

# Mark Bachman

## List of Publications by Year in descending order

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71  
papers

2,439  
citations

257450

24  
h-index

197818

49  
g-index

71  
all docs

71  
docs citations

71  
times ranked

2832  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Digital Signal Processing-Assisted Microfluidic PCB for On-Chip Fluorescence Detection. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 846-854.	2.5	10
2	Development of a novel completely-in-the-canal direct-drive hearing device. Laryngoscope, 2017, 127, 932-938.	2.0	1
3	Highly efficient cellular cloning using Ferro-core Micropallet Arrays. Scientific Reports, 2017, 7, 13081.	3.3	2
4	Multicolor Immunofluorescent Imaging of Complex Cellular Mixtures on Micropallet Arrays Enables the Identification of Single Cells of Defined Phenotype. Advanced Healthcare Materials, 2016, 5, 767-771.	7.6	2
5	Heterogeneous Integrated MEMS Enabled by AAO Process Technologies. ECS Journal of Solid State Science and Technology, 2016, 5, P657-P662.	1.8	5
6	Skin-mountable stretch sensor for wearable health monitoring. Nanoscale, 2016, 8, 17295-17303.	5.6	97
7	3-D In-Bi-Sn Electrodes for Lab-on-PCB Cell Sorting. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1295-1300.	2.5	3
8	Packaging Architecture for Fluidic Components in Microfluidic PCBs. , 2016, , .		2
9	Deep, High Aspect Ratio Etches in Alumina Films for MEMS and Advanced Packages. , 2016, , .		1
10	A fluid collection system for dermal wounds in clinical investigations. Biomicrofluidics, 2016, 10, 024113.	2.4	1
11	Large area magnetic micropallet arrays for cell colony sorting. Lab on A Chip, 2016, 16, 172-181.	6.0	6
12	Integrated bioflexible electronic device for electrochemical analysis of blood. , 2015, , .		1
13	The Manometer: A Wearable Device for Monitoring Daily Use of the Wrist and Fingers. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1804-1812.	6.3	76
14	Laminated microfluidic system for small sample protein analysis. Biomicrofluidics, 2014, 8, 014107.	2.4	3
15	Microfluidic dielectrophoretic sorter using gel vertical electrodes. Biomicrofluidics, 2014, 8, 034105.	2.4	14
16	Flexible shrink-induced high surface area electrodes for electrochemiluminescent sensing. Lab on A Chip, 2013, 13, 4205.	6.0	37
17	MEMS in laminates and package substrates. , 2013, , .		0
18	Frequency Multiplexed MEMS Actuators and Switches. IEEE Electron Device Letters, 2013, 34, 132-134.	3.9	0

#	ARTICLE	IF	CITATIONS
19	Laminate MEMS for Heterogeneous Integrated Systems. Materials Research Society Symposia Proceedings, 2012, 1427, 26.	0.1	1
20	Resonance-based addressing in laminate MEMS devices. , 2012, , .		1
21	A novel N x M array of resonance-based addressable MEMS actuators. , 2012, , .		0
22	Microfluidic thermal component for integrated microfluidic systems. , 2012, , .		11
23	High-Power Magnetically Actuated Microswitches Fabricated in Laminates. IEEE Electron Device Letters, 2012, 33, 1309-1311.	3.9	15
24	Laminates for MEMS and BioMEMS. , 2012, , .		0
25	Integrated MEMS in package. Circuit World, 2012, 38, 184-192.	0.9	6
26	Integrated Printed Circuit Board Device for Cell Lysis and Nucleic Acid Extraction. Analytical Chemistry, 2012, 84, 9640-9645.	6.5	64
27	MEMS optical acoustic sensors manufactured in laminates. , 2011, , .		4
28	Microfluidic printed circuit boards. , 2011, , .		18
29	MEMS in laminates. , 2011, , .		9
30	StabilitySole: Embedded Sensor Insole for Balance and Gait Monitoring. Lecture Notes in Computer Science, 2011, , 171-177.	1.3	8
31	Fabrication and biological evaluation of uniform extracellular matrix coatings on discontinuous photolithography generated micropallet arrays. Journal of Biomedical Materials Research - Part A, 2010, 95A, 401-412.	4.0	10
32	Novel Microtechnology System for Cytometric Analysis of Adherent Cell Populations. , 2010, , .		0
33	A Novel Membrane Process for RF MEMS Switches. Journal of Microelectromechanical Systems, 2010, 19, 715-717.	2.5	2
34	MOEMS acoustic sensors for Structural Health Monitoring. , 2010, , .		3
35	Ferromagnetic Micropallets for Magnetic Capture of Single Adherent Cells. Langmuir, 2010, 26, 17703-17711.	3.5	15
36	A novel microdroplet cassette for biochemical screening. , 2010, , .		0

