

Chang-Jin Cj Kim

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

174
papers

12,812
citations

56
h-index

112
g-index

195
ext. papers

14,810
ext. citations

4.8
avg, IF

6.77
L-index

#	Paper	IF	Citations
174	Superhydrophobic drag reduction in turbulent flows: a critical review. <i>Experiments in Fluids</i> , 2021 , 62, 1	2.5	7
173	Superhydrophobic drag reduction in high-speed towing tank. <i>Journal of Fluid Mechanics</i> , 2021 , 908,	3.7	13
172	Brightness of Microtrench Superhydrophobic Surfaces and Visual Detection of Intermediate Wetting States. <i>Langmuir</i> , 2021 , 37, 1206-1214	4	3
171	Low-cost and low-topography fabrication of multilayer interconnections for microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2020 , 30, 077001	2	1
170	Superhydrophobic Drag Reduction for Turbulent Flows in Open Water. <i>Physical Review Applied</i> , 2020 , 13,	4.3	27
169	A low-profile wall shear comparator to mount and test surface samples. <i>Experiments in Fluids</i> , 2020 , 61, 1	2.5	4
168	Self-Powered Plastron Preservation and One-Step Molding of Semiactive Superhydrophobic Surfaces. <i>Langmuir</i> , 2020 , 36, 8193-8198	4	10
167	Current commercialization status of electrowetting-on-dielectric (EWOD) digital microfluidics. <i>Lab on A Chip</i> , 2020 , 20, 1705-1712	7.2	45
166	Ionic-surfactant-mediated electro-dewetting for digital microfluidics. <i>Nature</i> , 2019 , 572, 507-510	50.4	92
165	On-demand radiosynthesis of -succinimidyl-4-[F]fluorobenzoate ([F]SFB) on an electrowetting-on-dielectric microfluidic chip for F-labeling of protein.. <i>RSC Advances</i> , 2019 , 9, 32175-32183	3.7	4
164	How to Engineer Surfaces to Control and Optimize Boiling, Condensation and Frost Formation? 2018 , 63-158		
163	Contact Angle Measurement of Small Capillary Length Liquid in Super-repelled State. <i>Scientific Reports</i> , 2017 , 7, 740	4.9	10
162	Thermal conductance switching based on the actuation of liquid droplets through the electrowetting on dielectric (EWOD) phenomenon. <i>Applied Thermal Engineering</i> , 2016 , 98, 189-195	5.8	17
161	Superhydrophobic drag reduction in laminar flows: a critical review. <i>Experiments in Fluids</i> , 2016 , 57, 1	2.5	128
160	Miniature fuel-cell system complete with on-demand fuel and oxidant supply. <i>Journal of Power Sources</i> , 2015 , 274, 916-921	8.9	4
159	Two types of Cassie-to-Wenzel wetting transitions on superhydrophobic surfaces during drop impact. <i>Soft Matter</i> , 2015 , 11, 4592-9	3.6	69
158	Doubly re-entrant cavities to sustain boiling nucleation in FC-72 2015 ,		1

