Gwo-Bin Lee

List of Publications by Year in Descending Order

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Version: 2024-04-20

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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.

397	12,371 citations	58	88
papers		h-index	g-index
524	14,129	4.8 avg, IF	6.59
ext. papers	ext. citations		L-index

#	Paper	IF	Citations
397	Isolation and Quantification of Methylated Cell-Free DNA in Plasma on an Integrated Microfluidic System <i>Analytical Chemistry</i> , 2022 ,	7.8	1
396	Isolation and digital counting of extracellular vesicles from blood via membrane-integrated microfluidics. <i>Sensors and Actuators B: Chemical</i> , 2022 , 358, 131473	8.5	1
395	An Integrated Microfluidic Platform Featuring Real-Time Reverse Transcription Loop-Mediated Isothermal Amplification for Detection of COVID-19 Sensors and Actuators B: Chemical, 2022, 131447	8.5	2
394	Integrated Microfluidic System for Cell-Free DNA Extraction from Plasma for Mutant Gene Detection and Quantification <i>Analytical Chemistry</i> , 2022 ,	7.8	3
393	Rapid molecular diagnosis of live Mycobacterium tuberculosis on an integrated microfluidic system. <i>Sensors and Actuators B: Chemical</i> , 2022 , 365, 131968	8.5	2
392	Electromagnetically-driven integrated microfluidic platform using reverse transcription loop-mediated isothermal amplification for detection of severe acute respiratory syndrome coronavirus 2. <i>Analytica Chimica Acta</i> , 2022 , 340036	6.6	0
391	Isolation and quantification of extracellular vesicle-encapsulated microRNA on an integrated microfluidic platform. <i>Lab on A Chip</i> , 2021 , 21, 4660-4671	7.2	3
390	Screening aptamers targeting the cell membranes of clinical cancer tissues on an integrated microfluidic system. <i>Sensors and Actuators B: Chemical</i> , 2021 , 330, 129334	8.5	6
389	A miniaturized, DNA-FET biosensor-based microfluidic system for quantification of two breast cancer biomarkers. <i>Microfluidics and Nanofluidics</i> , 2021 , 25, 1	2.8	9
388	An aptamer interacting with heat shock protein 70 shows therapeutic effects and prognostic ability in serous ovarian cancer. <i>Molecular Therapy - Nucleic Acids</i> , 2021 , 23, 757-768	10.7	3
387	An integrated microfluidic system for early detection of sepsis-inducing bacteria. <i>Lab on A Chip</i> , 2021 , 21, 113-121	7.2	9
386	Rapid antimicrobial susceptibility tests on an integrated microfluidic device for precision medicine of antibiotics. <i>Biosensors and Bioelectronics</i> , 2021 , 176, 112890	11.8	4
385	An automated and portable antimicrobial susceptibility testing system for urinary tract infections. <i>Lab on A Chip</i> , 2021 , 21, 755-763	7.2	2
384	Isolation and recovery of extracellular vesicles using optically-induced dielectrophoresis on an integrated microfluidic platform. <i>Lab on A Chip</i> , 2021 , 21, 1475-1483	7.2	8
383	An integrated microfluidic platform for detection of ovarian clear cell carcinoma mRNA biomarker FXYD2. <i>Lab on A Chip</i> , 2021 , 21, 2625-2632	7.2	1
382	A multiplexed nanoliter array-based microfluidic platform for quick, automatic antimicrobial susceptibility testing. <i>Lab on A Chip</i> , 2021 , 21, 2223-2231	7.2	4
381	Exfoliated tumor cells in bile as a promising indicator of disease status in cholangiocarcinoma. <i>Sensors and Actuators B: Chemical</i> , 2021 , 346, 130526	8.5	O

