

Gwo-Bin Lee

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397
papers

12,371
citations

58
h-index

88
g-index

524
ext. papers

14,129
ext. citations

4.8
avg. IF

6.59
L-index

#	Paper	IF	Citations
397	Microfluidic cell culture systems for drug research. <i>Lab on A Chip</i> , 2010 , 10, 939-56	7.2	314
396	Humidity Sensors: A Review. <i>Sensor Letters</i> , 2005 , 3, 1-15	0.9	287
395	Integrated polymerase chain reaction chips utilizing digital microfluidics. <i>Biomedical Microdevices</i> , 2006 , 8, 215-25	3.7	275
394	Microfabricated plastic chips by hot embossing methods and their applications for DNA separation and detection. <i>Sensors and Actuators B: Chemical</i> , 2001 , 75, 142-148	8.5	216
393	A fast prototyping process for fabrication of microfluidic systems on soda-lime glass. <i>Journal of Micromechanics and Microengineering</i> , 2001 , 11, 726-732	2	206
392	A new fabrication process for ultra-thick microfluidic microstructures utilizing SU-8 photoresist. <i>Journal of Micromechanics and Microengineering</i> , 2002 , 12, 590-597	2	203
391	Diesel exhaust particle induction of IL-17A contributes to severe asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2013 , 132, 1194-1204.e2	11.5	177
390	Electrokinetically driven micro flow cytometers with integrated fiber optics for on-line cell/particle detection. <i>Analytica Chimica Acta</i> , 2004 , 507, 163-169	6.6	168
389	The hydrodynamic focusing effect inside rectangular microchannels. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1024-1032	2	152
388	High-purity and label-free isolation of circulating tumor cells (CTCs) in a microfluidic platform by using optically-induced-dielectrophoretic (ODEP) force. <i>Lab on A Chip</i> , 2013 , 13, 1371-83	7.2	146
387	A magnetic bead-based assay for the rapid detection of methicillin-resistant <i>Staphylococcus aureus</i> by using a microfluidic system with integrated loop-mediated isothermal amplification. <i>Lab on A Chip</i> , 2011 , 11, 1521-31	7.2	136
386	Automatic bio-sampling chips integrated with micro-pumps and micro-valves for disease detection. <i>Biosensors and Bioelectronics</i> , 2005 , 21, 419-25	11.8	136
385	Integrated microfluidic systems for cell lysis, mixing/pumping and DNA amplification. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 1215-1223	2	133
384	Size-dependent attenuation of TLR9 signaling by gold nanoparticles in macrophages. <i>Journal of Immunology</i> , 2012 , 188, 68-76	5.3	125
383	Beyond the Debye length in high ionic strength solution: direct protein detection with field-effect transistors (FETs) in human serum. <i>Scientific Reports</i> , 2017 , 7, 5256	4.9	122
382	Integrated microfluidic system for rapid screening of CRP aptamers utilizing systematic evolution of ligands by exponential enrichment (SELEX). <i>Biosensors and Bioelectronics</i> , 2010 , 25, 1761-6	11.8	107
381	Micro flow cytometry utilizing a magnetic bead-based immunoassay for rapid virus detection. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 861-8	11.8	107