157	. <i>Journal of Microelectromechanical Systems</i> , 2015 , 24, 1426-1435	2.5	5
156	A dynamic Cassie-Baxter model. <i>Soft Matter</i> , 2015 , 11, 1589-96	3.6	37
155	High yield and high specific activity synthesis of [¹⁸ F]fallypride in a batch microfluidic reactor for micro-PET imaging. <i>Chemical Communications</i> , 2014 , 50, 1192-4	5.8	30
154	On-chip product purification for complete microfluidic radiotracer synthesis 2014 ,		2
153	Efficient radiosynthesis of 3 ^o deoxy-3 ^o 18F-fluorothymidine using electrowetting-on-dielectric digital microfluidic chip. <i>Journal of Nuclear Medicine</i> , 2014 , 55, 321-8	8.9	30
152	3D Architected Anodes for Lithium-Ion Microbatteries with Large Areal Capacity. <i>Energy Technology</i> , 2014 , 2, 362-369	3.5	32
151	Infinite lifetime of underwater superhydrophobic states. <i>Physical Review Letters</i> , 2014 , 113, 136103	7.4	99
150	EWOD microfluidic systems for biomedical applications. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 965-987	2.8	72
149	Microchannel cooling device with perforated side walls: Design and modeling. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 68, 174-183	4.9	10
148	Surface engineering for phase change heat transfer: A review. <i>MRS Energy & Sustainability</i> , 2014 , 1, 1	2.2	217
147	Radiolabelling diverse positron emission tomography (PET) tracers using a single digital microfluidic reactor chip. <i>Lab on A Chip</i> , 2014 , 14, 902-10	7.2	32
146	Repellent surfaces. Turning a surface superrepellent even to completely wetting liquids. <i>Science</i> , 2014 , 346, 1096-100	33.3	726
145	Superhydrophobic turbulent drag reduction as a function of surface grating parameters. <i>Journal of Fluid Mechanics</i> , 2014 , 747, 722-734	3.7	124
144	EWOD (electrowetting on dielectric) digital microfluidics powered by finger actuation. <i>Lab on A Chip</i> , 2014 , 14, 1117-22	7.2	42
143	Electrostatic Side-Drive Rotary Stage on Liquid-Ring Bearing. <i>Journal of Microelectromechanical Systems</i> , 2014 , 23, 147-156	2.5	15
142	Optimization of microfluidic PET tracer synthesis with Cerenkov imaging. <i>Analyst, The</i> , 2013 , 138, 5654-64	5.4	25
141	Miniature Netting System for Endoscopic Object Retrieval From Hard-to-Reach Area. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 1158-1165	2.5	
140	Boiling heat transfer on superhydrophilic, superhydrophobic, and superbiphilic surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 57, 733-741	4.9	320

139	Sputtered Anodized Ta_2O_5 as the Dielectric Layer for Electrowetting-on-Dielectric. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 253-255	2.5	14
138	On-demand droplet loading for automated organic chemistry on digital microfluidics. <i>Lab on A Chip</i> , 2013 , 13, 2785-95	7.2	20
137	Evaluation of repeated electrowetting on three different fluoropolymer top coatings. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 067002	2	26
136	Self-Pumping Membraneless Miniature Fuel Cell With an Air-Breathing Cathode. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 476-483	2.5	16
135	Miniature Flipping Disk Device for Size Measurement of Objects Through Endoscope. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 926-933	2.5	4
134	Fabrication of Very-High-Aspect-Ratio Microstructures in Complex Patterns by Photoelectrochemical Etching. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 1504-1512	2.5	5
133	Wetting and Active Dewetting Processes of Hierarchically Constructed Superhydrophobic Surfaces Fully Immersed in Water. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 712-720	2.5	22
132	On chip droplet characterization: a practical, high-sensitivity measurement of droplet impedance in digital microfluidics. <i>Analytical Chemistry</i> , 2012 , 84, 1915-23	7.8	39
131	Advanced Nanostructured Surfaces for the Control of Biofouling: Cell Adhesions to Three-Dimensional Nanostructures. <i>Green Energy and Technology</i> , 2012 , 79-103	0.6	3
130	Evaluation of anodic Ta_2O_5 as the dielectric layer for EWOD devices 2012 ,		3
129	Droplet Actuation by Electrowetting-on-Dielectric (EWOD): A Review. <i>Journal of Adhesion Science and Technology</i> , 2012 , 26, 1747-1771	2	281
128	Characterization of Nontoxic Liquid-Metal Alloy Galinstan for Applications in Microdevices. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 443-450	2.5	452
127	Micro-chemical synthesis of molecular probes on an electronic microfluidic device. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 690-5	11.5	155
126	Accurate dispensing of volatile reagents on demand for chemical reactions in EWOD chips. <i>Lab on A Chip</i> , 2012 , 12, 3331-40	7.2	62
125	Dynamic contact angles and hysteresis under electrowetting-on-dielectric. <i>Langmuir</i> , 2011 , 27, 10319-264		51
124	Pneumatically deployed net system for endoscopic removal of foreign object 2011 ,		4
123	Underwater restoration and retention of gases on superhydrophobic surfaces for drag reduction. <i>Physical Review Letters</i> , 2011 , 106, 014502	7.4	297
122	Monolithic Fabrication of EWOD Chips for Picoliter Droplets. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 1419-1427	2.5	12