380	Optimization of aptamer selection on an automated microfluidic system with cancer tissues. <i>Lab on A Chip</i> , 2021 , 21, 725-734	7.2	5	
379	Two-step magnetic bead-based (2MBB) techniques for immunocapture of extracellular vesicles and quantification of microRNAs for cardiovascular diseases: A pilot study. <i>PLoS ONE</i> , 2020 , 15, e0229610	3.7	12	
378	An integrated microfluidic system for rapid, automatic and high-throughput staining of clinical tissue samples for diagnosis of ovarian cancer. <i>Lab on A Chip</i> , 2020 , 20, 1103-1109	7.2	13	
377	Dual aptamer assay for detection of Acinetobacter baumannii on an electromagnetically-driven microfluidic platform. <i>Biosensors and Bioelectronics</i> , 2020 , 159, 112148	11.8	26	
376	Exploring Circulating Tumor Cells in Cholangiocarcinoma Using a Novel Glycosaminoglycan Probe on a Microfluidic Platform. <i>Advanced Healthcare Materials</i> , 2020 , 9, e1901875	10.1	7	
375	A structure-free digital microfluidic platform for detection of influenza a virus by using magnetic beads and electromagnetic forces. <i>Lab on A Chip</i> , 2020 , 20, 789-797	7.2	21	
374	Aptamer probed isolation of circulating tumor cells in cholangiocarcinoma patients. <i>Sensors and Actuators B: Chemical</i> , 2020 , 322, 128569	8.5	4	
373	Detection and isolation of free cancer cells from ascites and peritoneal lavages using optically induced electrokinetics (OEK). <i>Science Advances</i> , 2020 , 6, eaba9628	14.3	18	
372	A CMOS-Based Capacitive Biosensor for Detection of a Breast Cancer MicroRNA Biomarker. <i>IEEE Open Journal of Nanotechnology</i> , 2020 , 1, 157-162	2.1	3	
371	Screening of multiple hemoprotein-specific aptamers and their applications for the binding, quantification, and extraction of hemoproteins in a microfluidic system. <i>Biomicrofluidics</i> , 2020 , 14, 0241	170 ²	1	
370	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	
369	An Aptamer Based Sandwich Assay for Simultaneous Detection of Multiple Cardiovascular Biomarkers on A Multilayered Integrated Microfluidic System 2019 ,		4	
368	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	
367	Bacterial detection and identification from human synovial fluids on an integrated microfluidic system. <i>Analyst, The</i> , 2019 , 144, 1210-1222	5	8	
366	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	
365	Design and Demonstration of Tunable Amplified Sensitivity of AlGaN/GaN High Electron Mobility Transistor (HEMT)-Based Biosensors in Human Serum. <i>Analytical Chemistry</i> , 2019 , 91, 5953-5960	7.8	22	
364	Generating digital drug cocktails via optical manipulation of drug-containing particles and photo-patterning of hydrogels. <i>Lab on A Chip</i> , 2019 , 19, 1764-1771	7.2	6	
363	An automated microfluidic system for selection of aptamer probes against ovarian cancer tissues. <i>Biomicrofluidics</i> , 2019 , 13, 014114	3.2	16	

