Aaron T Ohta

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8995428/publications.pdf

Version: 2024-02-01

117	4,270	186265	168389
papers	citations	28 h-index	53 g-index

117	117	117	3407
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrocapillary Actuation of Liquid Metal in Microchannels. Micromachines, 2022, 13, 572.	2.9	2
2	Liquid-Metal, Flexible-Ceramic-Based Antenna for Extreme High-Temperature Conformal Seeker Applications. , 2022, , .		0
3	Bubbles in microfluidics: an all-purpose tool for micromanipulation. Lab on A Chip, 2021, 21, 1016-1035.	6.0	40
4	Toward the Design of a Reconfigurable Liquid-Metal Pixel Array. , 2021, , .		1
5	A Tunable Parallel-Plate Capacitor Using Liquid-Metal Actuation. , 2021, , .		0
6	Tunable Microwave Inductor Using Liquid-Metal Microfluidics. , 2021, , .		0
7	Deep learning neural network analysis of human blastocyst expansion from time-lapse image files. Reproductive BioMedicine Online, 2021, 42, 1075-1085.	2.4	18
8	Two-Dimensional Actuation of Liquid-Metal Droplets for Hot-Spot Cooling. , 2021, , .		0
9	Leveraging discrete modulation and liquid metal antennas for interference reduction. Eurasip Journal on Wireless Communications and Networking, 2021, 2021, .	2.4	2
10	Micromanipulation With Microrobots. IEEE Open Journal of Nanotechnology, 2021, 2, 8-15.	2.0	8
11	Corrections to â€œComplex Permittivity of NaOH Solutions Used in Liquid-Metal Circuitsâ€• IEEE Access, 2021, 9, 149398-149398.	4.2	0
12	Liquid-Metal Nodal Sheet for Reconfigurable Devices and Circuits. IEEE Access, 2020, 8, 167596-167603.	4.2	5
13	Predictive Design of a Liquid-Metal Switch Actuated by Continuous Electrowetting. , 2020, , .		0
14	Complex Permittivity of NaOH Solutions Used in Liquid-Metal Circuits. IEEE Access, 2019, 7, 150150-150156.	4.2	17
15	Enabling Reconfigurable All-Liquid Microcircuits via Laplace Barriers to Control Liquid Metal. , 2019, , .		5
16	Spray-On Liquid-Metal Electrodes for Graphene Field-Effect Transistors. Micromachines, 2019, 10, 54.	2.9	14
17	Low-Cost Rapid Fabrication of Conformal Liquid-Metal Patterns. Applied Sciences (Switzerland), 2019, 9, 1565.	2.5	15
18	RECi-P: Rapid, Economical Circuit Prototyping. , 2019, , .		2

#	Article	IF	Citations
19	Physically Reconfigurable RF Liquid Electronics via Laplace Barriers. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 4881-4889.	4.6	11
20	An Electrically Actuated DC-to-11-GHz Liquid-Metal Switch. IEEE Access, 2018, 6, 1261-1266.	4.2	11
21	A Liquid-Metal Polarization-Pattern-Reconfigurable Dipole Antenna. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 50-53.	4.0	65
22	Measurement of Impedance Changes Associated with Developmental Phases in Artemia Cysts. , 2018, , .		0
23	A Polarization-Reconfigurable Antipodal Dipole Antenna Using Liquid Metal. , 2018, , .		7
24	Managing Interference Through Discrete Modulation and Liquid Metal Antennas. , 2018, , .		1
25	A Ferrofluidically Actuated Liquid-Metal RF Switch. , 2018, , .		1
26	An Electrically Actuated Liquid-Metal Gain-Reconfigurable Antenna. International Journal of Antennas and Propagation, 2018, 2018, 1-7.	1.2	4
27	Frequency-Reconfigurable Dipole Antenna Using Liquid-Metal Pixels. International Journal of Antennas and Propagation, 2018, 2018, 1-6.	1.2	11
28	Cooperative Micromanipulation Using the Independent Actuation of Fifty Microrobots in Parallel. Scientific Reports, 2017, 7, 3278.	3.3	43
29	Optical Manipulation of Cells. Microsystems and Nanosystems, 2017, , 93-128.	0.1	6
30	Parallel actuation of multiple bubble microrobots in saline solution in an open reservoir. , 2017, , .		3
31	Collaborative micromanipulation using multiple bubble microrobots in an open reservoir. Micro and Nano Letters, 2017, 12, 891-896.	1.3	5
32	Instrument Mounted Liquid-Pressure Sensor System for Biomedical Applications. , 2017, , .		0
33	Localized Single-Cell Lysis and Manipulation Using Optothermally-Induced Bubbles. Micromachines, 2017, 8, 121.	2.9	10
34	Editorial for the Special Issue on Microdevices and Microsystems for Cell Manipulation. Micromachines, 2017, 8, 276.	2.9	2
35	Vision-assisted micromanipulation using closed-loop actuation of multiple microrobots. Robotics and Biomimetics, 2017, 4, 7.	1.7	6
36	Rapid measurement of impedance changes associated with developmental phases in Artemia cysts. , 2017, , .		2