121	Influence of surface hierarchy of superhydrophobic surfaces on liquid slip. <i>Langmuir</i> , 2011 , 27, 4243-8	4	47
120	. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 876-884	2.5	7
119	A miniature capillary breakup extensional rheometer by electrostatically assisted generation of liquid filaments. <i>Lab on A Chip</i> , 2011 , 11, 2424-31	7.2	18
118	The Microhand: a new concept of micro-forceps for ocular robotic surgery. <i>Eye</i> , 2010 , 24, 364-7	4.4	42
117	Specific binding and magnetic concentration of CD8+ T-lymphocytes on electrowetting-on-dielectric platform. <i>Biomicrofluidics</i> , 2010 , 4, 44106	3.2	29
116	Design and Analysis of an In-Plane Thermoelectric Microcooler. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2010 , 14, 95-109	3.7	5
115	Incubated protein reduction and digestion on an electrowetting-on-dielectric digital microfluidic chip for MALDI-MS. <i>Analytical Chemistry</i> , 2010 , 82, 9932-7	7.8	90
114	A micro extensional filament rheometer enabled by EWOD 2010 ,		3
113	Membraneless micro fuel cell chip enabled by self-pumping of fuel-oxidant mixture 2010 ,		2
112	Three-dimensional microbatteries for MEMS/NEMS technology 2010 ,		9
111	Electrowetting on dielectric-based microfluidics for integrated lipid bilayer formation and measurement. <i>Applied Physics Letters</i> , 2009 , 95, 013706	3.4	52
110	Fluidic conduits for highly efficient purification of target species in EWOD-driven droplet microfluidics. <i>Lab on A Chip</i> , 2009 , 9, 2402-5	7.2	10
109	Cell growth as a sheet on three-dimensional sharp-tip nanostructures. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 89, 804-17	5.4	27
108	An active micro-direct methanol fuel cell with self-circulation of fuel and built-in removal of CO ₂ bubbles. <i>Journal of Power Sources</i> , 2009 , 194, 445-450	8.9	37
107	Droplet evaporation of pure water and protein solution on nanostructured superhydrophobic surfaces of varying heights. <i>Langmuir</i> , 2009 , 25, 7561-7	4	76
106	A Liquid-Metal RF MEMS Switch with DC-to-40 GHz Performance 2009 ,		4
105	Meniscus-Assisted High-Efficiency Magnetic Collection and Separation for EWOD Droplet Microfluidics. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 363-375	2.5	34
104	Maximizing the giant liquid slip on superhydrophobic microstructures by nanostructuring their sidewalls. <i>Langmuir</i> , 2009 , 25, 12812-8	4	207

103	Microfabricated Flipping Glass Disc for Stereo Imaging in Endoscopic Visual Inspection 2009 ,		1
102	EWOD-driven droplet microfluidic device integrated with optoelectronic tweezers as an automated platform for cellular isolation and analysis. <i>Lab on A Chip</i> , 2009 , 9, 1732-9	7.2	123
101	Low-Temperature Monolithic Encapsulation Using Porous-Alumina Shell Anodized on Chip. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 588-596	2.5	43
100	Flash dry deposition of nanoscale material thin films. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5845		9
99	Liquid transfer between two separating plates for micro-gravure-offset printing. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 015025	2	72
98	Microscale Liquid-Metal Switches: A Review. <i>IEEE Transactions on Industrial Electronics</i> , 2009 , 56, 1314-1330	3.9	100
97	Microhand With Internal Visual System. <i>IEEE Transactions on Industrial Electronics</i> , 2009 , 56, 1005-1011	8.9	16
96	A Fast Liquid-Metal Droplet Microswitch Using EWOD-Driven Contact-Line Sliding. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 174-185	2.5	71
95	A Liquid-Solid Direct Contact Low-Loss RF Micro Switch. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 990-997	2.5	25
94	Structured surfaces for a giant liquid slip. <i>Physical Review Letters</i> , 2008 , 101, 064501	7.4	317
93	All-electronic droplet generation on-chip with real-time feedback control for EWOD digital microfluidics. <i>Lab on A Chip</i> , 2008 , 8, 898-906	7.2	187
92	Direct-referencing Two-dimensional-array Digital Microfluidics Using Multi-layer Printed Circuit Board. <i>Journal of Microelectromechanical Systems</i> , 2008 , 17, 257-264	2.5	108
91	A study of EWOD-driven droplets by PIV investigation. <i>Lab on A Chip</i> , 2008 , 8, 456-61	7.2	66
90	Micropumping of liquid by directional growth and selective venting of gas bubbles. <i>Lab on A Chip</i> , 2008 , 8, 958-68	7.2	46
89	Air cooling of a microelectronic chip with diverging metal microchannels monolithically processed using a single mask. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 115022	2	4
88	A Methanol-Tolerant Gas-Venting Microchannel for a Microdirect Methanol Fuel Cell. <i>Journal of Microelectromechanical Systems</i> , 2007 , 16, 1403-1410	2.5	35
87	A diffuse-interface model for electrowetting drops in a Hele-Shaw cell. <i>Journal of Fluid Mechanics</i> , 2007 , 590, 411-435	3.7	58
86	Cell interaction with three-dimensional sharp-tip nanotopography. <i>Biomaterials</i> , 2007 , 28, 1672-9	15.6	226