380	Microfluidic systems integrated with two-dimensional surface plasmon resonance phase imaging systems for microarray immunoassay. <i>Biosensors and Bioelectronics</i> , 2007 , 23, 466-72	11.8	106
379	Micromachine-based humidity sensors with integrated temperature sensors for signal drift compensation. <i>Journal of Micromechanics and Microengineering</i> , 2003 , 13, 620-627	2	105
378	Active micro-mixers using surface acoustic waves on Y-cut 128°LiNbO3. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 539-548	2	104
377	Integrated reverse transcription polymerase chain reaction systems for virus detection. <i>Biosensors and Bioelectronics</i> , 2007 , 22, 1739-48	11.8	101
376	Pneumatically driven peristaltic micropumps utilizing serpentine-shape channels. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 341-348	2	101
375	Nucleic acid amplification using microfluidic systems. <i>Lab on A Chip</i> , 2013 , 13, 1225-42	7.2	99
374	High sensitivity cardiac troponin I detection in physiological environment using AlGaIn/GaN High Electron Mobility Transistor (HEMT) Biosensors. <i>Biosensors and Bioelectronics</i> , 2018 , 100, 282-289	11.8	98
373	A cell counting/sorting system incorporated with a microfabricated flow cytometer chip. <i>Measurement Science and Technology</i> , 2006 , 17, 2001-2009	2	97
372	An integrated microfluidic chip for DNA/RNA amplification, electrophoresis separation and on-line optical detection. <i>Electrophoresis</i> , 2006 , 27, 3297-305	3.6	93
371	A flexible micromachine-based shear-stress sensor array and its application to separation-point detection. <i>Sensors and Actuators A: Physical</i> , 2000 , 79, 194-203	3.9	92
370	Purification and enrichment of virus samples utilizing magnetic beads on a microfluidic system. <i>Lab on A Chip</i> , 2007 , 7, 868-75	7.2	90
369	Sample preconcentration in microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2011 , 10, 481-511	2.8	89
368	Electrokinetic injection techniques in microfluidic chips. <i>Analytical Chemistry</i> , 2002 , 74, 5084-91	7.8	87
367	Micro flow cytometers with buried SU-8/SOG optical waveguides. <i>Sensors and Actuators A: Physical</i> , 2003 , 103, 165-170	3.9	86
366	An integrated microfluidic system for rapid diagnosis of dengue virus infection. <i>Biosensors and Bioelectronics</i> , 2009 , 25, 745-52	11.8	84
365	Hydrodynamic Focusing for a Micromachined Flow Cytometer. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2001 , 123, 672-679	2.1	83
364	A high throughput perfusion-based microbioreactor platform integrated with pneumatic micropumps for three-dimensional cell culture. <i>Biomedical Microdevices</i> , 2008 , 10, 309-19	3.7	81
363	An integrated microfluidic system for rapid screening of alpha-fetoprotein-specific aptamers. <i>Biosensors and Bioelectronics</i> , 2012 , 35, 50-55	11.8	79

362	Electrokinetically driven active micro-mixers utilizing zeta potential variation induced by field effect. <i>Journal of Micromechanics and Microengineering</i> , 2004 , 14, 1390-1398	2	79
361	Electrokinetic focusing injection methods on microfluidic devices. <i>Analytical Chemistry</i> , 2003 , 75, 1905-1918	10.8	78
360	Micromachined flow cytometers with embedded etched optic fibers for optical detection. <i>Journal of Micromechanics and Microengineering</i> , 2003 , 13, 447-453	2	78
359	An integrated microfluidic loop-mediated-isothermal-amplification system for rapid sample pre-treatment and detection of viruses. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 2045-52	11.8	76
358	Optically induced flow cytometry for continuous microparticle counting and sorting. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 572-8	11.8	76
357	Miniature RT-PCR system for diagnosis of RNA-based viruses. <i>Nucleic Acids Research</i> , 2005 , 33, e156	20.1	76
356	A microfluidic system utilizing molecularly imprinted polymer films for amperometric detection of morphine. <i>Sensors and Actuators B: Chemical</i> , 2007 , 121, 576-582	8.5	75
355	An integrated microfluidic system for fast, automatic detection of C-reactive protein. <i>Sensors and Actuators B: Chemical</i> , 2011 , 157, 710-721	8.5	74
354	Pneumatic micropumps with serially connected actuation chambers. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 2265-2272	2	74
353	Rapid detection of influenza A virus infection utilizing an immunomagnetic bead-based microfluidic system. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 3900-7	11.8	72
352	Vertical focusing device utilizing dielectrophoretic force and its application on microflow cytometer. <i>Journal of Microelectromechanical Systems</i> , 2004 , 13, 923-932	2.5	70
351	Micromachined polymerase chain reaction system for multiple DNA amplification of upper respiratory tract infectious diseases. <i>Biosensors and Bioelectronics</i> , 2005 , 20, 1341-8	11.8	70
350	A pneumatic micropump incorporated with a normally closed valve capable of generating a high pumping rate and a high back pressure. <i>Microfluidics and Nanofluidics</i> , 2009 , 6, 823-833	2.8	69
349	An integrated microfluidic system for C-reactive protein measurement. <i>Biosensors and Bioelectronics</i> , 2009 , 24, 3091-6	11.8	69
348	An on-chip Cell-SELEX process for automatic selection of high-affinity aptamers specific to different histologically classified ovarian cancer cells. <i>Lab on A Chip</i> , 2014 , 14, 4017-28	7.2	64
347	Stem cells in microfluidics. <i>Biomicrofluidics</i> , 2011 , 5, 13401	3.2	62
346	Integrated microfluidic systems for automatic glucose sensing and insulin injection. <i>Sensors and Actuators B: Chemical</i> , 2007 , 122, 461-468	8.5	62
345	Influenza A virus-specific aptamers screened by using an integrated microfluidic system. <i>Lab on A Chip</i> , 2014 , 14, 2002-13	7.2	61

