Junya Suehiro

List of Publications by Year
in descending order

93	2,467	279487	205818
papers	citations	23 h-index	48 g-index

95	95	95	2133
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Characterization of Extra-Cellular Vesicle Dielectrophoresis and Estimation of Its Electric Properties. Sensors, 2022, 22, 3279.	2.1	6
2	Rapid and low-cost amplicon visualization for nucleic acid amplification tests using magnetic microbeads. Analyst, The, 2021, 146, 2818-2824.	1.7	3
3	Detection of SARS-CoV-2 Gene by Microbeads Dielectrophoresis-based DNA Detection Method. IEEJ Transactions on Sensors and Micromachines, 2021, 141, 233-236.	0.0	0
4	Effect of mixing ratio on NO2 gas sensor response with SnO2-decorated carbon nanotube channels fabricated by one-step dielectrophoretic assembly. Sensors and Actuators B: Chemical, 2021, 344, 130257.	4.0	41
5	Response properties of nitrogen dioxide gas sensors with tin oxide decorated carbon nanotube channel fabricated by two-step dielectrophoretic assembly. AIP Advances, 2020, 10, .	0.6	10
6	DNA-induced changes in traveling wave dielectrophoresis velocity of microparticles. AIP Advances, 2020, 10, .	0.6	4
7	Dielectrophoretic properties of submicron diamond particles in sodium chloride aqueous solution. Japanese Journal of Applied Physics, 2020, 59, 046502.	0.8	4
8	Applications of dielectrophoresis in life science. Denki Eido, 2020, 64, 15-18.	0.0	0
9	A New Scheme for Residual CF4 Detection in Gas-Insulated Switchgear Using Plasma-induced CF4 Decomposition into CO2. , 2020, , .		0
10	Simple microfluidic device for detecting the negative dielectrophoresis of DNA labeled microbeads. Biomicrofluidics, 2019, 13, 064109.	1.2	9
11	DNA Detection Method based on the Microbead Velocity under Traveling Wave Dielectrophoresis. , 2019, , .		0
12	Frequency-dependent conductance change of dielectrophoretic-trapped DNA-labeled microbeads and its application in DNA size determinations. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	5
13	Time-resolved imaging of the electrical breakdown of planar microelectrode gap in atmospheric air. Journal of Electrostatics, 2017, 87, 167-172.	1.0	7
14	Bacterial detection based on polymerase chain reaction and microbead dielectrophoresis characteristics. IET Nanobiotechnology, 2017, 11, 562-567.	1.9	3
15	DNA detection microfluidic device based on negative dielectrophoresis of DNA labeled microbeads. , 2017, , .		1
16	Evaluation on Insulation Performance of Snow Accreted Insulators by using Artificial Snow Created in a Laboratory. IEEJ Transactions on Fundamentals and Materials, 2017, 137, 590-597.	0.2	0
17	Comparison of Sensitivity and Quantitation between Microbead Dielectrophoresis-Based DNA Detection and Real-Time PCR. Biosensors, 2017, 7, 44.	2.3	8
18	Detection of acetylene dissolved in insulation oil using pt-decorated ZnO gas sensor. , 2016, , .		3