362	Simultaneous detection of multiple NT-proBNP clinical samples utilizing an aptamer-based sandwich assay on an integrated microfluidic system. <i>Lab on A Chip</i> , 2019 , 19, 1676-1685	7.2	20
361	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
360	An integrated microfluidic system for antimicrobial susceptibility testing with antibiotic combination. <i>Lab on A Chip</i> , 2019 , 19, 2699-2708	7.2	19
359	Optimization of an enzyme linked DNA aptamer assay for cardiac troponin I detection: synchronous multiple sample analysis on an integrated microfluidic platform. <i>Analyst, The</i> , 2019 , 144, 4943-4951	5	13
358	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
357	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
356	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
355	Dynamic monitoring of transmembrane potential changes: a study of ion channels using an electrical double layer-gated FET biosensor. <i>Lab on A Chip</i> , 2018 , 18, 1047-1056	7.2	11
354	Visible light induced electropolymerization of suspended hydrogel bioscaffolds in a microfluidic chip. <i>Biomaterials Science</i> , 2018 , 6, 1371-1378	7.4	10
353	A Comprehensive Model for Whole Cell Sensing and Transmembrane Potential Measurement Using FET Biosensors. <i>ECS Journal of Solid State Science and Technology</i> , 2018 , 7, Q3001-Q3008	2	11
352	An integrated microfluidic system using mannose-binding lectin for bacteria isolation and biofilm-related gene detection. <i>Microfluidics and Nanofluidics</i> , 2018 , 22, 1	2.8	5
351	Integrated microfluidic system with field effect transistor for automatic detection of multiple cardiovascular biomarkers 2018 ,		1
350	An automatic integrated microfluidic system for allergy microarray chips. <i>Analyst, The</i> , 2018 , 143, 2285	-2 3 292	5
349	High sensitivity cardiac troponin I detection in physiological environment using AlGaN/GaN High Electron Mobility Transistor (HEMT) Biosensors. <i>Biosensors and Bioelectronics</i> , 2018 , 100, 282-289	11.8	98
348	Rapid Assembly of Carbon Nanoparticles Into Electrical Elements by Optically-Induced Electroosmotic Flow. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 1045-1052	2.6	5
347	EDL Gated FET Biosensor Array for the Investigation of Ion Channels and Bioelectric Signals of Circulating Tumor Cells. <i>ECS Transactions</i> , 2018 , 85, 15-23	1	
346	A nitrocellulose membrane-based integrated microfluidic system for bacterial detection utilizing magnetic-composite membrane microdevices and bacteria-specific aptamers. <i>Lab on A Chip</i> , 2018 , 18, 1633-1640	7.2	21
345	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

344	Aptamer-functionalized AlGaN/GaN High-electron-mobility Transistor for Rapid Diagnosis of Fibrinogen in Human Plasma. <i>Sensors and Materials</i> , 2018 , 30, 2321	1.5	3
343	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
342	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
341	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	1 ^{11.8}	30
340	Thermometry of photosensitive and optically induced electrokinetics chips. <i>Microsystems and Nanoengineering</i> , 2018 , 4, 26	7.7	1
339	Microfluidic platforms for rapid screening of cancer affinity reagents by using tissue samples. <i>Biomicrofluidics</i> , 2018 , 12, 054108	3.2	12
338	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
337	Direct detection of DNA using electrical double layer gated high electron mobility transistor in high ionic strength solution with high sensitivity and specificity. <i>Sensors and Actuators B: Chemical</i> , 2018 , 271, 110-117	8.5	12
336	Automatic cell fusion via optically-induced dielectrophoresis and optically-induced locally-enhanced electric field on a microfluidic chip. <i>Biomicrofluidics</i> , 2018 , 12, 034108	3.2	9
335	An integrated microfluidic system for identification of live mycobacterium tuberculosis by real-time polymerase chain reaction 2018 ,		2
334	Vancomycin-resistant gene identification from live bacteria on an integrated microfluidic system by using low temperature lysis and loop-mediated isothermal amplification. <i>Biomicrofluidics</i> , 2017 , 11, 024	101	7
333	Combination of optical manipulation of particles and patterning of hydrogels for demonstration of digital drug cocktails 2017 ,		1
332	An integrated microfluidic system for live bacteria detection from human joint fluid samples by using ethidium monoazide and loop-mediated isothermal amplification. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	11
331	EditorsSChoice E ield-Effect Transistor-Based Biosensors and a Portable Device for Personal Healthcare. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, Q71-Q76	2	15
330	Automatic optimization of drug cocktails on an integrated microfluidic system. <i>Biomicrofluidics</i> , 2017 , 11, 034109	3.2	3
329	Determination of Cell Membrane Capacitance and Conductance via Optically Induced Electrokinetics. <i>Biophysical Journal</i> , 2017 , 113, 1531-1539	2.9	42
328	Direct detection of fibrinogen in human plasma using electric-double-layer gated AlGaN/GaN high electron mobility transistors. <i>Applied Physics Letters</i> , 2017 , 111, 082106	3.4	7
327	Detection of C-reactive protein on an integrated microfluidic system by utilizing field-effect transistors and aptamers. <i>Biomicrofluidics</i> , 2017 , 11, 044105	3.2	8