#	Article	IF	Citations
37	Towards Flexible Patch Antennas: Characterization of Introduced Gaps. , 2017, , .		0
38	Microporous Capacitive Sensors for Use in Surgical Procedures. , 2017, , .		2
39	Feasibility of an Ultrasonic Bone-Marrow Harvester. , 2016, , .		0
40	Closed-loop vision-assisted actuation of a bubble microrobot. , 2016, , .		1
41	Automated micro-object caging using bubble microrobots. , 2016, , .		3
42	Parallel actuation and independent addressing of many bubble microrobots. , 2016, , .		6
43	An electrically actuated liquid-metal switch with metastable switching states. , 2016, , .		13
44	Reconfigurable liquid-metal antenna with integrated surface-tension actuation. , 2016, , .		4
45	Cell patterning in a hydrogel using optically induced dielectrophoresis. , 2016, , .		0
46	Electrically actuated liquid metal for reconfigurable RF devices. , 2016, , .		4
47	A planar liquid-metal shunt switch. , 2016, , .		2
48	Self-Actuation of Liquid Metal via Redox Reaction. ACS Applied Materials & Interfaces, 2016, 8, 6-10.	8.0	84
49	Rapid electrocapillary deformation of liquid metal with reversible shape retention. Micro and Nano Systems Letters, 2015, 3, .	3.7	60
50	A tunable amplifier using reconfigurable liquid-metal double-stub tuners. , 2015, , .		7
51	Efficient single-cell poration by microsecond laser pulses. Lab on A Chip, 2015, 15, 581-588.	6.0	38
52	Liquid-metal-based phase shifter with reconfigurable EBG filling factor. , 2015, , .		11
53	Liquid-Metal-Based Reconfigurable Components for RF Front Ends. IEEE Potentials, 2015, 34, 24-30.	0.3	17
54	A tunable x-band substrate integrated waveguide cavity filter using reconfigurable liquid-metal perturbing posts. , 2015, , .		27

#	Article	IF	Citations
55	Automated actuation of multiple bubble microrobots using computer-generated holograms. Proceedings of SPIE, 2015, , .	0.8	6
56	A liquid-metal reconfigurable log-periodic balun. , 2014, , .		4
57	Continuous Electrowetting of Non-toxic Liquid Metal for RF Applications. IEEE Access, 2014, 2, 874-882.	4.2	102
58	Frequency-tunable slot antenna using continuous electrowetting of liquid metal. , 2014, , .		14
59	Liquid-metal reconfigurable RF components and antennas. , 2014, , .		0
60	Interactive actuation of multiple opto-thermocapillary flow-addressed bubble microrobots. Robotics and Biomimetics, 2014, 1, 14.	1.7	25
61	Molecular delivery and transfection by laser-induced oscillating microbubbles. , 2014, , .		0
62	Laser-induced microbubble poration of localized single cells. Lab on A Chip, 2014, 14, 1572-1578.	6.0	35
63	An opto-thermocapillary cell micromanipulator. Lab on A Chip, 2013, 13, 2285.	6.0	63
64	A Liquid-Metal Monopole Array With Tunable Frequency, Gain, and Beam Steering. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1388-1391.	4.0	98
65	Bubble-driven light-absorbing hydrogel microrobot for the assembly of bio-objects. , 2013, 2013, 5303-6.		1
66	A reconfigurable, liquid-metal-based low-pass filter with reversible tuning. , 2013, , .		8
67	A liquid-metal reconfigurable Yagi-Uda monopole array. , 2013, , .		6
68	Light-induced microbubble poration of localized cells. , 2013, 2013, 4482-5.		2
69	A tunable low-pass filter using a liquid-metal reconfigurable periodic defected ground structure. , 2012, , .		7
70	Small satellites for rapid-response communication and situational assessment. , 2012, , .		1
71	Cooperative micromanipulation using optically controlled bubble microrobots. , 2012, , .		15
72	A liquid-metal reconfigurable double-stub tuner. , 2012, , .		10