85	Concentration and binary separation of micro particles for droplet-based digital microfluidics. <i>Lab on A Chip</i> , 2007 , 7, 490-8	7.2	114
84	Meniscus-Assisted Magnetic Bead Trapping on Ewod-Based Digital Microfluidics for Specific Protein Localization 2007 ,		2
83	On-Wafer Monolithic Encapsulation by Surface Micromachining With Porous Polysilicon Shell. <i>Journal of Microelectromechanical Systems</i> , 2007 , 16, 462-472	2.5	25
82	Electrowetting devices with transparent single-walled carbon nanotube electrodes. <i>Applied Physics Letters</i> , 2007 , 90, 093124	3.4	44
81	. <i>Journal of Microelectromechanical Systems</i> , 2007 , 16, 844-852	2.5	69
80	An integrated digital microfluidic chip for multiplexed proteomic sample preparation and analysis by MALDI-MS. <i>Lab on A Chip</i> , 2006 , 6, 1213-9	7.2	226
79	A degassing plate with hydrophobic bubble capture and distributed venting for microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 419-424	2	78
78	Characterization of electrowetting actuation on addressable single-side coplanar electrodes. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 2053-2059	2	143
77	Choi and Kim Reply:. <i>Physical Review Letters</i> , 2006 , 97,	7.4	15
76	Microhand for biological applications. <i>Applied Physics Letters</i> , 2006 , 89, 164101	3.4	56
75	Selective surface treatment of micro printing pin and its performance. <i>Applied Physics Letters</i> , 2006 , 89, 083901	3.4	1
74	Pneumatically Driven Microcage for Microbe Manipulation in a Biological Liquid Environment. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 1499-1505	2.5	20
73	Effective slip and friction reduction in nanograted superhydrophobic microchannels. <i>Physics of Fluids</i> , 2006 , 18, 087105	4.4	338
72	Fabrication of a dense array of tall nanostructures over a large sample area with sidewall profile and tip sharpness control. <i>Nanotechnology</i> , 2006 , 17, 5326-5333	3.4	124
71	Electrostatically actuated metal-droplet microswitches integrated on CMOS chip. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 879-889	2.5	30
70	Large slip of aqueous liquid flow over a nanoengineered superhydrophobic surface. <i>Physical Review Letters</i> , 2006 , 96, 066001	7.4	563
69	S1c1-2 Digital Microfluidics(S1-c1: "Micro/nanodevices for biophysical measurements",Symposia,Abstract,Meeting Program of EABS & BSJ 2006). <i>Seibutsu Butsuri</i> , 2006 , 46, S105	0	
68	Digital microfluidics with in-line sample purification for proteomics analyses with MALDI-MS. <i>Analytical Chemistry</i> , 2005 , 77, 534-40	7.8	228