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19	Breakup of carbon nanotube aggregates under high electric field and its application to nanocomposite film. , 2016, , .		0
20	Dielectrophoretic modification of carbon nanotube with ZnO nanoparticles for NO<inf>2</inf> gas sensing. , 2016, , .		2
21	Dielectrophoresis and dielectrophoretic impedance detection of adenovirus and rotavirus. Japanese Journal of Applied Physics, 2016, 55, 017001.	0.8	33
22	Sensitivity Improvement of Dielectrophoretic Impedance Measurement by Bacteria Concentration using Negative Dielectrophoresis. IEEJ Transactions on Sensors and Micromachines, 2016, 136, 148-152.	0.0	0
23	Effect of DNA length on dielectrophoretic characteristics of DNA-labeled microbeads. , 2015, , .		2
24	Sensitive and quantitative DNA detection by beads-based dielectrophoretic impedance measurement. , 2015, , .		0
25	Concentration of bacteria in high conductive medium using negative dielectrophoresis. , 2015, , .		5
26	Dielectrophoretic fabrication and chacterization of ZnO nanowire-based acetylene gas sensor. , 2015, , .		0
27	Rapid microbead-based DNA detection using dielectrophoresis and impedance measurement. Europhysics Letters, 2014, 108, 28003.	0.7	17
28	DNA detection using microbeads-based dielectrophoretic impedance measurement. , 2014, , .		5
29	A rapid bacteria detection technique utilizing impedance measurement combined with positive and negative dielectrophoresis. Sensors and Actuators B: Chemical, 2013, 181, 439-445.	4.0	76
30	Detection of norovirus and rotavirus by dielectrophoretic impedance measurement. , 2013, , .		3
31	Fabrication of a Large-Scale Conductive Composite Film Containing Electrically Aligned Carbon Nanotubes. Advanced Materials Research, 2013, 699, 513-518.	0.3	1
32	Solution-Based Fabrication of Carbon Nanotube Gas Sensor by Using Dielectrophoresis and Spin-Column Chromatography. Advanced Materials Research, 2013, 699, 915-920.	0.3	1
33	Higher throughput of optical detection of bacteria concentrated by negative dielectrophoresis. , 2013, , .		1
34	Dielectrophoretic Assembly of Semiconducting Carbon Nanotubes Separated and Enriched by Spin Column Chromatography and Its Application to Gas Sensing. Japanese Journal of Applied Physics, 2012, 51, 045102.	0.8	5
35	Electrical detection of norovirus capsid using dielectrophoretic impedance measurement method. , 2012, , .		4
36	Pretreatment of cell membranes for improved electropermeabilization-assisted dielectrophoretic impedance measurement. Sensors and Actuators B: Chemical, 2012, 173, 676-681.	4.0	5

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37	Detection of SF₆ decomposition products generated by DC corona discharge using a carbon nanotube gas sensor. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 671-676.	1.8	28
38	Dielectrophoretic Assembly of Semiconducting Carbon Nanotubes Separated and Enriched by Spin Column Chromatography and Its Application to Gas Sensing. Japanese Journal of Applied Physics, 2012, 51, 045102.	0.8	3
39	Electrical Conductivity Enhancement of a Large-scale Composite Film Containing Electrically Aligned Carbon Nanotubes. IEEJ Transactions on Fundamentals and Materials, 2012, 132, 980-981.	0.2	0
40	Response of a Carbon Nanotube Gas Sensor to Impulse Discharges in SF₆ Gas. IEEJ Transactions on Fundamentals and Materials, 2012, 132, 978-979.	0.2	1
41	Fabrication and characterization of nanomaterial-based sensors using dielectrophoresis. Biomicrofluidics, 2010, 4, 022804.	1.2	23
42	Enhancement and Stabilization of Pulsed Streamer Discharge in Water by Adding Carbon Nanotubes. Japanese Journal of Applied Physics, 2010, 49, 086203.	0.8	3
43	Solubilization of Single-Walled Carbon Nanotubes Using Ozone Generated by Dielectric Barrier Discharge. Japanese Journal of Applied Physics, 2010, 49, 055002.	0.8	2
44	Identification of DC corona generating SF<inf>6</inf> decomposition gases adsorbed on CNT gas sensor using FTIR spectroscopy. , 2010, , .		1
45	Effects of pH on Water-Solubilization of Carbon Nanotube Using Microplasma in Aqueous Solution. Japanese Journal of Applied Physics, 2009, 48, 065004.	0.8	11
46	Dielectrophoretic Manipulation of Nanomaterials and its Application to Device Fabrication. IEEJ Transactions on Fundamentals and Materials, 2009, 129, 435-438.	0.2	0
47	Fabrication of bio/nano interfaces between biological cells and carbon nanotubes using dielectrophoresis. Microfluidics and Nanofluidics, 2008, 5, 741-747.	1.0	18
48	Production of magnetic iron oxide nanoparticles by using graphite arc discharge in Fe(OH)₃ colloidal solution. Electronics and Communications in Japan, 2008, 91, 55-62.	0.3	4
49	Effects of gas bubbling on water-solubilization of carbon nanotube using microplasma generated in water. Surface and Coatings Technology, 2008, 202, 5271-5274.	2.2	6
50	Optical observations of partial discharge-induced bubbles generated in subcooled liquid nitrogen at atmospheric pressure. IEEE Transactions on Dielectrics and Electrical Insulation, 2008, 15, 620-625.	1.8	6
51	AC particle-triggered corona discharge in low pressure SF/sub 6/ gas. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 91-100.	1.8	16
52	Carbon Nanotube-Based Hydrogen Gas Sensor Electrochemically Functionalized with Palladium. , 2007, , .		6
53	Enhancement of microplasma-based water-solubilization of single-walled carbon nanotubes using gas bubbling in water. Nanotechnology, 2007, 18, 335602.	1.3	52
54	Factors affecting PD detection in GIS using a carbon nanotube gas sensor. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 718-725.	1.8	15