344	Size-controlled synthesis of gold nanoparticles using a micro-mixing system. <i>Microfluidics and Nanofluidics</i> , 2010 , 8, 303-311	2.8	60
343	Micro-droplet formation utilizing microfluidic flow focusing and controllable moving-wall chopping techniques. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 2403-2410	2	60
342	A suction-type, pneumatic microfluidic device for liquid transport and mixing. <i>Microfluidics and Nanofluidics</i> , 2011 , 10, 301-310	2.8	59
341	Micromachined pre-focused microfluidic flow switches for continuous multi-sample injection. <i>Journal of Micromechanics and Microengineering</i> , 2001 , 11, 654-661	2	59
340	Control of machining parameters for energy and cost savings in micro-scale drilling of PCBs. <i>Journal of Cleaner Production</i> , 2013 , 54, 41-48	10.3	58
339	Development of perfusion-based micro 3-D cell culture platform and its application for high throughput drug testing. <i>Sensors and Actuators B: Chemical</i> , 2008 , 129, 231-240	8.5	58
338	New magnetic tweezers for investigation of the mechanical properties of single DNA molecules. <i>Nanotechnology</i> , 2006 , 17, 1217-1224	3.4	58
337	Membrane-activated microfluidic rotary devices for pumping and mixing. <i>Biomedical Microdevices</i> , 2007 , 9, 545-54	3.7	57
336	An integrated microfluidic system for measurement of glycated hemoglobin levels by using an aptamer-antibody assay on magnetic beads. <i>Biosensors and Bioelectronics</i> , 2015 , 68, 397-403	11.8	56
335	Integrated microfluidic system for rapid detection of influenza H1N1 virus using a sandwich-based aptamer assay. <i>Biosensors and Bioelectronics</i> , 2016 , 82, 105-11	11.8	55
334	A microfluidic device for antimicrobial susceptibility testing based on a broth dilution method. <i>Biosensors and Bioelectronics</i> , 2017 , 87, 669-678	11.8	54
333	A sample-to-answer, portable platform for rapid detection of pathogens with a smartphone interface. <i>Lab on A Chip</i> , 2019 , 19, 3804-3814	7.2	53
332	A vortex-type micromixer utilizing pneumatically driven membranes. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 035020	2	52
331	Micro capillary electrophoresis chips integrated with buried SU-8/SOG optical waveguides for bio-analytical applications. <i>Sensors and Actuators A: Physical</i> , 2003 , 107, 125-131	3.9	52
330	Biomedical microdevices synthesis of iron oxide nanoparticles using a microfluidic system. <i>Biomedical Microdevices</i> , 2009 , 11, 161-71	3.7	51
329	An optically induced cell lysis device using dielectrophoresis. <i>Applied Physics Letters</i> , 2009 , 94, 033901	3.4	49
328	Automatic microfluidic platform for cell separation and nucleus collection. <i>Biomedical Microdevices</i> , 2007 , 9, 533-43	3.7	49
327	A microfluidic system for automatic cell culture. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, 1266-1274	2	49