67	Mechanical properties of aerogel-like thin films used for MEMS. <i>Journal of Micromechanics and Microengineering</i> , 2004 , 14, 681-686	2	17
66	Development of Spin Coated Mesoporous Oxide Films for MEMS Structures. <i>Journal of Electroceramics</i> , 2004 , 13, 423-428	1.5	6
65	Soft printing of droplets pre-metered by electrowetting. <i>Sensors and Actuators A: Physical</i> , 2004 , 114, 347-354	3.9	40
64	Electrowetting-based microfluidics for analysis of peptides and proteins by matrix-assisted laser desorption/ionization mass spectrometry. <i>Analytical Chemistry</i> , 2004 , 76, 4833-8	7.8	228
63	Characterization of Balloon-Jointed Micro-Fingers 2003 , 311		5
62	Light actuation of liquid by optoelectrowetting. <i>Sensors and Actuators A: Physical</i> , 2003 , 104, 222-228	3.9	160
61	Reversible switching of high-speed air-liquid two-phase flows using electrowetting-assisted flow-pattern change. <i>Journal of the American Chemical Society</i> , 2003 , 125, 14678-9	16.4	80
60	Frequency-Based Relationship of Electrowetting and Dielectrophoretic Liquid Microactuation. <i>Langmuir</i> , 2003 , 19, 7646-7651	4	167
59	Creating, transporting, cutting, and merging liquid droplets by electrowetting-based actuation for digital microfluidic circuits. <i>Journal of Microelectromechanical Systems</i> , 2003 , 12, 70-80	2.5	1068
58	Equilibrium behavior of sessile drops under surface tension, applied external fields, and material variations. <i>Journal of Applied Physics</i> , 2003 , 93, 5794-5811	2.5	173
57	The Use of Surface Tension for the Design of MEMS Actuators 2003 , 239-246		0
56	Electrowetting and electrowetting-on-dielectric for microscale liquid handling. <i>Sensors and Actuators A: Physical</i> , 2002 , 95, 259-268	3.9	443
55	A micromechanical switch with electrostatically driven liquid-metal droplet. <i>Sensors and Actuators A: Physical</i> , 2002 , 97-98, 672-679	3.9	45
54	Micromachining of mesoporous oxide films for microelectromechanical system structures. <i>Journal of Materials Research</i> , 2002 , 17, 2121-2129	2.5	26
53	. <i>Journal of Microelectromechanical Systems</i> , 2002 , 11, 454-461	2.5	114
52	Low voltage electrowetting-on-dielectric. <i>Journal of Applied Physics</i> , 2002 , 92, 4080-4087	2.5	518
51	A high-resolution high-frequency monolithic top-shooting microinjector free of satellite drops - part I: concept, design, and model. <i>Journal of Microelectromechanical Systems</i> , 2002 , 11, 427-436	2.5	61
50	A high-resolution high-frequency monolithic top-shooting microinjector free of satellite drops - part II: fabrication, implementation, and characterization. <i>Journal of Microelectromechanical Systems</i> , 2002 , 11, 437-447	2.5	39

49	Electrostatic actuation of microscale liquid-metal droplets. <i>Journal of Microelectromechanical Systems</i> , 2002 , 11, 302-308	2.5	40
48	Preparation of Mesoporous Oxides for Mems Structures. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 657, 731		1
47	Microscale material testing of single crystalline silicon: process effects on surface morphology and tensile strength. <i>Sensors and Actuators A: Physical</i> , 2000 , 83, 172-178	3.9	145
46	Investigating the influence of fabrication process and crystal orientation on shear strength of silicon microcomponents. <i>Journal of Materials Science</i> , 2000 , 35, 5465-5474	4.3	9
45	Surface-tension-driven microactuation based on continuous electrowetting. <i>Journal of Microelectromechanical Systems</i> , 2000 , 9, 171-180	2.5	249
44	Mesoscale actuator device: micro interlocking mechanism to transfer macro load. <i>Sensors and Actuators A: Physical</i> , 1999 , 73, 30-36	3.9	20
43	Flow control by using high-aspect-ratio, in-plane microactuators. <i>Sensors and Actuators A: Physical</i> , 1999 , 73, 169-175	3.9	5
42	Measurement of mechanical properties for MEMS materials. <i>Measurement Science and Technology</i> , 1999 , 10, 706-716	2	165
41	Pneumatically driven microcage for micro-objects in biological liquid 1999 ,		22
40	Free-space fiber-optic switches based on MEMS vertical torsion mirrors. <i>Journal of Lightwave Technology</i> , 1999 , 17, 7-13	4	110
39	Micromachines driven by surface tension 1999 ,		3
38	Comparative evaluation of drying techniques for surface micromachining. <i>Sensors and Actuators A: Physical</i> , 1998 , 64, 17-26	3.9	90
37	Elimination of extra spring effect at the step-up anchor of surface-micromachined structure. <i>Journal of Microelectromechanical Systems</i> , 1998 , 7, 114-121	2.5	26
36	. <i>IEEE Transactions on Industrial Electronics</i> , 1998 , 45, 854-860	8.9	22
35	Valveless pumping using traversing vapor bubbles in microchannels. <i>Journal of Applied Physics</i> , 1998 , 83, 5658-5664	2.5	125
34	Development of Mesoscale Actuator Device with Microinterlocking Mechanism. <i>Journal of Intelligent Material Systems and Structures</i> , 1998 , 9, 449-457	2.3	7
33	Dry release for surface micromachining with HF vapor-phase etching. <i>Journal of Microelectromechanical Systems</i> , 1997 , 6, 226-233	2.5	72
32	A liquid-filled microrelay with a moving mercury microdrop. <i>Journal of Microelectromechanical Systems</i> , 1997 , 6, 208-216	2.5	56