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55	Fabrication of interfaces between carbon nanotubes and catalytic palladium using dielectrophoresis and its application to hydrogen gas sensor. Sensors and Actuators B: Chemical, 2007, 127, 505-511.	4.0	50
56	Gas sensor using single-wall carbon nanohorns. Advanced Powder Technology, 2007, 18, 455-466.	2.0	20
57	Solubilization of Carbon Nanotubes Using Microplasma Generated in Water. Transactions of the Materials Research Society of Japan, 2007, 32, 517-522.	0.2	0
58	Dielectrophoretic fabrication and characterization of a ZnO nanowire-based UV photosensor. Nanotechnology, 2006, 17, 2567-2573.	1.3	211
59	DC corona discharge from floating particle in low pressure SF/sub 6/. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1208-1216.	1.8	16
60	Analysis of PD-generated SF/sub 6/ decomposition gases adsorbed on carbon nanotubes. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1200-1207.	1.8	58
61	Production of Magnetic Iron Oxide Nanoparticles by using Graphite Arc Discharge in Fe(OH)3 Colloidal Solution. IEEJ Transactions on Fundamentals and Materials, 2006, 126, 349-354.	0.2	1
62	Application of dielectrophoresis to fabrication of carbon nanohorn gas sensor. Journal of Electrostatics, 2006, 64, 408-415.	1.0	52
63	Selective detection of bacteria by a dielectrophoretic impedance measurement method using an antibody-immobilized electrode chip. Sensors and Actuators B: Chemical, 2006, 119, 319-326.	4.0	81
64	Preparation of water-soluble carbon nanotubes using a pulsed streamer discharge in water. Nanotechnology, 2006, 17, 3421-3427.	1.3	51
65	Schottky-type response of carbon nanotube NO2 gas sensor fabricated onto aluminum electrodes by dielectrophoresis. Sensors and Actuators B: Chemical, 2006, 114, 943-949.	4.0	124
66	Corona Discharge Mechanism and Breakdown Voltage Characteristics from Metallic Floating Particle in SF6 Gas under dc Voltage. , 2006, , .		6
67	Detection of partial discharge in SF6 gas using a carbon nanotube-based gas sensor. Sensors and Actuators B: Chemical, 2005, 105, 164-169.	4.0	127
68	Controlled fabrication of carbon nanotube NO2 gas sensor using dielectrophoretic impedance measurement. Sensors and Actuators B: Chemical, 2005, 108, 398-403.	4.0	141
69	Improvement of electric pulse shape for electropermeabilization-assisted dielectrophoretic impedance measurement for high sensitive bacteria detection. Sensors and Actuators B: Chemical, 2005, 109, 209-215.	4.0	50
70	Improvement of the Ozone Generation Efficiency by Silent Discharge at Cryogenic Temperature. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 791-796.	0.2	8
71	Particle-initiated Breakdown Characteristics around Spacer under Lightning Impulse Voltage Superimposed on Pre-stressed DC. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 547-552.	0.2	3
72	Influence of gap length on the gas-puff z-pinch plasma produced by an inductive pulsed power system. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2003, 144, 1-8.	0.2	2

