Levent Yobas

List of Publications by Year
in descending order

78	2,857	218677	175258
papers	citations	26 h-index	52 g-index

78	78	78	3519
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Sub-nL Differential Scanning Calorimetry Chip for Liquid Crystal Phase Transition Characterization. , 2022, , .		0
2	Continuous-Flow Size Fractionation of Extracellular Vesicles Using A Micrifluidic Junction Featuring Electrode Microbridges. , 2022, , .		0
3	Ordered surface crack patterns in situ formed under confinement on fluidic microchannel boundaries in polydimethylsiloxane. Lab on A Chip, 2021, 21, 668-673.	6.0	2
4	Electrokinetic oscillation, railing, and enrichment of submicron particles along 3D microelectrode tracks. Microfluidics and Nanofluidics, 2021, 25, 1.	2.2	2
5	Multifunctional 3D Viaduct Microelectrodes for Continuous-Flow Dielectrophoretic Railing and Electroporation of Cells Under Modulated Activation. , 2021, , .		0
6	A Sub-nL Chip Calorimeter and Its Application to the Measurement of the Photothermal Transduction Efficiency of Plasmonic Nanoparticles. Journal of Microelectromechanical Systems, 2021, 30, 759-769.	2.5	7
7	Analyzing proteinâ€“protein interactions in rare cells using microbead-based single-molecule pulldown assay. Lab on A Chip, 2021, 21, 3137-3149.	6.0	6
8	Heat transfer time determination based on DNA melting curve analysis. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	7
9	Conductance Interplay in Ion Concentration Polarization across 1D Nanochannels: Microchannel Surface Shunt and Nanochannel Conductance. Analytical Chemistry, 2020, 92, 1252-1259.	6.5	9
10	The vision of point-of-care PCR tests for the COVID-19 pandemic and beyond. TrAC - Trends in Analytical Chemistry, 2020, 130, 115984.	11.4	73
11	A SiN Microcalorimeter and a Non-Contact Precision Method of Temperature Calibration. Journal of Microelectromechanical Systems, 2020, 29, 1103-1105.	2.5	8
12	Rapid Characterization of Biomoleculesâ€™ Thermal Stability in a Segmented Flow-Through Optofluidic Microsystem. Scientific Reports, 2020, 10, 6925.	3.3	3
13	Microfluidics and bioMEMS in silicon. , 2020, , 547-563.		1
14	nanolithography toolboxâ€”Simplifying the design complexity of microfluidic chips. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 063002.	1.2	7
15	Single-Cell Point Constrictions for Reagent-Free High-Throughput Mechanical Lysis and Intact Nuclei Isolation. Micromachines, 2019, 10, 488.	2.9	9
16	A nanofluidic memristor based on ion concentration polarization. Analyst, The, 2019, 144, 7168-7172.	3.5	22
17	A Low-Backpressure Single-Cell Point Constriction for Cytosolic Delivery Based on Rapid Membrane Deformations. Analytical Chemistry, 2018, 90, 1836-1844.	6.5	14
18	Railing cells along 3D microelectrode tracks for continuous-flow dielectrophoretic sorting. Lab on A Chip, 2018, 18, 3760-3769.	6.0	19