326	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
325	An integrated passive microfluidic device for rapid detection of influenza a (H1N1) virus by reverse transcription loop-mediated isothermal amplification (RT-LAMP) 2017 ,		5
324	Screening of peptide specific to cholangiocarcinoma cancer cells using an integrated microfluidic system and phage display technology. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	2
323	Automated selection of aptamers against cholangiocarcinoma cells on an integrated microfluidic platform. <i>Biomicrofluidics</i> , 2017 , 11, 044101	3.2	22
322	An integrated microfluidic system for the isolation and detection of ovarian circulating tumor cells using cell selection and enrichment methods. <i>Biomicrofluidics</i> , 2017 , 11, 034122	3.2	18
321	A Microfluidic Chip for Detecting Cholangiocarcinoma Cells in Human Bile. <i>Scientific Reports</i> , 2017 , 7, 4248	4.9	3
320	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
319	Rapid identification of pathogens responsible for necrotizing fasciitis on an integrated microfluidic system. <i>Biomicrofluidics</i> , 2017 , 11, 064108	3.2	1
318	Silver nanostructures synthesis via optically induced electrochemical deposition. <i>Scientific Reports</i> , 2016 , 6, 28035	4.9	14
317	Rapidly patterning micro/nano devices by directly assembling ions and nanomaterials. <i>Scientific Reports</i> , 2016 , 6, 32106	4.9	17
316	Optically-Induced Cell Fusion on Cell Pairing Microstructures. Scientific Reports, 2016, 6, 22036	4.9	12
315	Microfluidics in the selection of affinity reagents for the detection of cancer: paving a way towards future diagnostics. <i>Lab on A Chip</i> , 2016 , 16, 2759-74	7.2	19
314	On-chip, aptamer-based sandwich assay for detection of glycated hemoglobins via magnetic beads. <i>Biosensors and Bioelectronics</i> , 2016 , 79, 887-93	11.8	46
313	Emerging Applications for Nanotechnology [From the Guest Editor's Desk]. <i>IEEE Nanotechnology Magazine</i> , 2016 , 10, 3-3	1.7	
312	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
311	An integrated microfluidic system for diagnosis of the resistance of Helicobacter pylori to quinolone-based antibiotics. <i>Biosensors and Bioelectronics</i> , 2016 , 78, 281-289	11.8	23
310	Hemostasis Plug for an Electromagnetic Thermotherapy and Its Application for Liver Laceration. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 1310-20	4.7	0
309	Fabrication of High-Aspect-Ratio 3D Hydrogel Microstructures Using Optically Induced Electrokinetics. <i>Micromachines</i> , 2016 , 7,	3.3	5

(2015-2016)