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37	Performance Improvement of Organic Thin-Film Transistors by Solution-Processed Crystallization of Pentacene at Room Temperature. IEEE Electron Device Letters, 2009, 30, 346-348.	3.9	4
38	Microfabricated micropallets for enhancement of biomolecular techniques. Microfluidics and Nanofluidics, 2008, 5, 225-234.	2.2	1
39	Characterization and use of laser-based lysis for cell analysis on-chip. Journal of the Royal Society Interface, 2008, 5, S113-21.	3.4	37
40	Fast-lysis cell traps for chemical cytometry. Lab on A Chip, 2008, 8, 710.	6.0	24
41	Characterization of the laser-based release of micropallets from arrays. Journal of Biomedical Optics, 2008, 13, 034007.	2.6	10
42	Universal Microcarriers for Microfluidic Assays. , 2007, , 613.		0
43	Materials for Devices in Life Science Applications. Solid State Phenomena, 2007, 124-126, 1157-1160.	0.3	0
44	Surface graft polymerization of SU-8 for bio-MEMS applications. Journal of Micromechanics and Microengineering, 2007, 17, 1371-1380.	2.6	53
45	Stability of Virtual Air Walls on Micropallet Arrays. Analytical Chemistry, 2007, 79, 7104-7109.	6.5	12
46	Photoresist with Low Fluorescence for Bioanalytical Applications. Analytical Chemistry, 2007, 79, 8774-8780.	6.5	105
47	Micropallet Arrays for the Separation of Single, Adherent Cells. Analytical Chemistry, 2007, 79, 682-687.	6.5	89
48	Collection and Expansion of Single Cells and Colonies Released from a Micropallet Array. Analytical Chemistry, 2007, 79, 2359-2366.	6.5	51
49	Broadening cell selection criteria with micropallet arrays of adherent cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2007, 71A, 866-874.	1.5	27
50	RF MEMS asymmetric capacitive switch with high-isolation at selected low-microwave frequency. Microwave and Optical Technology Letters, 2007, 49, 702-706.	1.4	2
51	Micropatterning of Living Cells on a Heterogeneously Wetted Surface. Langmuir, 2006, 22, 8257-8262.	3.5	97
52	Simple Photografting Method to Chemically Modify and Micropattern the Surface of SU-8 Photoresist. Langmuir, 2006, 22, 2719-2725.	3.5	80
53	Choosing one from the many: selection and sorting strategies for single adherent cells. Analytical and Bioanalytical Chemistry, 2006, 387, 5-8.	3.7	16
54	Virtual Walls in Microchannels. , 2006, 2006, 2840-3.		2

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55	Materials for Devices Applications in Life Sciences. Materials Science Forum, 2006, 510-511, 1066-1069.	0.3	0
56	Micromechanical Resonator Array for an Implantable Bionic Ear. Audiology and Neuro-Otology, 2006, 11, 95-103.	1.3	29
57	Droplet formation in microchannels under static conditions. Applied Physics Letters, 2006, 89, 144106.	3.3	16
58	Droplet Screens in Nanovolumes Using Static Conditions. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
59	Covalent Micropatterning of Poly(dimethylsiloxane) by Photografting through a Mask. Analytical Chemistry, 2005, 77, 7539-7546.	6.5	130
60	Phase-resolved optical Doppler tomography for imaging flow dynamics in microfluidic channels. Applied Physics Letters, 2004, 85, 1855-1857.	3.3	45
61	Large Scale Engineered Nanostructured Surfaces by Reactive Ion Etching with Kinetically Self-Assembled Non-continuous Metal Film as Etching Mask. Materials Research Society Symposia Proceedings, 2004, 849, 183.	0.1	1
62	Imaging and quantifying of microflow by phase-resolved optical Doppler tomography. Optics Communications, 2004, 232, 25-29.	2.1	8
63	Polymeric micro-cantilever array for auditory front-end processing. Sensors and Actuators A: Physical, 2004, 114, 176-182.	4.1	42
64	Frequency domain phase-resolved optical Doppler and Doppler variance tomography. Optics Communications, 2004, 242, 345-350.	2.1	64
65	Tailoring the Surface Properties of Poly(dimethylsiloxane) Microfluidic Devices. Langmuir, 2004, 20, 5569-5574.	3.5	89
66	Surface-Directed, Graft Polymerization within Microfluidic Channels. Analytical Chemistry, 2004, 76, 1865-1870.	6.5	222
67	Cross-linked coatings for electrophoretic separations in poly(dimethylsiloxane) microchannels. Electrophoresis, 2003, 24, 3679-3688.	2.4	78
68	Fast Electrical Lysis of Cells for Capillary Electrophoresis. Analytical Chemistry, 2003, 75, 3688-3696.	6.5	104
69	Surface Modification of Poly(dimethylsiloxane) Microfluidic Devices by Ultraviolet Polymer Grafting. Analytical Chemistry, 2002, 74, 4117-4123.	6.5	399
70	Electroosmotic properties of microfluidic channels composed of poly(dimethylsiloxane). Biomedical Applications, 2001, 762, 117-125.	1.7	166
71	SU-8 Processing on a Variety of Substrates. Materials Research Society Symposia Proceedings, 1999, 605, 91.	0.1	8