326	An SU-8 microlens array fabricated by soft replica molding for cell counting applications. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, 693-699	2	49
325	Analysis of the optimal dimension on the electrothermal microactuator. <i>Journal of Micromechanics and Microengineering</i> , 2002 , 12, 291-296	2	49
324	Screening of aptamers on microfluidic systems for clinical applications. <i>Sensors</i> , 2012 , 12, 9514-29	3.8	48
323	Rapid isolation and detection of cancer cells by utilizing integrated microfluidic systems. <i>Lab on A Chip</i> , 2010 , 10, 2875-86	7.2	47
322	Micro devices integrated with microchannels and electrospray nozzles using PDMS casting techniques. <i>Sensors and Actuators B: Chemical</i> , 2002 , 86, 280-286	8.5	47
321	On-chip, aptamer-based sandwich assay for detection of glycosylated hemoglobins via magnetic beads. <i>Biosensors and Bioelectronics</i> , 2016 , 79, 887-93	11.8	46
320	Magnetic nanoparticle-based immunoassay for rapid detection of influenza infections by using an integrated microfluidic system. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014 , 10, 819-29	6	46
319	Enhancement of thermal uniformity for a microthermal cycler and its application for polymerase chain reaction. <i>Sensors and Actuators B: Chemical</i> , 2008 , 130, 848-856	8.5	46
318	Microfluidic system for detection of alpha-thalassemia-1 deletion using saliva samples. <i>Analytical Chemistry</i> , 2009 , 81, 4502-9	7.8	45
317	Screening of aptamers specific to colorectal cancer cells and stem cells by utilizing On-chip Cell-SELEX. <i>Scientific Reports</i> , 2015 , 5, 10326	4.9	44
316	A novel micromachined flow sensor using periodic flapping motion of a planar jet impinging on a V-shaped plate. <i>Experimental Thermal and Fluid Science</i> , 2002 , 26, 435-444	3	44
315	Flow-through sampling for electrophoresis-based microfluidic chips using hydrodynamic pumping. <i>Journal of Chromatography A</i> , 2001 , 937, 115-25	4.5	44
314	Self-rotation of cells in an irrotational AC E-field in an opto-electrokinetics chip. <i>PLoS ONE</i> , 2013 , 8, e51537	3.7	44
313	Minimal dead-volume connectors for microfluidics using PDMS casting techniques. <i>Journal of Micromechanics and Microengineering</i> , 2004 , 14, 1484-1490	2	43
312	Determination of Cell Membrane Capacitance and Conductance via Optically Induced Electrokinetics. <i>Biophysical Journal</i> , 2017 , 113, 1531-1539	2.9	42
311	Extraction of genomic DNA and detection of single nucleotide polymorphism genotyping utilizing an integrated magnetic bead-based microfluidic platform. <i>Microfluidics and Nanofluidics</i> , 2009 , 6, 539-555	2.8	42
310	A disposable poly(methylmethacrylate)-based microfluidic module for protein identification by nanoelectrospray ionization-tandem mass spectrometry. <i>Electrophoresis</i> , 2001 , 22, 3972-7	3.6	42
309	Micromachined pre-focused flow switches for continuous sample injection. <i>Journal of Micromechanics and Microengineering</i> , 2001 , 11, 567-573	2	42

