Holger Becker

List of Publications by Year
in descending order

Version: 2024-02-01

73 papers	5,094 citations	236925 25 h-index	206112 48 g-index
73 all docs	73 docs citations	73 times ranked	4778 citing authors

#	Article	IF	Citations
1	Polymer microfluidic devices. Talanta, 2002, 56, 267-287.	5.5	1,065
2	Polymer microfabrication technologies for microfluidic systems. Analytical and Bioanalytical Chemistry, 2008, 390, 89-111.	3.7	887
3	Polymer microfabrication methods for microfluidic analytical applications. Electrophoresis, 2000, 21, 12-26.	2.4	762
4	Hot embossing as a method for the fabrication of polymer high aspect ratio structures. Sensors and Actuators A: Physical, 2000, 83, 130-135.	4.1	575
5	Hype, hope and hubris: the quest for the killer application in microfluidics. Lab on A Chip, 2009, 9, 2119.	6.0	255
6	Polymer microfabrication technologies. Microsystem Technologies, 2002, 8, 32-36.	2.0	151
7	Fabrication of plastic microchips by hot embossing. Lab on A Chip, 2002, 2, 1.	6.0	127
8	Liver-Kidney-on-Chip To Study Toxicity of Drug Metabolites. ACS Biomaterials Science and Engineering, 2018, 4, 78-89.	5.2	102
9	Deterministic Lateral Displacement: Challenges and Perspectives. ACS Nano, 2020, 14, 10784-10795.	14.6	97
10	Planar quartz chips with submicron channels for two-dimensional capillary electrophoresis applications. Journal of Micromechanics and Microengineering, 1998, 8, 24-28.	2.6	85
11	â€œArtificial micro organsâ€â€”a microfluidic device for dielectrophoretic assembly of liver sinusoids. Biomedical Microdevices, 2011, 13, 493-501.	2.8	82
12	It's the economyâ€¦. Lab on A Chip, 2009, 9, 2759.	6.0	79
13	Accelerating innovation and commercialization through standardization of microfluidic-based medical devices. Lab on A Chip, 2021, 21, 9-21.	6.0	69
14	All-polymer photonic sensing platform based on whispering-gallery mode microgoblet lasers. Lab on A Chip, 2015, 15, 3800-3806.	6.0	67
15	PDMS free-flow electrophoresis chips with integrated partitioning bars for bubble segregation. Lab on A Chip, 2011, 11, 309-314.	6.0	55
16	A novel microfluidic 3D platform for culturing pancreatic ductal adenocarcinoma cells: comparison with in vitro cultures and in vivo xenografts. Scientific Reports, 2017, 7, 1325.	3.3	53
17	Mind the gap!. Lab on A Chip, 2010, 10, 271-273.	6.0	51
18	Label-Free and Real-Time Detection of Tuberculosis in Human Urine Samples Using a Nanophotonic Point-of-Care Platform. ACS Sensors, 2018, 3, 2079-2086.	7.8	44

#	Article	IF	Citations
19	Polymer based micro-reactors. Reviews in Molecular Biotechnology, 2001, 82, 89-99.	2.8	43
20	A low-cost integrated biosensing platform based on SiN nanophotonics for biomarker detection in urine. Analytical Methods, 2018, 10, 3066-3073.	2.7	39
21	Micro free-flow electrophoresis with injection molded chips. RSC Advances, 2012, 2, 520-525.	3.6	38
22	Chips, money, industry, education and the â€œkiller applicationâ€• Lab on A Chip, 2009, 9, 1659.	6.0	35
23	Chemical analysis in photostructurable glass chips. Sensors and Actuators B: Chemical, 2002, 86, 271-279.	7.8	33
24	One size fits all?. Lab on A Chip, 2010, 10, 1894.	6.0	31
25	Embedded Disposable Functionalized Electrochemical Biosensor with a 3D-Printed Flow Cell for Detection of Hepatic Oval Cells (HOCs). Genes, 2018, 9, 89.	2.4	31
26	Blister pouches for effective reagent storage on microfluidic chips for blood cell counting. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	25
27	All I want for Christmasâ€¦. Lab on A Chip, 2011, 11, 1571.	6.0	22
28	Moving the solid phase: a platform technology for cartridge based sandwich immunoassays. Biomedical Microdevices, 2014, 16, 163-172.	2.8	20
29	Microfluidics and the Life Sciences. Science Progress, 2012, 95, 175-198.	1.9	16
30	Microfluidics-Enabled Diagnostic Systems: Markets, Challenges, and Examples. Methods in Molecular Biology, 2017, 1547, 3-21.	0.9	13
31	Lost in translation. Lab on A Chip, 2010, 10, 813.	6.0	12
32	HepaChip-MP â€“ a twenty-four chamber microplate for a continuously perfused liver coculture model. Lab on A Chip, 2020, 20, 2911-2926.	6.0	12
33	Microfluidic toolbox: tools and standardization solutions for microfluidic devices for life sciences applications. , 2004, , .		10
34	IP or no IP: that is the question. Lab on A Chip, 2009, 9, 3327.	6.0	10
35	Start me upâ€¦. Lab on A Chip, 2010, 10, 3197.	6.0	9
36	Parallelizable Microfluidic Platform to Model and Assess In Vitro Cellular Barriers: Technology and Application to Study the Interaction of 3D Tumor Spheroids with Cellular Barriers. Biosensors, 2021, 11, 314.	4.7	9

