Erwin Berthier

List of Publications by Citations

64 papers	2,138 citations	24 h-index	46 g-index
83 ext. papers	2,632 ext. citations	6.8 avg, IF	5.02 L-index

#	Paper	IF	Citations
64	Engineers are from PDMS-land, Biologists are from Polystyrenia. *Lab on A Chip*, **2012**, 12, 1224-37	7.2	588
63	Flow rate analysis of a surface tension driven passive micropump. *Lab on A Chip*, **2007**, 7, 1475-8	7.2	147
62	Rapid prototyping of arrayed microfluidic systems in polystyrene for cell-based assays. *Analytical Chemistry*, **2011**, 83, 1408-17	7.8	127
61	Suspended microfluidics. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 10111-6	11.5	117
60	Managing evaporation for more robust microscale assays. Part 1. Volume loss in high throughput assays. *Lab on A Chip*, **2008**, 8, 852-9	7.2	92
59	Microbial metabolomics in open microscale platforms. *Nature Communications*, **2016**, 7, 10610	17.4	67
58	Microfluidic kit-on-a-lid: a versatile platform for neutrophil chemotaxis assays. *Blood*, **2012**, 120, e45-53	2.2	64
57	Low-volume toolbox for the discovery of immunosuppressive fungal secondary metabolites. *PLoS Pathogens*, **2013**, 9, e1003289	7.6	52
56	Characterizing asthma from a drop of blood using neutrophil chemotaxis. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 5813-8	11.5	51
55	An arrayed high-content chemotaxis assay for patient diagnosis. *Integrative Biology (United Kingdom)*, **2010**, 2, 630-8	3.7	51
54	**2016**,		46
53	Open Microfluidic Capillary Systems. *Analytical Chemistry*, **2019**, 91, 8739-8750	7.8	43
52	Microbial volatile communication in human organotypic lung models. *Nature Communications*, **2017**, 8, 1770	17.4	43
51	Fundamentals of rapid injection molding for microfluidic cell-based assays. *Lab on A Chip*, **2018**, 18, 496-504	7.2	42
50	Hax1 regulates neutrophil adhesion and motility through RhoA. *Journal of Cell Biology*, **2011**, 193, 465-73	7.3	41
49	Managing evaporation for more robust microscale assays. Part 2. Characterization of convection and diffusion for cell biology. *Lab on A Chip*, **2008**, 8, 860-4	7.2	39
48	Reconfigurable open microfluidics for studying the spatiotemporal dynamics of paracrine signalling. *Nature Biomedical Engineering*, **2019**, 3, 830-841	19	38

47	A general condition for spontaneous capillary flow in uniform cross-section microchannels. *Microfluidics and Nanofluidics*, **2014**, 16, 779-785	2.8	35
46	Assessment of enhanced autofluorescence and impact on cell microscopy for microfabricated thermoplastic devices. *Analytical Chemistry*, **2013**, 85, 44-9	7.8	32
45	RsmA regulates Aspergillus fumigatus gliotoxin cluster metabolites including cyclo(L-Phe-L-Ser), a potential new diagnostic marker for invasive aspergillosis. *PLoS ONE*, **2013**, 8, e62591	3.7	32
44	Bead-based microfluidic toxin sensor integrating evaporative signal amplification. *Lab on A Chip*, **2008**, 8, 1793-800	7.2	29
43	Pipette-friendly laminar flow patterning for cell-based assays. *Lab on A Chip*, **2011**, 11, 2060-5	7.2	26
42	Upgrading well plates using open microfluidic patterning. *Lab on A Chip*, **2017**, 17, 4253-4264	7.2	25
41	The actin regulatory protein HS1 interacts with Arp2/3 and mediates efficient neutrophil chemotaxis. *Journal of Biological Chemistry*, **2012**, 287, 25466-77	5.4	24
40	An automated microdroplet passive pumping platform for high-speed and packeted microfluidic flow applications. *Lab on A Chip*, **2010**, 10, 23-6	7.2	23
39	Integrin associated proteins differentially regulate neutrophil polarity and directed migration in 2D and 3D. *Biomedical Microdevices*, **2015**, 17, 100	3.7	22
38	Backward flow in a surface tension driven micropump. *Journal of Micromechanics and Microengineering*, **2008**, 18, 087002	2	22
37	Kit-On-A-Lid-Assays for accessible self-contained cell assays. *Lab on A Chip*, **2013**, 13, 424-31	7.2	19
36	An inertia enhanced passive pumping mechanism for fluid flow in microfluidic devices. *Lab on A Chip*, **2012**, 12, 2221-8	7.2	19
35	A Golgi-localized pool of the mitotic checkpoint component Mad1 controls integrin secretion and cell migration. *Current Biology*, **2014**, 24, 2687-92	6.3	16
34	Layer-by-layer fabrication of 3D hydrogel structures using open microfluidics. *Lab on A Chip*, **2020**, 20, 525-536	7.2	15
33	Fungal oxylipins direct programmed developmental switches in filamentous fungi. *Nature Communications*, **2020**, 11, 5158	17.4	15
32	Human iNKT Cells Promote Protective Inflammation by Inducing Oscillating Purinergic Signaling in Monocyte-Derived DCs. *Cell Reports*, **2016**, 16, 3273-3285	10.6	15
31	Induced hydrophobic recovery of oxygen plasma-treated surfaces. *Lab on A Chip*, **2012**, 12, 2317-21	7.2	14
30	Investigating Fibroblast-Induced Collagen Gel Contraction Using a Dynamic Microscale Platform. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 196	5.8	13

