal of the Robotics Society of Japan, 2021, 39, 120-124.	0.0	2
74	Enhancing output power of rotational electret energy harvester by synchronized switch harvesting on inductor. Journal of Intelligent Material Systems and Structures, 2022, 33, 183-195.	1.4	2
75	Heat Transfer and Fluid Flow Characteristics of Recuperators with Oblique Wavy Walls. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 2604-2611.	0.2	1
76	Optimal Thermal Design of Micro Hot-film Wall Shear Stress Sensor.. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2004, 70, 38-45.	0.2	1
77	Adhesion-based cell sorter with antibody-immobilized functionalized-parylene surface. , 2007, , .		1
78	Electrostatic droplet manipulation using electret as a voltage source. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1
79	Label-Free Continuous Micro Cell Sorter with Antibody-Immobilized Oblique Grooves. , 2009, , .		1
80	Conversion Efficiency of Micro-Plasma Actuator for Flow Control(<Special Issue>The 1st Symposium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf of Mechanical Engineers, Part C, 2010, 76, 1914-1916.	0.2	1
81	Secondary-flow-induced label-free continuous cell sorting using antibody-immobilized micro oblique grooves. , 2010, , .		1
82	High-speed electret charging using vacuum UV photoionization [Reprint]. IEEE Electrical Insulation Magazine, 2011, 27, 62-64.	1.1	1
83	All-polymer soft-X-ray-charged piezoelectret with embedded PEDOT electrode. , 2013, , .		1
84	Facile and versatile replication of high-performance superlyophobic surfaces on curable substrates using elastomer molds. , 2013, , .		1
85	All-polymer high-aspect-ratio spring with embedded electrode. , 2013, , .		1
86	Electric instability of cassie droplets on super-lyophobic pillar surface: Pull-in versus electrowetting. , 2016, , .		1
87	Development of feedback control system based on genetic algorithm for wall turbulence. The Proceedings of the JSME Annual Meeting, 2002, 2002.7, 37-38.	0.0	1
88	3-3 Development of Battery-less Sensor-node Using Vibration-driven Electret Generator. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2011, 2011.3, 27-28.	0.0	1
89	Cylinder Wall Temperature Measurement in the Optical Engine Using a Flexible Wireless Sensor. The Proceedings of the International Symposium on Diagnostics and Modeling of Combustion in Internal Combustion Engines, 2017, 2017.9, A203.	0.1	1
90	Solid-state Analysis Based on Polarizable Continuum Model for Amorphous Fluorinated Polymer Electret. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2020, 2020.11, 26A3-MN1-5.	0.0	1

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91	Evaluation of Lamination Micro Mixer for Micro Immunomagnetic Cell Sorter. , 2006, , .		0
92	Evaluation of Feedback Control System for Wall Turbulence with Micro Sensors and Actuators. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2006, 72, 568-575.	0.2	0
93	Selective Emitter with Two-dimensional Surface Microstructures Revisited. AIP Conference Proceedings, 2007, , .	0.3	0
94	Optimal Shape Design of Compact Heat Exchanger Based on Adjoint Analysis of Momentum and Heat Transfer. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 1670-1677.	0.2	0
95	Micro power generator with high-performace polymer electret. , 2008, , .		0
96	Development of high-performance purfluorinated polymer electret. , 2008, , .		0
97	Development of Vibration-Driven MEMS Electret Power Generator for Energy Harvesting Application(<Special Issue>The 1st Symposium on Micro-Nano Engineering). Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2010, 76, 1887-1889.	0.2	0
98	High-density antibody-immobilized surface for adhesion-based cell separation. , 2010, , .		0
99	Electrostatically-driven active space radiator using near-field thermal radiation. , 2011, , .		0
100	Macromol. Biosci. 7/2011. Macromolecular Bioscience, 2011, 11, .	2.1	0
101	Soft X-ray-charged multilayered piezoelectret with embedded electrode for push-button energy harvesting. , 2018, , .		0
102	Deep Electrode and Parylene E-Based Capacitive VOC Detector for Micro Gas Chromatograph Application. , 2019, , .		0
103	Design and Evaluation of Micro Hot-film Shear Stress Sensor. The Proceedings of the JSME Annual Meeting, 2000, 2000.1, 723-724.	0.0	0
104	E220 Optimal Design of Micro Bare-Tube Heat Exchanger for Electronic Equipment Cooling. Proceedings of Thermal Engineering Conference, 2001, 2001, 555-556.	0.0	0
105	C213 Active Control of Diffusion Flame with Arrayed Micro Actuators. Proceedings of Thermal Engineering Conference, 2001, 2001, 451-452.	0.0	0
106	G215 Development of Active Feedback Control System for Wall Turbulence Using Micro Devices. Proceedings of Thermal Engineering Conference, 2001, 2001, 633-634.	0.0	0
107	K-1309 Active Control of Rount Jet with Arrayed Actuators. The Proceedings of the JSME Annual Meeting, 2001, II.01.1, 127-130.	0.0	0
108	Active Control of Coaxial Air Jet with Arrayed Micro Actuators. The Proceedings of the JSME Annual Meeting, 2003, 2003.2, 147-148.	0.0	0