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19	Label-Free Multiplexed Electrical Detection of Cancer Markers on a Microchip Featuring an Integrated Fluidic Diode Nanopore Array. ACS Nano, 2018, 12, 7892-7900.	14.6	37
20	Mechanical Characterization of Microengineered Epithelial Cysts by Using Atomic Force Microscopy. Biophysical Journal, 2017, 112, 398-409.	0.5	17
21	Continuous-Flow Electrophoresis of DNA and Proteins in a Two-Dimensional Capillary-Well Sieve. Analytical Chemistry, 2017, 89, 10022-10028.	6.5	12
22	On-chip hydrodynamic chromatography of DNA through centimeters-long glass nanocapillaries. Analyst, The, 2017, 142, 2191-2198.	3.5	6
23	Slowing DNA Translocation in a Nanofluidic Field-Effect Transistor. ACS Nano, 2016, 10, 3985-3994.	14.6	51
24	Continuous-Flow Electrokinetic-Assisted Plasmapheresis by Using Three-Dimensional Microelectrodes Featuring Sidewall Undercuts. Analytical Chemistry, 2016, 88, 5197-5204.	6.5	16
25	Pressure-Driven Chromatographic Separation Modes in Self-Enclosed Integrated Nanocapillaries. Analytical Chemistry, 2016, 88, 11601-11608.	6.5	14
26	Dielectrophoretic isolation of cells using 3D microelectrodes featuring castellated blocks. Analyst, The, 2015, 140, 3397-3405.	3.5	18
27	Microfluidics and BioMEMS in Silicon. , 2015, , 565-581.		0
28	Microfluidic emulsification through a monolithic integrated glass micronozzle suspended inside a flow-focusing geometry. Applied Physics Letters, 2015, 106, 174101.	3.3	14
29	Gel-Free Electrophoresis of DNA and Proteins on Chips Featuring a 70 nm Capillaryâ€"Well Motif. ACS Nano, 2015, 9, 427-435.	14.6	21
30	Induced hydraulic pumping via integrated submicrometer cylindrical glass capillaries. Electrophoresis, 2014, 35, 2353-2360.	2.4	4
31	Flow-through electroporation of mammalian cells in decoupled flow streams using microcapillaries. Biomicrofluidics, 2014, 8, 052101.	2.4	7
32	Label-Free Specific Detection of Femtomolar Cardiac Troponin Using an Integrated Nanoslit Array Fluidic Diode. Nano Letters, 2014, 14, 6983-6990.	9.1	17
33	Fast DNA Sieving through Submicrometer Cylindrical Glass Capillary Matrix. Analytical Chemistry, 2014, 86, 737-743.	6.5	22
34	Label-free enumeration of colorectal cancer cells from lymphocytes performed at a high cell-loading density by using interdigitated ring-array microelectrodes. Biosensors and Bioelectronics, 2014, 61, 434-442.	10.1	26
35	Microsystems for cell-based electrophysiology. Journal of Micromechanics and Microengineering, 2013, 23, 083002.	2.6	11
36	Interdigitated 3-D Silicon Ring Microelectrodes for DEP-Based Particle Manipulation. Journal of Microelectromechanical Systems, 2013, 22, 363-371.	2.5	17

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37	Microchannel plate (MCP) functionalized with Ag nanorods as a high-porosity stable SERS-active membrane. Sensors and Actuators B: Chemical, 2013, 184, 235-242.	7.8	9
38	Self-formed cylindrical microcapillaries through surface migration of silicon and their application to single-cell analysis. Journal of Micromechanics and Microengineering, 2013, 23, 055001.	2.6	7
39	Microchannel plate as a novel bipolar electrode for highâ€performance enrichment of anions. Electrophoresis, 2013, 34, 1991-1997.	2.4	5
40	Cylindrical glass nanocapillaries patterned via coarse lithography (>1â€‰Î¼m) for biomicrofluidic applications. Biomicrofluidics, 2012, 6, 046502.	2.4	23
41	Microchannel plate electro-osmotic pump. Microfluidics and Nanofluidics, 2012, 13, 279-288.	2.2	17
42	Microcapillary-assisted dielectrophoresis for single-particle positioning. Lab on A Chip, 2012, 12, 4085.	6.0	9
43	UVâ€illuminated dielectrophoresis by twoâ€dimensional electron gas (2DEG) in AlGaN/GaN heterojunction. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2223-2228.	1.8	1
44	Monolithic integration of fine cylindrical glass microcapillaries on silicon for electrophoretic separation of biomolecules. Biomicrofluidics, 2012, 6, 036501.	2.4	9
45	A â€˜microfluidic pinballâ€™ for on-chip generation of Layer-by-Layer polyelectrolyte microcapsules. Lab on A Chip, 2011, 11, 1030.	6.0	106
46	The Effect of Asymmetry on Particle Focusing in Microchannels. Advanced Materials Research, 2011, 403-408, 482-485.	0.3	1
47	Versatile label free biochip for the detection of circulating tumor cells from peripheral blood in cancer patients. Biosensors and Bioelectronics, 2010, 26, 1701-1705.	10.1	191
48	Reliable addition of reagents into microfluidic droplets. Microfluidics and Nanofluidics, 2010, 8, 409-416.	2.2	34
49	A simple method for evaluating and predicting chaotic advection in microfluidic slugs. Chemical Engineering Science, 2010, 65, 5382-5391.	3.8	19
50	Design and fabrication of Poly(dimethylsiloxane) arrayed waveguide grating. Optics Express, 2010, 18, 21732.	3.4	26
51	Formation and manipulation of ferrofluid droplets at a microfluidicT-junction. Journal of Micromechanics and Microengineering, 2010, 20, 045004.	2.6	113
52	Lateral patch-clamping in a standard 1536-well microplate format. Lab on A Chip, 2010, 10, 1044.	6.0	45
53	Thermally mediated control of liquid microdroplets at a bifurcation. Journal Physics D: Applied Physics, 2009, 42, 065503.	2.8	71
54	Microdroplet formation of water and nanofluids in heat-induced microfluidic T-junction. Microfluidics and Nanofluidics, 2009, 6, 253-259.	2.2	64

