Peter Koltay

List of Publications by Year in descending order

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47 papers	1,468 citations	394421 19 h-index	330143 37 g-index
48 all docs	48 docs citations	48 times ranked	1970 citing authors

#	Article	IF	Citations
1	Technologies for Single-Cell Isolation. International Journal of Molecular Sciences, 2015, 16, 16897-16919.	4.1	339
2	Completely Superhydrophobic PDMS Surfaces for Microfluidics. Langmuir, 2012, 28, 8292-8295.	3.5	135
3	Inkjet-like printing of single-cells. Lab on A Chip, 2011, 11, 2447.	6.0	126
4	Single-Cell Printer: Automated, On Demand, and Label Free. Journal of the Association for Laboratory Automation, 2013, 18, 504-518.	2.8	91
5	Multi-layer SU-8 lift-off technology for microfluidic devices. Journal of Micromechanics and Microengineering, 2005, 15, 1125-1130.	2.6	86
6	Assessment of hydrogels for bioprinting of endothelial cells. Journal of Biomedical Materials Research - Part A, 2018, 106, 935-947.	4.0	63
7	Large scale production and controlled deposition of single HUVEC spheroids for bioprinting applications. Biofabrication, 2017, 9, 025027.	7.1	57
8	Generic method of printing window adjustment for extrusion-based 3D-bioprinting to maintain high viability of mesenchymal stem cells in an alginate-gelatin hydrogel. Bioprinting, 2020, 20, e00094.	5.8	36
9	The dispensing well plate: a novel nanodispenser for the multiparallel delivery of liquids (DWP Part I). Sensors and Actuators A: Physical, 2004, 116, 483-491.	4.1	33
10	Cytocompatibility testing of hydrogels toward bioprinting of mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2017, 105, 3231-3241.	4.0	33
11	Enhanced Liquid Metal Micro Droplet Generation by Pneumatic Actuation Based on the StarJet Method. Micromachines, 2013, 4, 49-66.	2.9	31
12	In vivo evaluation of bioprinted prevascularized bone tissue. Biotechnology and Bioengineering, 2020, 117, 3902-3911.	3.3	26
13	Capillary-driven pumping for passive degassing and fuel supply in direct methanol fuel cells. Microfluidics and Nanofluidics, 2009, 7, 531-543.	2.2	24
14	Capillary driven movement of gas bubbles in tapered structures. Microfluidics and Nanofluidics, 2010, 9, 341-355.	2.2	24
15	Open microfluidic gel electrophoresis: Rapid and low cost separation and analysis of DNA at the nanoliter scale. Electrophoresis, 2017, 38, 1764-1770.	2.4	23
16	A Low-Cost, Normally Closed, Solenoid Valve for Non-Contact Dispensing in the Sub-ÂµL Range. Micromachines, 2013, 4, 9-21.	2.9	22
17	Scalable fabrication of renal spheroids and nephron-like tubules by bioprinting and controlled self-assembly of epithelial cells. Biofabrication, 2021, 13, 035019.	7.1	22
18	Novel gravimetric measurement technique for quantitative volume calibration in the sub-microliter range. Measurement Science and Technology, 2013, 24, 025301.	2.6	21