#	Article	IF	Citations
37	Microfluidics: a technology coming of age. Medical Device Technology, 2008, 19, 21-4.	0.1	9
38	Monitoring cytochrome P450 activity in living hepatocytes by chromogenic substrates in response to drug treatment or during cell maturation. Archives of Toxicology, 2018, 92, 1133-1149.	4.2	6
39	Hybrid microfluidic systems: combining a polymer microfluidic toolbox with biosensors. , 2007, , .		5
40	Collective wisdom. Lab on A Chip, 2010, 10, 1351.	6.0	5
41	A lab-on-a-chip system for the development of complex assays using modular microfluidic components. Proceedings of SPIE, 2012, , .	0.8	5
42	A microfluidic platform with integrated arrays for immunologic assays for biological pathogen detection. Proceedings of SPIE, 2014, , .	0.8	4
43	Microfluidic devices for cell culture and handling in organ-on-a-chip applications. , 2014, , .		4
44	Modular microfluidic cartridge-based universal diagnostic system for global health applications. Proceedings of SPIE, 2016, , .	0.8	4
45	Portable integrated capillary-electrophoresis system using disposable polymer chips with capacitively coupled contactless conductivity detection for on-site analysis of foodstuff. , 2009, , .		3
46	Opportunities and limits of cell-based assay miniaturization in drug discovery. Expert Opinion on Drug Discovery, 2010, 5, 673-679.	5.0	3
47	A sample-in result-out lab-on-a-chip device: from prototype to mass fabrication. Proceedings of SPIE, 2011, , .	0.8	3
48	Magnetic particle-based sample-prep and valveing in microfluidic devices. , 2012, , .		3
49	Sensor enhanced microfluidic devices for cell based assays and organs on chip. , 2015, , .		3
50	Microfluidic system for the identification of bacterial pathogens causing urinary tract infections. , 2015, , .		3
51	Blister pouches for effective reagent storage and release for low cost point-of-care diagnostic applications. Proceedings of SPIE, 2016, , .	0.8	3
52	Polymer based microfluidic devices: examples for fluidic interfaces and standardization concepts. , 2003, 4982, 99.		2
53	Free-flow electrophoresis with electrode-less injection molded chips. Proceedings of SPIE, 2011, , .	0.8	2
54	Two-component injection molding for micofluidic devices. Proceedings of SPIE, 2012, , .	0.8	2

#	Article	IF	Citations
55	Polymeric Microfluidic Devices for High Performance Optical Imaging and Detection Methods in Bioanalytics. Springer Series on Chemical Sensors and Biosensors, 2012, , 271-288.	0.5	2
56	Multisense chip: continuously working air monitoring system: An integrated system for the detection of airborne biological pathogens on molecular and immunological level. , 2015, , .		2
57	Microfluidic devices for stem-cell cultivation, differentiation and toxicity testing. Proceedings of SPIE, 2017, , .	0.8	2
58	Continuous-flow PCR using segmented flow and integrating sample preparation. , 2009, , .		1
59	SmartHEALTH: a microfluidic multisensor platform for POC cancer diagnostics. , 2009, , .		1
60	Hybrid tooling technologies for injection molded and hot embossed polymeric microfluidic devices. , 2010, , .		1
61	Stationary microfluidics: molecular diagnostic assays by moving magnetic beads through non-moving liquids. , 2013, , .		1
62	Microfluidic devices for rapid identification and characterization of pathogens. , 2014, , 220-249.		1
63	SmartHEALTH: A multisensor platform for POC cancer diagnostics. , 2008, 2008, 11-2.		0
64	Microfluidic Manifolds with High Dynamic Range in Structural Dimensions Replicated in Thermoplastic Materials. Materials Research Society Symposia Proceedings, 2009, 1191, 7.	0.1	0
65	Lab-on-a-Chip European Congress 2010. Expert Opinion on Drug Discovery, 2010, 5, 903-905.	5.0	0
66	Non scholae sed vitae discimus!. Lab on A Chip, 2010, 10, 2497.	6.0	0
67	Integrated lab-on-a-chip: a combined sample preparation and PCR system as an ultrafast analytical tool for pathogen detection. Proceedings of SPIE, 2011, , .	0.8	0
68	Microfluidics. Optik & Photonik, 2011, 6, 52-55.	0.2	0
69	Lab-on-a-chip platforms from sample preparation via continuous-flow PCR to an ultrafast detection of B-agents. , 2012, , .		0
70	From microfluidic modules to an integrated Lab-on-a-chip system for the detection ofFrancisella tularensis. Proceedings of SPIE, 2013, , .	0.8	0
71	IFSA: a microfluidic chip-platform for frit-based immunoassay protocols. , 2013, , .		0
72	Lab-on-a-chip PCR: real time PCR in miniaturized format for HLA diagnostics. , 2014, , .		0

#	Article	IF	Citations
73	Lab-on-a-chip enabled HLA diagnostic: combined sample preparation and real time PCR for HLA-B57 diagnosis. , 2015, , .		0