

Colin Dalton

List of Publications by Year in descending order

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40
papers

1,041
citations

516561

16
h-index

526166

27
g-index

42
all docs

42
docs citations

42
times ranked

1146
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous dielectrophoretic cell separation microfluidic device. <i>Lab on A Chip</i> , 2007, 7, 239-248.	3.1	139
2	A combined dielectrophoresis, traveling wave dielectrophoresis and electrorotation microchip for the manipulation and characterization of human malignant cells. <i>Journal of Microbiological Methods</i> , 2004, 58, 387-401.	0.7	110
3	Accelerated axon outgrowth, guidance, and target reinnervation across nerve transection gaps following a brief electrical stimulation paradigm. <i>Journal of Neurosurgery</i> , 2012, 116, 498-512.	0.9	93
4	A circular ac magnetohydrodynamic micropump for chromatographic applications. <i>Sensors and Actuators B: Chemical</i> , 2003, 92, 215-221.	4.0	91
5	An AC electroosmotic micropump for circular chromatographic applications. <i>Lab on A Chip</i> , 2004, 4, 396.	3.1	76
6	A novel alternating current multiple array electrothermal micropump for lab-on-a-chip applications. <i>Biomicrofluidics</i> , 2015, 9, 014113.	1.2	58
7	Two-phase AC electrothermal fluidic pumping in a coplanar asymmetric electrode array. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 521-529.	1.0	53
8	Design and fabrication of MEMS-based microneedle arrays for medical applications. <i>Microsystem Technologies</i> , 2009, 15, 1073-1082.	1.2	49
9	Analysis of parasites by electrorotation. <i>Journal of Applied Microbiology</i> , 2004, 96, 24-32.	1.4	48
10	Viability of <i>Giardia intestinalis</i> Cysts and Viability and Sporulation State of <i>Cyclospora cayetanensis</i> Oocysts Determined by Electrorotation. <i>Applied and Environmental Microbiology</i> , 2001, 67, 586-590.	1.4	46
11	AC Electrothermal Effect in Microfluidics: A Review. <i>Micromachines</i> , 2019, 10, 762.	1.4	41
12	Parasite viability by electrorotation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001, 195, 263-268.	2.3	28
13	A cost effective, re-configurable electrokinetic microfluidic chip platform. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 628-635.	4.0	26
14	Direct patterning of microelectrode arrays using femtosecond laser micromachining. <i>Applied Surface Science</i> , 2010, 256, 3761-3766.	3.1	26
15	Peripheral neuron plasticity is enhanced by brief electrical stimulation and overrides attenuated regrowth in experimental diabetes. <i>Neurobiology of Disease</i> , 2015, 83, 134-151.	2.1	24
16	Study on an alternating current electrothermal micropump for microneedle-based fluid delivery systems. <i>Journal of Applied Physics</i> , 2013, 114, 024701.	1.1	19
17	Modeling of drug delivery into tissues with a microneedle array using mixture theory. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010, 9, 77-86.	1.4	17
18	Investigations into a low band gap, semiconducting polymer. <i>Synthetic Metals</i> , 1999, 102, 1000-1001.	2.1	15

#	ARTICLE	IF	CITATIONS
19	A novel bio-mimicking, planar nano-edge microelectrode enables enhanced long-term neural recording. Scientific Reports, 2016, 6, 34553.	1.6	15
20	Effect of planar microelectrode geometry on neuron stimulation: Finite element modeling and experimental validation of the efficient electrode shape. Journal of Neuroscience Methods, 2015, 248, 51-58.	1.3	14
21	Simultaneous Pumping and Mixing of Biological Fluids in a Double-Array Electrothermal Microfluidic Device. Micromachines, 2019, 10, 92.	1.4	14
22	Fabrication of a 3D Multi-Depth Reservoir Micromodel in Borosilicate Glass Using Femtosecond Laser Material Processing. Micromachines, 2020, 11, 1082.	1.4	8
23	AC electrothermal micropump for biofluidic applications using numerous microelectrode pairs. , 2014, , .		5
24	Fertilization state of <i>Ascaris suum</i> determined by electrorotation. Journal of Helminthology, 2006, 80, 25-31.	0.4	4
25	Three dimensional microelectrodes enable high signal and spatial resolution for neural seizure recordings in brain slices and freely behaving animals. Scientific Reports, 2021, 11, 21952.	1.6	4
26	An alternative method of fabricating sub-micron resolution masks using excimer laser ablation. Journal of Micromechanics and Microengineering, 2004, 14, 826-831.	1.5	3
27	Numerical simulation of a tuneable reversible flow design for practical ACET devices. SN Applied Sciences, 2020, 2, 1.	1.5	3
28	Development of a Micro System for Circular Chromatography Using Wavelet Transform Detection. , 2001, , 541-542.		3
29	An Integrated Microfluidic Dielectrophoretic (DEP) Cell Fractionation System. , 2005, , 403.		2
30	High throughput fabrication of robust solid microneedles. , 2022, , .		2
31	Investigation of human malignant cells by electrorotation. , 0, , .		1
32	An Integrated PDMS Microfluidic Device for Dielectrophoretic Separation of Malignant Cells. , 2005, , 411.		1
33	Vibration effect on cross-flow and co-flow focusing mechanism for droplet generation. , 2015, , .		1
34	AC electrothermal technique in microchannels. , 2017, , .		1
35	Fluid flow study of an AC electrothermal micropump consisting of multiple arrays of microelectrodes for biofluidic applications. , 2015, , .		0
36	High efficient biofluid micromixing using ultra-fast AC electrothermal flow. Proceedings of SPIE, 2015, , .	0.8	0

#	ARTICLE	IF	CITATIONS
37	A novel AC electrothermal micropump for biofluid transport using circular interdigitated microelectrode array. Proceedings of SPIE, 2015, , .	0.8	0
38	Optimized AC electrothermal micromixing design for biofluid systems. , 2017, , .		0
39	Editorial on the Special Issue on Microelectrode Arrays and Application to Medical Devices. Micromachines, 2020, 11, 776.	1.4	0
40	Impact of open surface area of multi-well microelectrode array on mammalian brain cells recording efficiency. , 2020, , .		0