308	Dual-aptamer assay for C-reactive protein detection by using field-effect transistors on an integrated microfluidic system 2016 ,		2
307	A self-driven microfluidic chip through a rapid surface modification of PDMS and its application for digital loop-mediated amplification (LAMP) 2016 ,		1
306	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
305	A UV-sensitive hydrogel based combinatory drug delivery chip (UV gel-Drug Chip) for cancer cocktail drug screening. <i>RSC Advances</i> , 2016 , 6, 44425-44434	3.7	10
304	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
303	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
302	Measurement of glycated hemoglobin levels using an integrated microfluidic system. <i>Microfluidics and Nanofluidics</i> , 2015 , 18, 613-621	2.8	10
301	A fluorescence in situ hybridization (FISH) microfluidic platform for detection of HER2 amplification in cancer cells. <i>Biosensors and Bioelectronics</i> , 2015 , 69, 272-9	11.8	19
300	Optically-controlled digital electrodeposition of thin-film metals for fabrication of nano-devices. <i>Optical Materials Express</i> , 2015 , 5, 838	2.6	13
299	. Journal of Microelectromechanical Systems, 2015 , 24, 2128-2135	2.5	12
299 298	. Journal of Microelectromechanical Systems, 2015, 24, 2128-2135 An integrated microfluidic platform for negative selection and enrichment of cancer cells. Journal of Micromechanics and Microengineering, 2015, 25, 084007	2.5	13
	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal</i>		
298	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084007 Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX.	2	13
298	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084007 Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX. <i>Lab on A Chip</i> , 2015 , 15, 486-94 Rapid detection and typing of live bacteria from human joint fluid samples by utilizing an	2 7.2	13 36
298 297 296	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084007 Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX. <i>Lab on A Chip</i> , 2015 , 15, 486-94 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 A microfluidic system integrated with buried optical fibers for detection of Phalaenopsis orchid	7.2	13 36 39
298 297 296 295	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084007 Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX. <i>Lab on A Chip</i> , 2015 , 15, 486-94 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 A microfluidic system integrated with buried optical fibers for detection of Phalaenopsis orchid pathogens. <i>Biosensors and Bioelectronics</i> , 2015 , 63, 572-579 Rapid and amplification-free detection of fish pathogens by utilizing a molecular beacon-based	7.2 11.8	13 36 39 23
298 297 296 295	An integrated microfluidic platform for negative selection and enrichment of cancer cells. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 084007 Selection of aptamers specific for glycated hemoglobin and total hemoglobin using on-chip SELEX. <i>Lab on A Chip</i> , 2015 , 15, 486-94 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 A microfluidic system integrated with buried optical fibers for detection of Phalaenopsis orchid pathogens. <i>Biosensors and Bioelectronics</i> , 2015 , 63, 572-579 Rapid and amplification-free detection of fish pathogens by utilizing a molecular beacon-based microfluidic system. <i>Biosensors and Bioelectronics</i> , 2015 , 63, 196-203 An integrated microfluidic system for screening of phage-displayed peptides specific to colon	7.2 11.8 11.8	13 36 39 23

2 90	An integrated microfluidic system with field-effect-transistor-based biosensors for automatic highly-sensitive C-reactive protein measurement 2015 ,		2
289	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
288	Measurement of single leukemia cells density and mass using optically induced electric field in a microfluidics chip. <i>Biomicrofluidics</i> , 2015 , 9, 022406	3.2	17
287	Cancer cell-specific oligopeptides selected by an integrated microfluidic system from a phage display library for ovarian cancer diagnosis. <i>Theranostics</i> , 2015 , 5, 431-42	12.1	19
286	Microfluidic platforms for discovery and detection of molecular biomarkers. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 941-963	2.8	13
285	Dielectrophoretically-assisted electroporation using light-activated virtual microelectrodes for multiple DNA transfection. <i>Lab on A Chip</i> , 2014 , 14, 592-601	7.2	21
284	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
283	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
282	Measurement of glycated hemoglobin using an aptamer/antibody assay on an integrated microfluidic system 2014 ,		2
281	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
280	A continuous optically-induced cell electroporation device with on-chip medium exchange mechanisms 2014 ,		1
279	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
278	Electromagnetic thermotherapy system with needle arrays: a practical tool for the removal of cancerous tumors. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 598-605	5	5
277	Optically induced dielectropheresis sorting with automated medium exchange in an integrated optofluidic device resulting in higher cell viability. <i>Lab on A Chip</i> , 2014 , 14, 2837-43	7.2	10
276	Rapid isolation and diagnosis of live bacteria from human joint fluids by using an integrated microfluidic system. <i>Lab on A Chip</i> , 2014 , 14, 3376-84	7.2	22
275	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
274	Application of strong transverse magneto-optical Kerr effect on high sensitive surface plasmon grating sensors. <i>Optics Express</i> , 2014 , 22, 19794-802	3.3	14
273	Exploring pulse-voltage-triggered optically induced electrohydrodynamic instability for femtolitre droplet generation. <i>Applied Physics Letters</i> , 2014 , 104, 264103	3.4	8

