Paul Vulto

List of Publications by Year
in descending order

44 papers	3,424 citations	218677 26 h-index	243625 44 g-index
45 all docs	45 docs citations	45 times ranked	4219 citing authors

#	Article	IF	Citations
1	Microfluidic 3D cell culture: from tools to tissue models. Current Opinion in Biotechnology, 2015, 35, 118-126.	6.6	416
2	Kidney-on-a-Chip Technology for Drug-Induced Nephrotoxicity Screening. Trends in Biotechnology, 2016, 34, 156-170.	9.3	279
3	A perfused human bloodâ€“brain barrier on-a-chip for high-throughput assessment of barrier function and antibody transport. Fluids and Barriers of the CNS, 2018, 15, 23.	5.0	235
4	Biology-inspired microphysiological system approaches to solve the prediction dilemma of substance testing. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 272-321.	1.5	214
5	Membrane-free culture and real-time barrier integrity assessment of perfused intestinal epithelium tubes. Nature Communications, 2017, 8, 262.	12.8	207
6	Phaseguides: a paradigm shift in microfluidic priming and emptying. Lab on A Chip, 2011, 11, 1596.	6.0	171
7	Microfluidic titer plate for stratified 3D cell culture. Lab on A Chip, 2013, 13, 3548.	6.0	158
8	Differentiation of neuroepithelial stem cells into functional dopaminergic neurons in 3D microfluidic cell culture. Lab on A Chip, 2015, 15, 2419-2428.	6.0	130
9	Biology-inspired microphysiological systems to advance medicines for patient benefit and animal welfare. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 365-394.	1.5	123
10	Development of a Gut-on-a-Chip Model for High Throughput Disease Modeling and Drug Discovery. International Journal of Molecular Sciences, 2019, 20, 5661.	4.1	118
11	High-throughput compound evaluation on 3D networks of neurons and glia in a microfluidic platform. Scientific Reports, 2016, 6, 38856.	3.3	113
12	An end-user perspective on Organ-on-a-Chip: Assays and usability aspects. Current Opinion in Biomedical Engineering, 2017, 1, 15-22.	3.4	102
13	Therapy response testing of breast cancer in a 3D high-throughput perfused microfluidic platform. BMC Cancer, 2017, 17, 709.	2.6	96
14	Nephrotoxicity and Kidney Transport Assessment on 3D Perfused Proximal Tubules. AAPS Journal, 2018, 20, 90.	4.4	86
15	Lab-on-a-Chip hyphenation with mass spectrometry: strategies for bioanalytical applications. Current Opinion in Biotechnology, 2015, 31, 79-85.	6.6	81
16	Automated microfluidic cell culture of stem cell derived dopaminergic neurons. Scientific Reports, 2019, 9, 1796.	3.3	81
17	Screening of Drug-Transporter Interactions in a 3D Microfluidic Renal Proximal Tubule on a Chip. AAPS Journal, 2018, 20, 87.	4.4	72
18	Enrichment of viable bacteria in a micro-volume by free-flow electrophoresis. Lab on A Chip, 2012, 12, 451-457.	6.0	54