#	Article	IF	Citations
73	A liquid-metal tunable electromagnetic-bandgap microstrip filter. , 2012, , .		5
74	Micro-assembly using optically controlled bubble microrobots in saline solution. , 2012, , .		18
75	Hydrogel microrobots actuated by optically generated vapour bubbles. Lab on A Chip, 2012, 12, 3821.	6.0	91
76	Optofluidics for Lab-on-a-Chip. Advances in OptoElectronics, 2012, 2012, 1-2.	0.6	0
77	A Wideband, Pressure-Driven, Liquid-Tunable Frequency Selective Surface. IEEE Microwave and Wireless Components Letters, 2011, 21, 465-467.	3.2	36
78	Micro-assembly using optically controlled bubble microrobots. Applied Physics Letters, 2011, 99, .	3.3	138
79	An Optically Controlled 3D Cell Culturing System. Advances in OptoElectronics, 2011, 2011, 1-8.	0.6	0
80	CubeSats: A bright future for nanosatellites. Open Engineering, 2011, 1, .	1.6	31
81	Aqueous droplet manipulation by optically induced Marangoni circulation. Microfluidics and Nanofluidics, 2011, 11, 307-316.	2.2	47
82	Micro-assembly using optically controlled bubbles. , 2011, , .		1
83	A Noninvasive, Motility Independent, Sperm Sorting Method and Technology to Identify and Retrieve Individual Viable Nonmotile Sperm for Intracytoplasmic Sperm Injection. Journal of Urology, 2010, 184, 2466-2472.	0.4	20
84	Phototransistor-based optoelectronic tweezers for dynamic cell manipulation in cell culture media. Lab on A Chip, 2010, 10, 165-172.	6.0	122
85	Motile and non-motile sperm diagnostic manipulation using optoelectronic tweezers. Lab on A Chip, 2010, 10, 3213.	6.0	72
86	Metallic Nanoparticle Manipulation using Optoelectronic Tweezers. , 2009, , .		5
87	Heterogeneous integration of InGaAsP microdisk laser onÂaÂsilicon platform using optofluidic assembly. Applied Physics A: Materials Science and Processing, 2009, 95, 967-972.	2.3	26
88	Trap profiles of projector based optoelectronic tweezers (OET) with HeLa cells. Optics Express, 2009, 17, 5231.	3.4	50
89	NanoPen: Dynamic, Low-Power, and Light-Actuated Patterning of Nanoparticles. Nano Letters, 2009, 9, 2921-2925.	9.1	93
90	Parallel single-cell light-induced electroporation and dielectrophoretic manipulation. Lab on A Chip, 2009, 9, 1714.	6.0	100

#	Article	IF	Citations
91	EWOD-driven droplet microfluidic device integrated with optoelectronic tweezers as an automated platform for cellular isolation and analysis. Lab on A Chip, 2009, 9, 1732.	6.0	143
92	Antifouling coatings for optoelectronic tweezers. Lab on A Chip, 2009, 9, 2952.	6.0	23
93	NanoPen: Light-actuated patterning of nanoparticles. , 2009, , .		0
94	Assessment of Single Cell Viability Following Light-Induced Electroporation Through use of On-Chip Microfluidics. , 2009, , .		3
95	Optoelectronic Tweezers as a Tool for Parallel Single-Cell Manipulation and Stimulation. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 424-431.	4.0	19
96	Force versus position profiles of HeLa cells trapped in phototransistor-based optoelectronic tweezers. Proceedings of SPIE, 2009, , .	0.8	0
97	Optofluidic Assembly of InGaAsP Microdisk Lasers on Si Photonic Circuits with Submicron Alignment Accuracy. , 2009, , .		0
98	Dynamic manipulation and separation of individual semiconducting and metallic nanowires. Nature Photonics, 2008, 2, 86-89.	31.4	246
99	In-situ single cell electroporation using optoelectronic tweezers. , 2008, , .		1
100	Optical MEMS and nano-photonics for diagnostics. , 2008, , .		0
101	Parallel assembly of nanowires using lateral-field optoelectronic tweezers. , 2008, , .		11
102	Operational Regimes and Physics Present in Optoelectronic Tweezers. Journal of Microelectromechanical Systems, 2008, 17, 342-350.	2.5	158
103	Light-Actuated AC Electroosmosis for Nanoparticle Manipulation. Journal of Microelectromechanical Systems, 2008, 17, 525-531.	2.5	97
104	Optoelectronic tweezers (OET) trap stiffness with HeLa cells. Proceedings of SPIE, 2008, , .	0.8	3
105	Assembly of IIIâ€“V microdisk lasers on silicon using lateral-field optoelectronic tweezers. , 2008, , .		0
106	Optofluidic assembly of microdisk lasers on a silicon chip. , 2008, , .		0
107	Study of the dipole-dipole interaction between metallic nanowires trapped using Optoelectronic Tweezers (OET). , 2008, , .		0
108	Optofluidics and optoelectronic tweezers. , 2008, , .		6

#	Article	IF	Citations
109	Hybrid microdisk laser on a silicon platform using lateral-field optoelectronic tweezers assembly. , 2008, , .		1
110	Optically actuated thermocapillary movement of gas bubbles on an absorbing substrate. Applied Physics Letters, 2007, 91, nihpa130823.	3.3	69
111	Trapping and Transport of Silicon Nanowires Using Lateral-Field Optoelectronic Tweezers. , 2007, , .		10
112	Dynamic Cell and Microparticle Control via Optoelectronic Tweezers. Journal of Microelectromechanical Systems, 2007, 16, 491-499.	2.5	155
113	Semiconductor nanowire manipulation using optoelectronic tweezers. , 2007, , .		7
114	Optically Controlled Cell Discrimination and Trapping Using Optoelectronic Tweezers. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 235-243.	2.9	116
115	Optically controlled manipulation of live cells using optoelectronic tweezers. , 2006, , .		3
116	Massively parallel manipulation of single cells and microparticles using optical images. Nature, 2005, 436, 370-372.	27.8	1,345
117	Retrodirective Systems. , 0, , .		6