(2013-2014)

272	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
271	An integrated microfluidic platform for rapid detection and subtyping of influenza viruses from clinical samples. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 501-512	2.8	11
270	Optically induced electrohydrodynamic instability-based micro-patterning of fluidic thin films. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 1097-1106	2.8	6
269	A micropump using amplified deformation of resilient membranes through oil hydraulics. <i>Microfluidics and Nanofluidics</i> , 2014 , 17, 393-400	2.8	2
268	An electromagnetic thermotherapy system with a deep penetration depth for percutaneous thermal ablation. <i>Annals of Biomedical Engineering</i> , 2014 , 42, 86-96	4.7	2
267	. IEEE Nanotechnology Magazine, 2014 , 13, 245-253	2.6	12
266	Rapid and label-free separation of Burkitt's lymphoma cells from red blood cells by optically-induced electrokinetics. <i>PLoS ONE</i> , 2014 , 9, e90827	3.7	21
265	Electromagnetic thermotherapy for deep organ ablation by using a needle array under a synchronized-coil system. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 2733-9	5	2
264	Carbon nanotube-based hot-film and temperature sensor assembled by optically-induced dielectrophoresis. <i>IET Nanobiotechnology</i> , 2014 , 8, 44-50	2	8
263	(Invited) Rapid C-reactive Protein Detection with AlGaN/GaN High Electron Mobility Transistors in an Integrated Microfluidic System. <i>ECS Transactions</i> , 2014 , 61, 95-100	1	
262	Rapid assembly of gold nanoparticle-based microstructures using optically-induced electrokinetics. <i>Optical Materials Express</i> , 2014 , 4, 2368	2.6	10
261	Regulating the mechanical properties of cells using a non-UV light-addressable hydrogel patterning process 2014 ,		1
260	Detection of viruses directly from the fresh leaves of a Phalaenopsis orchid using a microfluidic system. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013 , 9, 1274-82	6	23
259	Analysis of energy efficiency and productivity in dry process in PCB manufacturing. <i>International Journal of Precision Engineering and Manufacturing</i> , 2013 , 14, 1213-1221	1.7	10
258	A numerical approach to energy savings in heat drying process of drilled and water-cleaned PCB. <i>International Journal of Precision Engineering and Manufacturing</i> , 2013 , 14, 891-895	1.7	3
257	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
256	Integrated three-dimensional system-on-chip for direct quantitative detection of mitochondrial DNA mutation in affected cells. <i>Biosensors and Bioelectronics</i> , 2013 , 48, 6-11	11.8	6
255	Partial nephrectomy without renal ischemia using an electromagnetic thermal surgery system in a porcine model. <i>Urology</i> , 2013 , 81, 1101-7	1.6	3

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 novel integrated microfluidic platform to perform fluorescence in situ hybridization for chromosomal analysis. <i>Microfluidics and Nanofluidics</i> , 2013 , 15, 745-752	2.8	14
252	An intergated microfluidic system for detecting human immunodeficiency virus in blood samples 2013 ,		1
251	Observation of strong transverse magneto-optical Kerr effect on surface plasmonic gratings 2013,		1
250	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
249	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
248	Nucleic acid amplification using microfluidic systems. <i>Lab on A Chip</i> , 2013 , 13, 1225-42	7.2	99
247	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
246	Numerical simulation of optically-induced dielectrophoresis using a voltage-transformation-ratio model. <i>Sensors</i> , 2013 , 13, 1965-83	3.8	9
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242	An integrated microfluidic platform for rapid tumor cell isolation, counting and molecular diagnosis. <i>Biomedical Microdevices</i> , 2013 , 15, 339-52	3.7	18
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240	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
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238	Successfully seal pancreatic end after thermal distal pancreatectomy using needle arrays in alternating electromagnetic fields. <i>Surgical Innovation</i> , 2013 , 20, 150-7	2	3
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