31	Microrivets for MEMS packaging: concept, fabrication, and strength testing. <i>Journal of Microelectromechanical Systems</i> , 1997 , 6, 217-225	2.5	14
30	Mercury-contact switching with gap-closing microcantilever 1996 ,		13
29	Polysilicon surface-modification technique to reduce sticking of microstructures. <i>Sensors and Actuators A: Physical</i> , 1996 , 52, 145-150	3.9	32
28	Photoresist-Assisted Release of Movable Microstructures. <i>Japanese Journal of Applied Physics</i> , 1993 , 32, L1642-L1644	1.4	43
27	. <i>Journal of Microelectromechanical Systems</i> , 1992 , 1, 31-36	2.5	162
26	Polysilicon microgripper. <i>Sensors and Actuators A: Physical</i> , 1992 , 33, 221-227	3.9	53
25	Comparative study of various release methods for polysilicon surface micromachining		16
24	Three-Dimensional Nickel-Zinc Microbatteries		4
23	Alow Temperature Vacuum Package Utilizing Porous Alumina Thin Film Encapsulation		3
22	Micropumping by directional growth and hydrophobic venting of bubbles		3
21	A comparative study of electrolysis and boiling for bubble-driven microactuators		3
20	Electrostatic fringe-field actuation for liquid-metal droplets		3
19	A New Bio-Molecules Decryption Protocol Using Shape Encoded Particles (SEP)		1
18	A distributed gas breather for micro direct methanol fuel cell (/spl mu/-DMFC)		1
17	Micro-finger articulation by pneumatic parylene balloons		19
16	Particle separation and concentration control for digital microfluidic systems		2
15	Mercury droplet microswitch for re-configurable circuit interconnect		6
14	Manipulation of multiple droplets on N/spl times/M grid by cross-reference EWOD driving scheme and pressure-contact packaging		4

13	Two-dimensional digital microfluidic system by multilayer printed circuit board	11
12	On-chip sample preparation by electrowetting-on-dielectric digital microfluidics for matrix assisted laser desorption/ionization mass spectrometry	1
11	On-chip hermetic packaging enabled by post-deposition electrochemical etching of polysilicon	3
10	Fabrication of silicon nanostructures with various sidewall profiles and sharp tips	1
9	Nanostructured surfaces for dramatic reduction of flow resistance in droplet-based microfluidics	4
8	Enhancement of mixing by droplet-based microfluidics	23
7	Towards digital microfluidic circuits: creating, transporting, cutting and merging liquid droplets by electrowetting-based actuation	4
6	MEMS with thin-film aerogel	1
5	A micropump driven by continuous electrowetting actuation for low voltage and low power operations	3
4	Mesoscale actuator device with micro interlocking mechanism	1
3	A novel microinjector with virtual chamber neck	8
2	Fabrication of monolithic microchannels for IC chip cooling	2
1	Testing And Characterization Of A Bistable Snapping Microactuator Based On Thermo-mechanical Analysis	4