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19	Implementation of a Human Renal Proximal Tubule on a Chip for Nephrotoxicity and Drug Interaction Studies. Journal of Pharmaceutical Sciences, 2021, 110, 1601-1614.	3.3	54
20	Direct On-Chip Differentiation of Intestinal Tubules from Induced Pluripotent Stem Cells. International Journal of Molecular Sciences, 2020, 21, 4964.	4.1	49
21	An Intestine-on-a-Chip Model of Plug-and-Play Modularity to Study Inflammatory Processes. SLAS Technology, 2020, 25, 585-597.	1.9	49
22	A microfluidic approach for high efficiency extraction of low molecular weight RNA. Lab on A Chip, 2010, 10, 610-616.	6.0	48
23	Culture and analysis of kidney tubuloids and perfused tubuloid cells-on-a-chip. Nature Protocols, 2021, 16, 2023-2050.	12.0	43
24	Optimization and characterization of wafer-level adhesive bonding with patterned dry-film photoresist for 3D MEMS integration. Sensors and Actuators A: Physical, 2010, 162, 137-144.	4.1	36
25	Adoption of organ-on-chip platforms by the pharmaceutical industry. Nature Reviews Drug Discovery, 2021, 20, 961-962.	46.4	36
26	Interstitial Flow Recapitulates Gemcitabine Chemoresistance in A 3D Microfluidic Pancreatic Ductal Adenocarcinoma Model by Induction of Multidrug Resistance Proteins. International Journal of Molecular Sciences, 2019, 20, 4647.	4.1	32
27	In vitro grafting of hepatic spheroids and organoids on a microfluidic vascular bed. Angiogenesis, 2022, 25, 455-470.	7.2	31
28	A directional 3D neurite outgrowth model for studying motor axon biology and disease. Scientific Reports, 2021, 11, 2080.	3.3	30
29	Modeling ischemic stroke in a triculture neurovascular unit on-a-chip. Fluids and Barriers of the CNS, 2021, 18, 59.	5.0	30
30	Neuromuscular junctionâ€onâ€aâ€chip: ALS disease modeling and readâ€out development in microfluidic devices. Journal of Neurochemistry, 2021, 157, 393-412.	3.9	26
31	Single-Electrolyte Isotachophoresis Using a Nanochannel-Induced Depletion Zone. Analytical Chemistry, 2011, 83, 7910-7915.	6.5	25
32	Phaseguides as tunable passive microvalves for liquid routing in complex microfluidic networks. Lab on A Chip, 2014, 14, 3334.	6.0	24
33	Robust and Scalable Angiogenesis Assay of Perfused 3D Human iPSC-Derived Endothelium for Anti-Angiogenic Drug Screening. International Journal of Molecular Sciences, 2020, 21, 4804.	4.1	24
34	Phaseguide assisted liquid lamination for magnetic particle-based assays. Lab on A Chip, 2014, 14, 2334-2343.	6.0	20
35	Continuous-Flow Microelectroextraction for Enrichment of Low Abundant Compounds. Analytical Chemistry, 2014, 86, 8048-8056.	6.5	19
36	Long-Lived Human Lymphatic Endothelial Cells to Study Lymphatic Biology and Lymphatic Vessel/Tumor Coculture in a 3D Microfluidic Model. ACS Biomaterials Science and Engineering, 2021, 7, 3030-3042.	5.2	19

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37	Elastomeric microvalves as tunable nanochannels for concentration polarization. Lab on A Chip, 2013, 13, 4810.	6.0	16
38	Tunable Ionic Mobility Filter for Depletion Zone Isotachophoresis. Analytical Chemistry, 2012, 84, 9065-9071.	6.5	15
39	Modelling and Prevention of Acute Kidney Injury through Ischemia and Reperfusion in a Combined Human Renal Proximal Tubule/Blood Vessel-on-a-Chip. Kidney360, 2022, 3, 217-231.	2.1	15
40	Bubble-free electrode actuation for micro-preparative scale electrophoresis of RNA. Lab on A Chip, 2013, 13, 2931.	6.0	13
41	Standardized and Scalable Assay to Study Perfused 3D Angiogenic Sprouting of iPSC-derived Endothelial Cells In Vitro. Journal of Visualized Experiments, 2019, , .	0.3	13
42	Isotachophoretic Phenomena in Electric Field Gradient Focusing: Perspectives for Sample Preparation and Bioassays. Analytical Chemistry, 2014, 86, 4078-4087.	6.5	11
43	Solvent Exchange Module for LC-NMR Hyphenation Using Machine Vision-Controlled Droplet Evaporation. Analytical Chemistry, 2013, 85, 5734-5739.	6.5	7
44	Intestinal Epithelium Tubules on a Chip. Methods in Molecular Biology, 2022, 2373, 87-105.	0.9	2