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19	Quantitative characterization of non-contact microdispensing technologies for the sub-microliter range. Drug Discovery Today, 2013, 18, 435-446.	6.4	20
20	Discrete Chemical Release From a Microfluidic Chip. Journal of Microelectromechanical Systems, 2007, 16, 786-794.	2.5	19
21	Multi physics network simulation of a solenoid dispensing valve. Mechatronics, 2014, 24, 209-221.	3.3	19
22	Molecular Genetic Characterization of Individual Cancer Cells Isolated via Single-Cell Printing. PLoS ONE, 2016, 11, e0163455.	2.5	18
23	Open-source hybrid 3D-bioprinter for simultaneous printing of thermoplastics and hydrogels. HardwareX, 2021, 10, e00230.	2.2	18
24	Single-cell dispensing and â€˜real-timeâ€™ cell classification using convolutional neural networks for higher efficiency in single-cell cloning. Scientific Reports, 2020, 10, 1193.	3.3	17
25	Theoretical evaluation of the dispensing well plate method (DWP part II). Sensors and Actuators A: Physical, 2004, 116, 472-482.	4.1	15
26	One Inch Thermal Bubble Jet Printhead With Laser Structured Integrated Polyimide Nozzle Plate. Journal of Microelectromechanical Systems, 2007, 16, 420-428.	2.5	15
27	Bioprinting of high cellâ€density constructs leads to controlled lumen formation with selfâ€assembly of endothelial cells. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1883-1895.	2.7	14
28	Examination of Hydrogels and Mesenchymal Stem Cell Sources for Bioprinting of Artificial Osteogenic Tissues. Cellular and Molecular Bioengineering, 2019, 12, 583-597.	2.1	14
29	Mechanical properties of polycaprolactone (PCL) scaffolds for hybrid 3D-bioprinting with alginate-gelatin hydrogel. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 130, 105219.	3.1	14
30	TopSpotÂ® Vario: a novel microarrayer system for highly flexible and highly parallel picoliter dispensing. Biomedical Microdevices, 2009, 11, 755-761.	2.8	13
31	StarTube: A Tube with Reduced Contact Line for Minimized Gas Bubble Resistance. Langmuir, 2008, 24, 9204-9206.	3.5	9
32	Paperâ€based open microfluidic platform for protein electrophoresis and immunoprobing. Electrophoresis, 2022, 43, 621-631.	2.4	9
33	Localized Functional Chemical Stimulation of TE 671 Cells Cultured on Nanoporous Membrane by Calcein and Acetylcholine. Biophysical Journal, 2007, 92, L04-L06.	0.5	7
34	A Disposable Dispensing Valve for Non-Contact Microliter Applications in a 96-Well Plate Format. Micromachines, 2015, 6, 423-436.	2.9	7
35	Semi-contact-writing of polymer molds for prototyping PDMS chips with low surface roughness, sharp edges and locally varying channel heights. Journal of Micromechanics and Microengineering, 2016, 26, 045018.	2.6	7
36	<title>Microdispenser array for highly parallel and accurate liquid handling</title>. , 2001, , .		6

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37	Liquid volume measurement method for the picoliter to nanoliter volume range based on quartz crystal microbalance technology. Measurement Science and Technology, 2014, 25, 095302.	2.6	6
38	A Calibration-Free, Noncontact, Disposable Liquid Dispensing Cartridge Featuring an Online Process Control. Journal of the Association for Laboratory Automation, 2014, 19, 394-402.	2.8	6
39	Fully passive degassing and fuel supply in direct methanol fuel cells. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	5
40	Characterization of CRISPR/Cas9 RANKL knockout mesenchymal stem cell clones based on single-cell printing technology and Emulsion Coupling assay as a low-cellularity workflow for single-cell cloning. PLoS ONE, 2021, 16, e0238330.	2.5	5
41	Wafer level fabrication of single cell dispenser chips with integrated electrodes for particle detection. Journal of Micromechanics and Microengineering, 2015, 25, 025008.	2.6	4
42	Technologies for Automated Single Cell Isolation. , 2018, , 1-28.		3
43	A modular diffusion barrier based on phase separation for localized delivery of discrete drug volumes in aqueous environments. Lab on A Chip, 2009, 9, 1801.	6.0	2
44	Atmospheric Photopolymerization of Acrylamide Enabled by Aqueous Glycerol Mixtures: Characterization and Application for Surfaceâ€Based Microfluidics. Macromolecular Materials and Engineering, 2017, 302, 1600518.	3.6	2
45	Analysis of the metallic structure of microspheres produced by printing of aluminum alloys from the liquid melt. Materials Research Express, 2019, 6, 036514.	1.6	2
46	Digital Hydraulic Drive for microfluid large-scale integration system based on shape memory alloy actuators. , 2017, , .		0
47	Technologies for Automated Single Cell Isolation. , 2022, , 235-262.		0