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55	Microdevice for the isolation and enumeration of cancer cells from blood. Biomedical Microdevices, 2009, 11, 883-892.	2.8	346
56	A self-contained fully-enclosed microfluidic cartridge for lab on a chip. Biomedical Microdevices, 2009, 11, 1279-1288.	2.8	15
57	Design and fabrication of Poly(dimethylsiloxane) single-mode rib waveguide. Optics Express, 2009, 17, 11739.	3.4	24
58	Self-sealed circular channels for micro-fluidics. Sensors and Actuators A: Physical, 2008, 142, 80-87.	4.1	24
59	Silicon-based microfilters for whole blood cell separation. Biomedical Microdevices, 2008, 10, 251-257.	2.8	235
60	Monolithic integration of poly(dimethylsiloxane) waveguides and microfluidics for on-chip absorbance measurements. Sensors and Actuators B: Chemical, 2008, 134, 532-538.	7.8	22
61	A disposable planar peristaltic pump for lab-on-a-chip. Lab on A Chip, 2008, 8, 660.	6.0	38
62	Thermally controlled droplet formation in flow focusing geometry: formation regimes and effect of nanoparticle suspension. Journal Physics D: Applied Physics, 2008, 41, 165501.	2.8	69
63	Digital microfluidics: Droplet based logic gates. Applied Physics Letters, 2007, 90, 054107.	3.3	93
64	Nucleic Acid Extraction, Amplification, and Detection on Si-Based Microfluidic Platforms. IEEE Journal of Solid-State Circuits, 2007, 42, 1803-1813.	5.4	12
65	Thermally mediated droplet formation in microchannels. Applied Physics Letters, 2007, 91, .	3.3	98
66	Microfluidic integration of substantially round glass capillaries for lateral patch clamping on chip. Lab on A Chip, 2007, 7, 1357.	6.0	40
67	Microfluidic systems for extracting nucleic acids for DNA and RNA analysis. Sensors and Actuators A: Physical, 2007, 133, 335-339.	4.1	31
68	Micromixing crowded biological agents by folding slugs through pillars. Sensors and Actuators B: Chemical, 2007, 128, 340-348.	7.8	5
69	Experimental and computational analysis of droplet formation in a high-performance flow-focusing geometry. Sensors and Actuators A: Physical, 2007, 138, 203-212.	4.1	50
70	High-performance flow-focusing geometry for spontaneous generation of monodispersed droplets. Lab on A Chip, 2006, 6, 1073.	6.0	245
71	Thermally mediated breakup of drops in microchannels. Applied Physics Letters, 2006, 89, 234101.	3.3	88
72	A missing factor in chip-based patch clamp assay: gigaseal. Journal of Physics: Conference Series, 2006, 34, 187-191.	0.4	13

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73	Active control for droplet-based microfluidics. , 2006, 6416, 113.		2
74	Buried microfluidic channel for integrated patch-clamping assay. Applied Physics Letters, 2006, 89, 093902.	3.3	30
75	Precise profile control of 3D lateral junction traps by 2D mask layout and isotropic etching. Journal of Micromechanics and Microengineering, 2005, 15, 386-393.	2.6	10
76	A novel integrable microvalve for refreshable braille display system. Journal of Microelectromechanical Systems, 2003, 12, 252-263.	2.5	70
77	A novel bulk micromachined electrostatic microvalve with a curved-compliant structure applicable for a pneumatic tactile display. Journal of Microelectromechanical Systems, 2001, 10, 187-196.	2.5	48
78	The Design and Fabrication of Poly(dimethylsiloxane) Single Mode Rib Waveguides for Lab-on-a-Chip Applications. Advanced Materials Research, 0, 74, 51-54.	0.3	0