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109	Optimal Shape Design of Recuperators with Oblique Wavy Walls. The Proceedings of the Thermal Engineering Conference, 2003, 2003, 445-446.	0.0	0
110	Numerical Simulation of Flow Induced by a Micro-Jet Actuator. The Proceedings of the Thermal Engineering Conference, 2003, 2003, 443-444.	0.0	0
111	Evaluation of Micro Catalytic Combustor Using Tape-casting Ceramic Structure. The Proceedings of the National Symposium on Power and Energy Systems, 2004, 2004.9, 29-30.	0.0	0
112	OS1-02 Study on Micro-scale Ceramic Catalytic Combustor with Embedded Heat Exchange Channels. The Proceedings of the National Symposium on Power and Energy Systems, 2005, 2005.10, 9-10.	0.0	0
113	3606 Development of Micro Ejector for Butane Catalytic Combustor. The Proceedings of the JSME Annual Meeting, 2005, 2005.3, 249-250.	0.0	0
114	F153 Performance Assessment of Oblique-Wave Heat Exchangers with Different Aspect Ratio. The Proceedings of the Thermal Engineering Conference, 2005, 2005, 249-250.	0.0	0
115	OS1-2 Development of Micro-Electret Generator Using Amorphous Perfluoropolymer. The Proceedings of the National Symposium on Power and Energy Systems, 2006, 2006.11, 23-24.	0.0	0
116	OS1-6 Evaluation of Micro Catalytic Combustor for Thermophotovoltaic Power Generation System. The Proceedings of the National Symposium on Power and Energy Systems, 2007, 2007.12, 49-50.	0.0	0
117	D208 Basic Study of Selective Emitter Using Surface Micro Cavities. The Proceedings of the National Symposium on Power and Energy Systems, 2008, 2008.13, 419-420.	0.0	0
118	335 Heat Transfer Characteristics of Two Phase Flow in a Micro Tube. The Proceedings of the JSME Annual Meeting, 2008, 2008.8, 69-70.	0.0	0
119	E113 Development of High-temperature-operated Micro Catalytic Combustor for Thermophotovoltaic Power Generation System. The Proceedings of the National Symposium on Power and Energy Systems, 2009, 2009.14, 151-152.	0.0	0
120	MNM-P9-3 Label-Free Continuous Micro Cell Sorting Using Specific Wall Adhesion And Secondary Flow. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2010, 2010.2, 127-128.	0.0	0
121	F105 Efficiency Prediction of Thermophotovoltaic with Metal-coated Silicon Microcavity. The Proceedings of the National Symposium on Power and Energy Systems, 2010, 2010.15, 211-212.	0.0	0
122	MNM-5B-2 Development of MEMS Electret Generator with Nonlinear Spring for Broadband Environmental Vibration. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2010, 2010.2, 209-210.	0.0	0
123	D131 High-Speed Transient Temperature Control Using Adjoint-Based Optimal Control Scheme. The Proceedings of the Thermal Engineering Conference, 2011, 2011, 91-92.	0.0	0
124	MP-22 Development of Vibration-driven MEMS Energy Harvester with Vacuum UV-Charged Vertical Electrets. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2011, 2011.3, 111-112.	0.0	0
125	MP-21 Electret Charging Method Based on X-ray Photoionization for MEMS Power Generator. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2011, 2011.3, 109-110.	0.0	0
126	P-OS4-3 Evaluation of Power Management Circuit for Electret Energy Harvester. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2012, 2012.4, 275-276.	0.0	0

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127	OS4-1-6 Electret-based MEMS energy harvesting device with improved parasitic capacitance. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2012, 2012.4, 101-102.	0.0	0
128	F222007 Micro Power Generation for High-added-value Energy Source. The Proceedings of Mechanical Engineering Congress Japan, 2012, 2012, _F222007-1-_F222007-4.	0.0	0
129	OS4-1-3 Development of electret charging method based on soft X-ray photoionization and its application to MEMS electret power generator. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2012, 2012.4, 95-96.	0.0	0
130	5AM2-C-3 Development of MEMS Vibration Energy Harvester with Soft-X-ray-charged Vertical Electrets. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2013, 2013.5, 5-6.	0.0	0
131	6PM3-PMN-010 Evaluation of RF Sensor Module with Vibration Electret Energy Harvester. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2013, 2013.5, 185-186.	0.0	0
132	Effect of vessel geometry on hemodynamics stress in pancreatic arcade aneurysms. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2018, 2018.30, 2F16.	0.0	0
133	Development of Synchronous Electric Charge Extraction Circuit for Rotational Electret Energy Harvester. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2020, 2020.11, 26A3-MN2-1.	0.0	0