Kwang W Oh

List of Publications by Year
in descending order

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47	3,449	218677	243625
papers	citations	26 h-index	44 g-index

48	48	48	4087
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of microvalves. Journal of Micromechanics and Microengineering, 2006, 16, R13-R39.	2.6	877
2	Design of pressure-driven microfluidic networks using electric circuit analogy. Lab on A Chip, 2012, 12, 515-545.	6.0	516
3	An integrated microfluidic biochemical detection system for protein analysis with magnetic bead-based sampling capabilities. Lab on A Chip, 2002, 2, 27.	6.0	349
4	DNA hybridization electrochemical sensor using conducting polymer. Biosensors and Bioelectronics, 2003, 18, 1241-1247.	10.1	144
5	Generalized serial dilution module for monotonic and arbitrary microfluidic gradient generators. Lab on A Chip, 2009, 9, 709-717.	6.0	136
6	Precise temperature control and rapid thermal cycling in a micromachined DNA polymerase chain reaction chip. Journal of Micromechanics and Microengineering, 2002, 12, 813-823.	2.6	127
7	Vacuum-driven power-free microfluidics utilizing the gas solubility or permeability of polydimethylsiloxane (PDMS). Lab on A Chip, 2015, 15, 3962-3979.	6.0	117
8	SERS-based immunoassay using a gold array-embedded gradient microfluidic chip. Lab on A Chip, 2012, 12, 3720.	6.0	112
9	Title is missing!. Biomedical Microdevices, 2001, 3, 191-200.	2.8	95
10	A low-temperature bonding technique using spin-on fluorocarbon polymers to assemble microsystems. Journal of Micromechanics and Microengineering, 2002, 12, 187-191.	2.6	87
11	Clinical evaluation of micro-scale chip-based PCR system for rapid detection of hepatitis B virus. Biosensors and Bioelectronics, 2006, 21, 2161-2169.	10.1	74
12	World-to-chip microfluidic interface with built-in valves for multichamber chip-based PCR assays. Lab on A Chip, 2005, 5, 845.	6.0	53
13	Various On-Chip Sensors with Microfluidics for Biological Applications. Sensors, 2014, 14, 17008-17036.	3.8	52
14	Parallel synchronization of two trains of droplets using a railroad-like channel network. Lab on A Chip, 2011, 11, 3956.	6.0	43
15	Gravity-oriented microfluidic device for uniform and massive cell spheroid formation. Biomicrofluidics, 2012, 6, 14114-141147.	2.4	42
16	A new fabrication process for uniform SU-8 thick photoresist structures by simultaneously removing edge bead and air bubbles. Journal of Micromechanics and Microengineering, 2011, 21, 125006.	2.6	39
17	Passive micropumping in microfluidics for point-of-care testing. Biomicrofluidics, 2020, 14, 031503.	2.4	39
18	Fusion and sorting of two parallel trains of droplets using a railroad-like channel network and guiding tracks. Lab on A Chip, 2012, 12, 3936.	6.0	36

#	ARTICLE	IF	CITATIONS
19	Miniaturization of pinch-type valves and pumps for practical micro total analysis system integration. Journal of Micromechanics and Microengineering, 2005, 15, 2449-2455.	2.6	35
20	Microfluidic network-based combinatorial dilution device for high throughput screening and optimization. Microfluidics and Nanofluidics, 2010, 8, 677-685.	2.2	34
21	Continuous-flow in-droplet magnetic particle separation in a droplet-based microfluidic platform. Microfluidics and Nanofluidics, 2012, 13, 613-623.	2.2	34
22	Droplet-based microfluidic device for multiple-droplet clustering. Lab on A Chip, 2012, 12, 725-730.	6.0	31
23	Simultaneous detection of duplex DNA oligonucleotides using a SERS-based micro-network gradient chip. Lab on A Chip, 2012, 12, 5160.	6.0	31
24	Droplet-based microfluidic washing module for magnetic particle-based assays. Biomicrofluidics, 2014, 8, 044113.	2.4	31
25	Optimizing the light delivery of linear-array-based photoacoustic systems by double acoustic reflectors. Scientific Reports, 2018, 8, 13004.	3.3	30
26	A Robust and Secure Palm Vessel Biometric Sensing System Based on Photoacoustics. IEEE Sensors Journal, 2018, 18, 5993-6000.	4.7	28
27	A robust, portable and backflow-free micromixing device based on both capillary- and vacuum-driven flows. Lab on A Chip, 2018, 18, 276-284.	6.0	26
28	A high flow rate thermal bubble-driven micropump with induction heating. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	25
29	Syringe-assisted point-of-care micropumping utilizing the gas permeability of polydimethylsiloxane. Microfluidics and Nanofluidics, 2014, 17, 745-750.	2.2	23
30	Microfluidic concentration-on-demand combinatorial dilutions. Microfluidics and Nanofluidics, 2011, 11, 75-86.	2.2	22
31	Phaseguide-assisted blood separation microfluidic device for point-of-care applications. Biomicrofluidics, 2015, 9, 014106.	2.4	21
32	2-layer based microfluidic concentration generator by hybrid serial and volumetric dilutions. Biomedical Microdevices, 2010, 12, 297-309.	2.8	20
33	Guiding, distribution, and storage of trains of shape-dependent droplets. Lab on A Chip, 2011, 11, 3915.	6.0	20
34	Introduction of a Chemical-Free Metal PDMS Thermal Bonding for Fabrication of Flexible Electrode by Metal Transfer onto PDMS. Micromachines, 2017, 8, 280.	2.9	18
35	A Simple Method for Fabrication of Microstructures Using a PDMS Stamp. Micromachines, 2016, 7, 173.	2.9	17
36	Microfluidic Devices for Biomedical Applications: Biomedical Microfluidic Devices 2019. Micromachines, 2020, 11, 370.	2.9	14

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37	Multidisciplinary Role of Microfluidics for Biomedical and Diagnostic Applications: Biomedical Microfluidic Devices. Micromachines, 2017, 8, 343.	2.9	11
38	A Compact, Syringe-Assisted, Vacuum-Driven Micropumping Device. Micromachines, 2019, 10, 543.	2.9	8
39	Hermetic encapsulation of negative-pressure-driven PDMS microfluidic devices using paraffin wax and glass. Microsystem Technologies, 2018, 24, 2035-2043.	2.0	7
40	A microfluidic gel valve device using reversible solâ€“gel transition of methyl cellulose for biomedical application. Microsystem Technologies, 2006, 12, 238-246.	2.0	6
41	An Integrated Centrifugal Degassed PDMS-Based Microfluidic Device for Serial Dilution. Micromachines, 2021, 12, 482.	2.9	6
42	Feasibility of a MEMS Sensor for Gas Detection in HV Oil-Insulated Transformer. IEEE Transactions on Industry Applications, 2013, 49, 316-321.	4.9	5
43	Manipulation of micro-objects using acoustically oscillating bubbles based on the gas permeability of PDMS. Biomicrofluidics, 2018, 12, 034111.	2.4	4
44	Fabrication of multiple height microstructures using UV lithography on timed-development-and-thermal-reflowed photoresist. , 2010, , .		2
45	Maximizing derivable information from cytologic specimens for pathologic and molecular diagnostics. Journal of the American Society of Cytopathology, 2015, 4, 141-147.	0.5	2
46	Single-Layered Microfluidic Network-Based Combinatorial Dilution for Standard Simplex Lattice Design. Micromachines, 2018, 9, 489.	2.9	0
47	10.1063/1.5028419.1. , 2018, , .		0