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73	Estimation of partial discharge onset characteristics in gases around a triple junction. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2003, 144, 1-11.	0.2	6
74	Quench time lag of NbTi mechanical PCS with ramped current waveforms. Cryogenics, 2003, 43, 19-24.	0.9	2
75	Selective detection of viable bacteria using dielectrophoretic impedance measurement method. Journal of Electrostatics, 2003, 57, 157-168.	1.0	187
76	Selective detection of specific bacteria using dielectrophoretic impedance measurement method combined with an antigenâ€“antibody reaction. Journal of Electrostatics, 2003, 58, 229-246.	1.0	66
77	High sensitive detection of biological cells using dielectrophoretic impedance measurement method combined with electropermeabilization. Sensors and Actuators B: Chemical, 2003, 96, 144-151.	4.0	75
78	Fabrication of a carbon nanotube-based gas sensor using dielectrophoresis and its application for ammonia detection by impedance spectroscopy. Journal Physics D: Applied Physics, 2003, 36, L109-L114.	1.3	276
79	Dielectrophoretic filter for separation and recovery of biological cells in water. IEEE Transactions on Industry Applications, 2003, 39, 1514-1521.	3.3	75
80	Production of Carbon Nanoparticles Using Pulsed Arc Discharge Triggered by Dielectric Breakdown in Water. Japanese Journal of Applied Physics, 2003, 42, L1483-L1485.	0.8	18
81	Wire Particle Motion Behavior and Breakdown Characteristics around Different Shaped Spacers within Diverging Air Gap. IEEJ Transactions on Power and Energy, 2003, 123, 1288-1295.	0.1	10
82	Partial Discharge Characteristics in an Artificial Air-filled Void under Superimposed Sinusoidal Voltages at LN2 Temperature. IEEJ Transactions on Power and Energy, 2003, 123, 1280-1287.	0.1	1
83	Quantitative estimation of biological cell concentration suspended in aqueous medium by using dielectrophoretic impedance measurement method. Journal Physics D: Applied Physics, 1999, 32, 2814-2820.	1.3	139
84	Effect of a thin insulation film on thermal bubble-triggered breakdown phenomena in liquid nitrogen. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 1999, 127, 18-28.	0.2	4
85	Influence of liquid temperature and electrode size on insulated breakdown characteristics in saturated superfluid helium. Electrical Engineering in Japan (English Translation of Denki Gakkai) Tj ETQq1 1 0.784314 rgBT /Overlock	0.2	
86	The dielectrophoretic movement and positioning of a biological cell using a three-dimensional grid electrode system. Journal Physics D: Applied Physics, 1998, 31, 3298-3305.	1.3	94
87	Characteristics of NbTi Mechanical Persistent Current Switch and Mechanism of Superconducting Connection at Contact.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of) Tj ETQq1 1 0.784314 rgBT /Overlock		
88	Methods for the improvement of electrical insulation in vacuum in the presence of transverse magnetic field. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 1990, 110, 27-35.	0.2	2
89	Methods for the improvement of electrical insulation in vacuum in the presence of transverse magnetic field.. IEEJ Transactions on Fundamentals and Materials, 1989, 109, 375-382.	0.2	1
90	Modes and characteristics of corona discharge in highâ€temperature air. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 1988, 108, 10-21.	0.2	6

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91	Modes and characteristics of corona discharge in high temperature air.. IEEJ Transactions on Fundamentals and Materials, 1987, 107, 379-386.	0.2	1
92	The similarity relationship in unipolar ion flow fields with rod-to-plane gaps.. IEEJ Transactions on Fundamentals and Materials, 1987, 107, 233-240.	0.2	3
93	Chemical Detection of SF₆ Decomposition Products Generated by AC and DC Corona Discharges Using a Carbon Nanotube Gas Sensor. Advanced Materials Research, 0, 699, 909-914.	0.3	9