J Mark Meacham

List of Publications by Year
in descending order

37 papers	857 citations	516710 16 h-index	477307 29 g-index
37 all docs	37 docs citations	37 times ranked	1052 citing authors

#	Article	IF	Citations
1	Thermal considerations for microswimmer trap-and-release using standing surface acoustic waves. Lab on A Chip, 2021, 21, 2534-2543.	6.0	9
2	Motile cells as probes for characterizing acoustofluidic devices. Lab on A Chip, 2021, 21, 521-533.	6.0	11
3	Photoferrotrophy and phototrophic extracellular electron uptake is common in the marine anoxygenic phototroph Rhodovulum sulfidophilum. ISME Journal, 2021, 15, 3384-3398.	9.8	12
4	Spray characteristics of an ultrasonic microdroplet generator with a continuously variable operating frequency. Journal of the Acoustical Society of America, 2021, 150, 1300-1310.	1.1	3
5	Rapid measurement of the local pressure amplitude in microchannel acoustophoresis using motile cells. Journal of the Acoustical Society of America, 2021, 150, 1565-1576.	1.1	4
6	Protection levels of N95-level respirator substitutes proposed during the COVID-19 pandemic: safety concerns and quantitative evaluation procedures. BMJ Open, 2021, 11, e045557.	1.9	1
7	Antibody Conjugate Assembly on Ultrasound-Confined Microcarrier Particles. ACS Biomaterials Science and Engineering, 2020, 6, 6108-6116.	5.2	6
8	Tumor-on-a-chip platform to interrogate the role of macrophages in tumor progression. Integrative Biology (United Kingdom), 2020, 12, 221-232.	1.3	37
9	Patient-derived small intestinal myofibroblasts direct perfused, physiologically responsive capillary development in a microfluidic Gut-on-a-Chip Model. Scientific Reports, 2020, 10, 3842.	3.3	29
10	Design, modeling, and experimental validation of an acoustofluidic platform for nanoscale molecular synthesis and detection. Physics of Fluids, 2019, 31, 082007.	4.0	11
11	Phototrophic extracellular electron uptake is linked to carbon dioxide fixation in the bacterium Rhodopseudomonas palustris. Nature Communications, 2019, 10, 1355.	12.8	101
12	Acoustic trap-and-release for rapid assessment of cell motility. Soft Matter, 2019, 15, 4266-4275.	2.7	11
13	Photoferrotrophs Produce a PioAB Electron Conduit for Extracellular Electron Uptake. MBio, 2019, 10, .	4.1	40
14	Acoustofluidic platform for in-channel immunoassays. , 2019, , .		0
15	10.1063/1.5100149.1. , 2019, , .		0
16	Enhanced intracellular delivery via coordinated acoustically driven shear mechanoporation and electrophoretic insertion. Scientific Reports, 2018, 8, 3727.	3.3	32
17	Tuning the Coupled-Domain Response for Efficient Ultrasonic Droplet Generation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1893-1904.	3.0	8
18	Augmented longitudinal acoustic trap for scalable microparticle enrichment. Biomicrofluidics, 2018, 12, 034110.	2.4	8

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19	Medication eluting devices for the field of OBGYN (MEDOBGYN): 3D printed biodegradable hormone eluting constructs, a proof of concept study. PLoS ONE, 2017, 12, e0182929.	2.5	82
20	Reduced Order Modeling and Experimental Investigation of Acoustic Particle Manipulation in Complex 3D Geometries. , 2016, , .		0
21	Physical Methods for Intracellular Delivery: Practical Aspects from Laboratory Use to Industrial-Scale Processing. Journal of the Association for Laboratory Automation, 2014, 19, 1-18.	2.8	88
22	Microchannel component technology for system-wide application in ammonia/water absorption heat pumps. International Journal of Refrigeration, 2011, 34, 1184-1196.	3.4	27
23	Micromachined Ultrasonic Print-Head for Deposition of High-Viscosity Materials. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2010, 132, .	2.2	9
24	Electrosonic ejector microarray for drug and gene delivery. Biomedical Microdevices, 2008, 10, 299-308.	2.8	37
25	Development of aptamerâ€based affinity assays using temperature gradient focusing: Minimization of the limit of detection. Electrophoresis, 2008, 29, 3456-3465.	2.4	12
26	Comparison of the internal energy deposition of venturi-assisted electrospray ionization and a venturi-assisted array of micromachined ultrasonic electrosprays (AMUSE). Journal of the American Society for Mass Spectrometry, 2008, 19, 1320-1329.	2.8	18
27	Counterflow Rejection of Adsorbing Proteins for Characterization of Biomolecular Interactions by Temperature Gradient Focusing. Analytical Chemistry, 2008, 80, 172-178.	6.5	26
28	Evaporation-enhanced, dynamically-adaptive air (gas)-cooled heat sink for thermal management of high heat dissipation devices. Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, 2008, , .	0.0	1
29	MICROMACHINED ULTRASONIC ATOMIZER FOR LIQUID FUELS. Small Group Research, 2008, 18, 163-190.	2.7	12
30	An integrated MEMS infrastructure for fuel processing: hydrogen generation and separation for portable power generation. Journal of Micromechanics and Microengineering, 2007, 17, S257-S264.	2.6	11
31	Using pattern homogenization of binary grayscale masks to fabricate microfluidic structures with 3D topography. Lab on A Chip, 2007, 7, 1567.	6.0	24
32	Analytical Performance of a Venturi-Assisted Array of Micromachined Ultrasonic Electrosprays Coupled to Ion Trap Mass Spectrometry for the Analysis of Peptides and Proteins. Analytical Chemistry, 2007, 79, 8154-8161.	6.5	23
33	Fuel Atomization From a Micromachined Ultrasonic Droplet Generator: Visualization, Scaling, and Modeling. , 2006, , 117.		7
34	Droplet formation and ejection from a micromachined ultrasonic droplet generator: Visualization and scaling. Physics of Fluids, 2005, 17, 100605.	4.0	79
35	Nanoelectrospray ion generation for high-throughput mass spectrometry using a micromachined ultrasonic ejector array. Applied Physics Letters, 2005, 86, 203110.	3.3	31
36	Micromachined ultrasonic droplet generator based on a liquid horn structure. Review of Scientific Instruments, 2004, 75, 1347-1352.	1.3	47

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37	Micromachined Ultrasonic ElectroSpray Source Array for High Throughput Mass Spectrometry. , 2004, , .		0