308	Rapid isolation and detection of aquaculture pathogens in an integrated microfluidic system using loop-mediated isothermal amplification. <i>Sensors and Actuators B: Chemical</i> , 2013 , 180, 96-106	8.5	41
307	Synthesis of hexagonal gold nanoparticles using a microfluidic reaction system. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 035019	2	41
306	A microfluidic chip capable of generating and trapping emulsion droplets for digital loop-mediated isothermal amplification analysis. <i>Lab on A Chip</i> , 2018 , 18, 296-303	7.2	41
305	Urine analysis in microfluidic devices. <i>Analyst, The</i> , 2011 , 136, 2669-88	5	40
304	Localised heating of tumours utilising injectable magnetic nanoparticles for hyperthermia cancer therapy. <i>IET Nanobiotechnology</i> , 2009 , 3, 46-54	2	40
303	A droplet-based microfluidic system capable of droplet formation and manipulation. <i>Microfluidics and Nanofluidics</i> , 2009 , 6, 599-610	2.8	40
302	Formation of Microdroplets in Liquids Utilizing Active Pneumatic Choppers on a Microfluidic Chip. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 1492-1498	2.5	40
301	Analysis of geometry effects on band spreading of microchip electrophoresis. <i>Electrophoresis</i> , 2002 , 23, 602-12	3.6	40
300	Multiple injection techniques for microfluidic sample handling. <i>Electrophoresis</i> , 2003 , 24, 3026-32	3.6	40
299	A new focusing model and switching approach for electrokinetic flow inside microchannels. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 2141-2148	2	40
298	Flow-through sampling for electrophoresis-based microchips and their applications for protein analysis. <i>Analytical Chemistry</i> , 2002 , 74, 5146-53	7.8	40
297	Rapid detection and typing of live bacteria from human joint fluid samples by utilizing an integrated microfluidic system. <i>Biosensors and Bioelectronics</i> , 2015 , 66, 148-54	11.8	39
296	Micromachine-based multi-channel flow cytometers for cell/particle counting and sorting. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 447-454	2	39
295	A microfabricated capillary electrophoresis chip with multiple buried optical fibers and microfocusing lens for multiwavelength detection. <i>Electrophoresis</i> , 2005 , 26, 1122-9	3.6	38
294	A micromachined DNA manipulation platform for the stretching and rotation of a single DNA molecule. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 109-117	2	38
293	Integrated microfluidic device using a single universal aptamer to detect multiple types of influenza viruses. <i>Biosensors and Bioelectronics</i> , 2016 , 86, 247-254	11.8	38
292	Magnetic-bead-based microfluidic system for ribonucleic acid extraction and reverse transcription processes. <i>Biomedical Microdevices</i> , 2009 , 11, 339-50	3.7	37
291	Variable-volume-injection methods using electrokinetic focusing on microfluidic chips. <i>Journal of Separation Science</i> , 2002 , 25, 996-1010	3.4	37

290	An integrated microfluidic system with field-effect-transistor sensor arrays for detecting multiple cardiovascular biomarkers from clinical samples. <i>Biosensors and Bioelectronics</i> , 2019 , 129, 155-163	11.8	37
289	An integrated self-driven microfluidic device for rapid detection of the influenza A (H1N1) virus by reverse transcription loop-mediated isothermal amplification. <i>Sensors and Actuators B: Chemical</i> , 2019 , 296, 126647	8.5	36
288	Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX. <i>Lab on A Chip</i> , 2015 , 15, 486-94	7.2	36
287	An integrated chip capable of performing sample pretreatment and nucleic acid amplification for HIV-1 detection. <i>Biosensors and Bioelectronics</i> , 2013 , 41, 484-91	11.8	36
286	Miniaturization of molecular biological techniques for gene assay. <i>Analyst, The</i> , 2010 , 135, 1499-518	5	36
285	A miniaturized quantitative polymerase chain reaction system for DNA amplification and detection. <i>Sensors and Actuators B: Chemical</i> , 2009 , 141, 329-337	8.5	36
284	An integrated microfluidic system using magnetic beads for virus detection. <i>Diagnostic Microbiology and Infectious Disease</i> , 2008 , 60, 51-8	2.9	36
283	A membrane-based serpentine-shape pneumatic micropump with pumping performance modulated by fluidic resistance. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 045008	2	36
282	Integrated optical-fiber capillary electrophoresis microchips with novel spin-on-glass surface modification. <i>Biosensors and Bioelectronics</i> , 2004 , 20, 83-90	11.8	36
281	Nervous necrosis virus replicates following the embryo development and dual infection with iridovirus at juvenile stage in grouper. <i>PLoS ONE</i> , 2012 , 7, e36183	3.7	35
280	On the surface modification of microchannels for microcapillary electrophoresis chips. <i>Electrophoresis</i> , 2005 , 26, 4616-24	3.6	35
279	Out-of-plane magnetic actuators with electroplated permalloy for fluid dynamics control. <i>Sensors and Actuators A: Physical</i> , 1999 , 78, 190-197	3.9	35
278	An integrated microfluidic platform to perform uninterrupted SELEX cycles to screen affinity reagents specific to cardiovascular biomarkers. <i>Biosensors and Bioelectronics</i> , 2018 , 122, 104-112	11.8	35
277	Separation of micro-particles utilizing spatial difference of optically induced dielectrophoretic forces. <i>Microfluidics and Nanofluidics</i> , 2010 , 8, 217-229	2.8	34
276	Model description of contact angles in electrowetting on dielectric layers. <i>Langmuir</i> , 2006 , 22, 484-9	4	34
275	Plastic microchip electrophoresis for genetic screening: the analysis of polymerase chain reactions products of fragile X (CGG) _n alleles. <i>Electrophoresis</i> , 2001 , 22, 1188-93	3.6	34
274	Screening of highly-specific aptamers and their applications in paper-based microfluidic chips for rapid diagnosis of multiple bacteria. <i>Sensors and Actuators B: Chemical</i> , 2019 , 284, 395-402	8.5	34
273	An integrated microfluidic device utilizing vancomycin conjugated magnetic beads and nanogold-labeled specific nucleotide probes for rapid pathogen diagnosis. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014 , 10, 809-18	6	33

