## Christopher T Culbertson

## 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.

67
papers

4,183
citations

h-index

64
g-index

70
ext. papers

64
g-index

L-index

#	Paper	IF	Citations
67	Optical biosensing of markers of mucosal inflammation. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2021</b> , 40, 102476	6	2
66	Measuring stimulation and inhibition of intracellular nitric oxide production in SIM-A9 microglia using microfluidic single-cell analysis. <i>Analytical Methods</i> , <b>2020</b> , 12, 4665-4673	3.2	4
65	Microelectrophoretic single-cell measurements with microfluidic devices. <i>Methods in Enzymology</i> , <b>2019</b> , 628, 223-241	1.7	1
64	Fabrication of Glass Microfluidic Devices. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1906, 1-12	1.4	1
63	Cellular Analysis Using Microfluidics. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 65-85	7.8	35
62	Early detection of pancreatic cancers in liquid biopsies by ultrasensitive fluorescence nanobiosensors. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2018</b> , 14, 1823-1832	6	13
61	Effects of storage temperature on airway exosome integrity for diagnostic and functional analyses. <i>Journal of Extracellular Vesicles</i> , <b>2017</b> , 6, 1359478	16.4	125
60	Out-of-plane integration of a multimode optical fiber for single particle/cell detection at multiple points on a microfluidic device with applications to particle/cell counting, velocimetry, size discrimination and the analysis of single cell lysate injections. <i>Lab on A Chip</i> , <b>2016</b> , 17, 145-155	7.2	10
59	Integrating Optical Fiber Bridges in Microfluidic Devices to Create Multiple Excitation/Detection Points for Single Cell Analysis. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 9920-9925	7.8	10
58	Micro Total Analysis Systems: Fundamental Advances and Applications. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 320-38	7.8	77
57	High-throughput microfluidic device for single cell analysis using multiple integrated soft lithographic pumps. <i>Electrophoresis</i> , <b>2016</b> , 37, 1337-44	3.6	14
56	Integration of a nanostructured dielectrophoretic device and a surface-enhanced Raman probe for highly sensitive rapid bacteria detection. <i>Nanoscale</i> , <b>2015</b> , 7, 3726-36	7.7	56
55	Micro total analysis systems: fundamental advances and biological applications. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 95-118	7.8	142
54	An integrated microfluidic device for monitoring changes in nitric oxide production in single T-lymphocyte (Jurkat) cells. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 10188-95	7.8	37
53	Manipulation of bacteriophages with dielectrophoresis on carbon nanofiber nanoelectrode arrays. <i>Electrophoresis</i> , <b>2013</b> , 34, 1123-30	3.6	24
52	Monitoring intracellular nitric oxide production using microchip electrophoresis and laser-induced fluorescence detection. <i>Analytical Methods</i> , <b>2012</b> , 4, 414	3.2	27
51	Integrated microfluidic device for the separation and electrochemical detection of catechol estrogen-derived DNA adducts. <i>Analytical and Bioanalytical Chemistry</i> , <b>2011</b> , 399, 519-24	4.4	10

## (2005-2011)

50	Dielectrophoretic capture of E. coli cells at micropatterned nanoelectrode arrays. <i>Electrophoresis</i> , <b>2011</b> , 32, 2358-65	3.6	14
49	Paper-based microfluidic devices for analysis of clinically relevant analytes present in urine and saliva. <i>Analytical and Bioanalytical Chemistry</i> , <b>2010</b> , 397, 1821-9	4.4	210
48	Electrokinetic trapping using titania nanoporous membranes fabricated using sol-gel chemistry on microfluidic devices. <i>Electrophoresis</i> , <b>2009</b> , 30, 3160-7	3.6	25
47	Synthesis and characterization of a poly(dimethylsiloxane)-poly(ethylene oxide) block copolymer for fabrication of amphiphilic surfaces on microfluidic devices. <i>Langmuir</i> , <b>2009</b> , 25, 10390-6	4	21
46	Single-molecule studies of oligomer extraction and uptake of dyes in poly(dimethylsiloxane) films. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 10089-96	7.8	12
45	Generation of nonbiased hydrodynamic injections on microfluidic devices using integrated dielectric elastomer actuators. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 8942-8	7.8	19
44	Demonstration of an integrated electroactive polymer actuator on a microfluidic electrophoresis device. <i>Lab on A Chip</i> , <b>2009</b> , 9, 2076-84	7.2	18
43	Single molecule studies of solvent-dependent diffusion and entrapment in poly(dimethylsiloxane) thin films. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 9726-34	7.8	4
42	A novel, environmentally friendly sodium lauryl ether sulfate-, cocamidopropyl betaine-, cocamide monoethanolamine-containing buffer for MEKC on microfluidic devices. <i>Electrophoresis</i> , <b>2008</b> , 29, 4900-	- <b>3</b> .6	8
41	Chemical analysis of single mammalian cells with microfluidics. Strategies for culturing, sorting, trapping, and lysing cells and separating their contents on chips. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 2614-21	7.8	50
40	Single-cell manipulation and analysis using microfluidic devices. <i>Analytical and Bioanalytical Chemistry</i> , <b>2007</b> , 387, 9-12	4.4	80
39	Micellar electrokinetic chromatography of fluorescently labeled proteins on poly(dimethylsiloxane)-based microchips. <i>Electrophoresis</i> , <b>2006</b> , 27, 2933-9	3.6	21
38	Single cell analysis on microfluidic devices. <i>Methods in Molecular Biology</i> , <b>2006</b> , 339, 203-16	1.4	6
37	The effect of photomask resolution on separation efficiency on microfabricated devices. <i>Lab on A Chip</i> , <b>2006</b> , 6, 1355-61	7.2	7
36	Surface engineering of poly(dimethylsiloxane) microfluidic devices using transition metal sol-gel chemistry. <i>Langmuir</i> , <b>2006</b> , 22, 4445-51	4	103
35	High efficiency micellar electrokinetic chromatography of hydrophobic analytes on poly(dimethylsiloxane) microchips. <i>Analyst, The</i> , <b>2006</b> , 131, 194-201	5	58
34	Static and dynamic acute cytotoxicity assays on microfluidic devices. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 667	- <del>7</del> 28	31
33	Sol-gel modified poly(dimethylsiloxane) microfluidic devices with high electroosmotic mobilities and hydrophilic channel wall characteristics. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 1414-22	7.8	181