29	Droplet Incubation and Splitting in Open Microfluidic Channels. *Analytical Methods*, **2019**, 11, 4528-4536	3.2	12
28	Metastable capillary filaments in rectangular cross-section open microchannels. *AIMS Biophysics*, **2014**, 1, 31-48	0.8	12
27	Droplet Behavior in Open Biphasic Microfluidics. *Langmuir*, **2018**, 34, 5358-5366	4	11
26	High-density self-contained microfluidic KOALA kits for use by everyone. *Journal of the Association for Laboratory Automation*, **2015**, 20, 146-53		9
25	Clinical application of volumetric absorptive microsampling to the gefapixant development program. *Bioanalysis*, **2020**, 12, 893-904	2.1	7
24	Stable biphasic interfaces for open microfluidic platforms. *Biomedical Microdevices*, **2019**, 21, 16	3.7	6
23	Capillary Flow in Open Microgrooves: Bifurcations and Networks. *Langmuir*, **2019**, 35, 10667-10675	4	6
22	User-defined morphogen patterning for directing human cell fate stratification. *Scientific Reports*, **2019**, 9, 6433	4.9	5
21	Multikingdom microscale models. *PLoS Pathogens*, **2017**, 13, e1006424	7.6	5
20	Fluorescence-based assessment of plasma-induced hydrophilicity in microfluidic devices via Nile Red adsorption and depletion. *Analytical Chemistry*, **2014**, 86, 7258-63	7.8	4
19	Open-Channel Capillary Trees and Capillary Pumping. *Langmuir*, **2020**, 36, 12795-12803	4	4
18	Open microfluidic coculture reveals paracrine signaling from human kidney epithelial cells promotes kidney specificity of endothelial cells. *American Journal of Physiology - Renal Physiology*, **2020**, 319, F41-F51	4.3	3
17	A Microfluidic Assay for Identifying Differential Responses of Plant and Human Fungal Pathogens to Tobacco Phylloplanins. *Plant Health Progress*, **2014**, 15, 130-134	1.2	3
16	Open channel droplet-based microfluidics		3
15	Paper-Based Microfluidics **2016**, 229-256		2
14	Spatial presentation of biological molecules to cells by localized diffusive transfer. *Lab on A Chip*, **2019**, 19, 2114-2126	7.2	1
13	RNA: A Self-Sampling Kit for the Collection of Peripheral Blood and Stabilization of RNA. *Analytical Chemistry*, **2021**, 93, 13196-13203	7.8	1
12	Miniaturizing Wet Scrubbers for Aerosolized Droplet Capture. *Analytical Chemistry*, **2021**, 93, 11433-11441	7.8	0

List of Publications

11	Suspended Capillary Flows **2016**, 157-205	
10	Theory of Spontaneous Capillary Flows **2016**, 13-56	
9	Fiber-Based Microfluidics **2016**, 257-302	
8	Localized Cell-Surface Sampling of a Secreted Factor Using Cell-Targeting Beads. *Analytical Chemistry*, **2020**, 92, 13634-13640	7.8
7	Localized Cell-Surface Sampling of a Secreted Factor Using Cell-Targeting Beads. *Analytical Chemistry*, **2020**, 92, 13634-13640	7.8
6	Microbe-Independent Entry of Oomycete RxLR Effectors and Fungal RxLR-Like Effectors Into Plant and Animal Cells Is Specific and Reproducible. *Molecular Plant-Microbe Interactions*, **2015**, 2015, 51-56	3.6
5	Hax1 regulates neutrophil adhesion and motility through RhoA. *Journal of Experimental Medicine*, **2011**, 208, i14-i14	16.6
4	Dynamics of Capillary Flow in a Channel with Constrictions and Enlargements **2016**, 125-156	
3	Capillary Filaments **2016**, 57-89	
2	Spontaneous Capillary Flows in Open U-Grooves **2016**, 91-123	
1	Spontaneous Capillary Flow Between Horizontal Rails **2016**, 207-228	