272	An integrated microfluidic system for isolation, counting, and sorting of hematopoietic stem cells. <i>Biomicrofluidics</i> , 2010 , 4,	3.2	33
271	A microfluidic platform for formation of double-emulsion droplets. <i>Microfluidics and Nanofluidics</i> , 2009 , 7, 709-719	2.8	33
270	An integrated cell counting and continuous cell lysis device using an optically induced electric field. <i>Sensors and Actuators B: Chemical</i> , 2010 , 145, 854-860	8.5	33
269	An integrated microfluidic system for on-chip enrichment and quantification of circulating extracellular vesicles from whole blood. <i>Lab on A Chip</i> , 2019 , 19, 3305-3315	7.2	32
268	A microfluidic platform integrated with field-effect transistors for enumeration of circulating tumor cells. <i>Lab on A Chip</i> , 2019 , 19, 618-625	7.2	32
267	Extracellular-controlled breast cancer cell formation and growth using non-UV patterned hydrogels via optically-induced electrokinetics. <i>Lab on A Chip</i> , 2014 , 14, 1367-76	7.2	32
266	An automatic microfluidic system for rapid screening of cancer stem-like cell-specific aptamers. <i>Microfluidics and Nanofluidics</i> , 2013 , 14, 753-765	2.8	32
265	A tunable micro filter modulated by pneumatic pressure for cell separation. <i>Sensors and Actuators B: Chemical</i> , 2009 , 142, 389-399	8.5	32
264	Detecting miRNA biomarkers from extracellular vesicles for cardiovascular disease with a microfluidic system. <i>Lab on A Chip</i> , 2018 , 18, 2917-2925	7.2	31
263	Rapid determination of cell mass and density using digitally controlled electric field in a microfluidic chip. <i>Lab on A Chip</i> , 2014 , 14, 4426-34	7.2	31
262	A microfabricated CE chip for DNA pre-concentration and separation utilizing a normally closed valve. <i>Electrophoresis</i> , 2009 , 30, 3228-35	3.6	31
261	Manipulation and patterning of carbon nanotubes utilizing optically induced dielectrophoretic forces. <i>Microfluidics and Nanofluidics</i> , 2010 , 8, 609-617	2.8	31
260	A microfluidic immunomagnetic bead-based system for the rapid detection of influenza infections: from purified virus particles to clinical specimens. <i>Biomedical Microdevices</i> , 2013 , 15, 539-51	3.7	30
259	Optical Spectrum and Electric Field Waveform Dependent Optically-Induced Dielectrophoretic (ODEP) Micro-Manipulation. <i>Micromachines</i> , 2012 , 3, 492-508	3.3	30
258	CE chips fabricated by injection molding and polyethylene/thermoplastic elastomer film packaging methods. <i>Electrophoresis</i> , 2007 , 28, 1130-7	3.6	30
257	Microfluidic pH-sensing chips integrated with pneumatic fluid-control devices. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1468-75	11.8	30
256	Poly(dimethylsiloxane)-based microfluidic device with electrospray ionization-mass spectrometry interface for protein identification. <i>Electrophoresis</i> , 2003 , 24, 3648-54	3.6	30
255	Digital quantification of DNA via isothermal amplification on a self-driven microfluidic chip featuring hydrophilic film-coated polydimethylsiloxane. <i>Biosensors and Bioelectronics</i> , 2018 , 99, 547-554	11.8	30