32	Microchip separations in reduced-gravity and hypergravity environments. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 7933-40	7.8	29
31	Effects of Microfabrication Processing on the Electrochemistry of Carbon Nanofiber Electrodes. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 10722-10728	3.4	27
30	Microfluidic devices for the high-throughput chemical analysis of cells. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 5646-55	7.8	309
29	High-efficiency, two-dimensional separations of protein digests on microfluidic devices. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 3758-64	7.8	178
28	Diffusion coefficient measurements in microfluidic devices. <i>Talanta</i> , <b>2002</b> , 56, 365-73	6.2	353
27	High Performance Two Dimensional Separations of Tryptic Digests on Microfluidic Devices <b>2002</b> , 608-6	10	2
26	Two-dimensional electrochromatography/capillary electrophoresis on a microchip. <i>Analytical Chemistry</i> , <b>2001</b> , 73, 2669-74	7.8	186
25	Flow cytometry of Escherichia coli on microfluidic devices. <i>Analytical Chemistry</i> , <b>2001</b> , 73, 5334-8	7.8	205
24	Electroosmotically induced hydraulic pumping with integrated electrodes on microfluidic devices. <i>Analytical Chemistry</i> , <b>2001</b> , 73, 4045-9	7.8	116
23	Rapid Cellular Assays on Microfabricated Fluidic Devices <b>2001</b> , 285-286		2
22	Single Cell Lysis on Microfluidic Devices <b>2001</b> , 301-302		3
21	Electroosmotically Induced Hydraulic Pumping on Microchips <b>2001</b> , 131-132		2
20	Effects of the electric field distribution on microchip valving performance. <i>Electrophoresis</i> , <b>2000</b> , 21, 100-6	3.6	74
19	Electrophoretic separation of proteins on microchips. <i>Journal of Separation Science</i> , <b>2000</b> , 12, 407-411		17
18	Integrated microchip-device for the digestion, separation and postcolumn labeling of proteins and peptides. <i>Biomedical Applications</i> , <b>2000</b> , 745, 243-9		66
17	Electroosmotically induced hydraulic pumping on microchips: differential ion transport. <i>Analytical Chemistry</i> , <b>2000</b> , 72, 2285-91	7.8	102
16	Microchip devices for high-efficiency separations. <i>Analytical Chemistry</i> , <b>2000</b> , 72, 5814-9	7.8	172
15	Microfabricated Fluidic Devices for Cellular Assays <b>2000</b> , 107-110		

## LIST OF PUBLICATIONS

14	Microfabricated Intrachannel Electrical Contacts for Material Transport Control <b>2000</b> , 213-216		2
13	High Efficiency Separations on Microchip Devices <b>2000</b> , 221-224		1
12	Increasing the resolving power of capillary electrophoresis through electroosmotic flow control using radial fields. <i>Journal of Separation Science</i> , <b>1999</b> , 11, 167-174		14
11	Separation of fluorescently derivatized deuterated isotopomers of phenylalanine using micellar electrokinetic chromatography and flow counterbalanced micellar electrokinetic chromatography. <i>Journal of Separation Science</i> , <b>1999</b> , 11, 175-183		4
10	Lowering the UV absorbance detection limit and increasing the sensitivity of capillary electrophoresis using a dual linear photodiode array detector and signal averaging. <i>Journal of Separation Science</i> , <b>1999</b> , 11, 652-662		9
9	Microchip flow cytometry using electrokinetic focusing. <i>Analytical Chemistry</i> , <b>1999</b> , 71, 4173-7	7.8	180
8	Microchip Structures for Submillisecond Electrophoresis. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 3476-3480	7.8	271
7	Lowering the UV Absorbance Detection Limit in Capillary Zone Electrophoresis Using a Single Linear Photodiode Array Detector. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 2629-38	7.8	30
6	Dispersion Sources for Compact Geometries on Microchips. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 3781-3789	7.8	167
5	Rapid Electrophoretic and Chromatographic Analysis on Microchips <b>1998</b> , 315-318		О
4	Minimizing Dispersion Introduced by Turns on Microchips <b>1998</b> , 161-164		
3	Synthesis and Photophysical Properties of Mono(2,21,211) terpyridine) Complexes of Ruthenium(II). <i>Inorganic Chemistry</i> , <b>1995</b> , 34, 3385-3395	5.1	88
2	. Analytical Chemistry, <b>1994</b> , 66, 955-962	7.8	98
1	Synthesis and pharmacology of irreversible affinity labels as potential cocaine antagonists: aryl 1,4-dialkylpiperazines related to GBR-12783. <i>European Journal of Pharmacology</i> , <b>1992</b> , 220, 173-80	5.3	20