254	Simultaneous separation and concentration of micro- and nano-particles by optically induced electrokinetics. <i>Sensors and Actuators A: Physical</i> , 2013 , 193, 103-111	3.9	29
253	A microfluidic platform for manipulation and separation of oil-in-water emulsion droplets using optically induced dielectrophoresis. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 045026	2	29
252	Manipulation of single DNA molecules by using optically projected images. <i>Optics Express</i> , 2009 , 17, 15318-15329	3.9	29
251	Droplet Formation Utilizing Controllable Moving-Wall Structures for Double-Emulsion Applications. <i>Journal of Microelectromechanical Systems</i> , 2008 , 17, 573-581	2.5	29
250	A microfluidic system with integrated molecular imprinting polymer films for surface plasmon resonance detection. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1251-1257	2	29
249	An integrated microfluidic system for rapid detection and multiple subtyping of influenza A viruses by using glycan-coated magnetic beads and RT-PCR. <i>Lab on A Chip</i> , 2019 , 19, 1277-1286	7.2	28
248	Continuous nucleus extraction by optically-induced cell lysis on a batch-type microfluidic platform. <i>Lab on A Chip</i> , 2016 , 16, 1447-56	7.2	28
247	A microfluidic-based system using reverse transcription polymerase chain reactions for rapid detection of aquaculture diseases. <i>Microfluidics and Nanofluidics</i> , 2009 , 7, 795-806	2.8	28
246	A cell delivery and pre-positioning system utilizing microfluidic devices for dual-beam optical trap-and-stretch. <i>Sensors and Actuators B: Chemical</i> , 2008 , 135, 388-397	8.5	28
245	Robust Vortex Control of a Delta Wing by Distributed Microelectromechanical-Systems Actuators. <i>Journal of Aircraft</i> , 2000 , 37, 697-706	1.6	28
244	Origin of bias-stress induced instability in organic thin-film transistors with semiconducting small-molecule/insulating polymer blend channel. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 1625-9	8.5	27
243	Active mixing inside microchannels utilizing dynamic variation of gradient zeta potentials. <i>Electrophoresis</i> , 2005 , 26, 4605-15	3.6	27
242	Dual aptamer assay for detection of <i>Acinetobacter baumannii</i> on an electromagnetically-driven microfluidic platform. <i>Biosensors and Bioelectronics</i> , 2020 , 159, 112148	11.8	26
241	An integrated microfluidic system for counting of CD4+/CD8+ T lymphocytes. <i>Microfluidics and Nanofluidics</i> , 2011 , 10, 531-541	2.8	26
240	A microfluidic cell culture platform for real-time cellular imaging. <i>Biomedical Microdevices</i> , 2009 , 11, 903-13	3.7	26
239	Microfluidic device utilizing pneumatic micro-vibrators to generate alginate microbeads for microencapsulation of cells. <i>Sensors and Actuators B: Chemical</i> , 2010 , 147, 755-764	8.5	26
238	Enumeration of circulating tumor cells and investigation of cellular responses using aptamer-immobilized AlGaN/GaN high electron mobility transistor sensor array. <i>Sensors and Actuators B: Chemical</i> , 2018 , 257, 96-104	8.5	26
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