David Inglis

List of Publications by Year in descending order

53 papers	2,869 citations	304743 22 h-index	182427 51 g-index
55 all docs	55 docs citations	55 times ranked	3249 citing authors

#	Article	IF	Citations
1	Shape-based separation of drug-treated Escherichia coli using viscoelastic microfluidics. Lab on A Chip, 2022, 22, 2801-2809.	6.0	15
2	Effect of process parameters on separation efficiency in a deterministic lateral displacement device. Journal of Chromatography A, 2022, 1678, 463295.	3.7	1
3	Hydrodynamic particle focusing enhanced by femtosecond laser deep grooving at low Reynolds numbers. Scientific Reports, 2021, 11, 1652.	3.3	8
4	Microfluidic Obstacle Arrays Induce Large Reversible Shape Change in Red Blood Cells. Micromachines, 2021, 12, 783.	2.9	1
5	Sidewall profiles in thick resist with direct image lithography. Journal of Micromechanics and Microengineering, 2021, 31, 107001.	2.6	1
6	A Review of Capillary Pressure Control Valves in Microfluidics. Biosensors, 2021, 11, 405.	4.7	18
7	Focusing of sub-micrometer particles in microfluidic devices. Lab on A Chip, 2020, 20, 35-53.	6.0	77
8	Deterministic Lateral Displacement: Challenges and Perspectives. ACS Nano, 2020, 14, 10784-10795.	14.6	97
9	Targeting of externalized Î±B-crystallin on irradiated endothelial cells with pro-thrombotic vascular targeting agents: Potential applications for brain arteriovenous malformations. Thrombosis Research, 2020, 189, 119-127.	1.7	3
10	The fluidic resistance of an array of obstacles and a method for improving boundaries in deterministic lateral displacement arrays. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	12
11	Characterization of optofluidic devices for the sorting of sub-micrometer particles. Applied Optics, 2020, 59, 271.	1.8	1
12	Droplets for Sampling and Transport of Chemical Signals in Biosensing: A Review. Biosensors, 2019, 9, 80.	4.7	16
13	Microfabricated needle for hydrogen peroxide detection. RSC Advances, 2019, 9, 18176-18181.	3.6	4
14	A Nanoparticle-Based Affinity Sensor that Identifies and Selects Highly Cytokine-Secreting Cells. IScience, 2019, 20, 137-147.	4.1	17
15	IFN-Î³-induced signal-on fluorescence aptasensors: from hybridization chain reaction amplification to 3D optical fiber sensing interface towards a deployable device for cytokine sensing. Molecular Systems Design and Engineering, 2019, 4, 872-881.	3.4	17
16	Turn-On Fluorescence Aptasensor on Magnetic Nanobeads for Aflatoxin M1 Detection Based on an Exonuclease III-Assisted Signal Amplification Strategy. Nanomaterials, 2019, 9, 104.	4.1	9
17	Nanochannel Gradient Separations. Methods in Molecular Biology, 2019, 1906, 125-132.	0.9	0
18	Deterministic Lateral Displacement: The Next-Generation CAR T-Cell Processing?. SLAS Technology, 2018, 23, 338-351.	1.9	19

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19	3D printed mould-based graphite/PDMS sensor for low-force applications. Sensors and Actuators A: Physical, 2018, 280, 525-534.	4.1	87
20	Stable thrombus formation on irradiated microvascular endothelial cells under pulsatile flow: Pre-testing annexin V-thrombin conjugate for treatment of brain arteriovenous malformations. Thrombosis Research, 2018, 167, 104-112.	1.7	9
21	Comparing fusion bonding methods for glass substrates. Materials Research Express, 2018, 5, 085201.	1.6	10
22	Maximizing particle concentration in deterministic lateral displacement arrays. Biomicrofluidics, 2017, 11, 024121.	2.4	20
23	Anisotropic permeability in deterministic lateral displacement arrays. Lab on A Chip, 2017, 17, 3318-3330.	6.0	37
24	A microfluidic needle for sampling and delivery of chemical signals by segmented flows. Applied Physics Letters, 2017, 111, 183702.	3.3	10
25	A mobility shift assay for DNA detection using nanochannel gradient electrophoresis. Electrophoresis, 2017, 38, 335-341.	2.4	6
26	Microfluidic Droplet Extraction by Hydrophilic Membrane. Micromachines, 2017, 8, 331.	2.9	4
27	Quantitative non-invasive cell characterisation and discrimination based on multispectral autofluorescence features. Scientific Reports, 2016, 6, 23453.	3.3	73
28	Non-invasive detection and monitoring of biochemistry in cells and tissues by decomposing autofluorescence. , 2016, , .		0
29	Printed circuit boards as platform for disposable lab-on-a-chip applications. Proceedings of SPIE, 2015, , .	0.8	3
30	Characterization of the Interaction between Heterodimeric Î±vÎ²6 Integrin and Urokinase Plasminogen Activator Receptor (uPAR) Using Functional Proteomics. Journal of Proteome Research, 2014, 13, 5956-5964.	3.7	18
31	Concentration gradient focusing and separation in a silica nanofluidic channel with a non-uniform electroosmotic flow. Lab on A Chip, 2014, 14, 3539-3549.	6.0	30
32	Isoelectric Focusing in a Silica Nanofluidic Channel: Effects of Electromigration and Electroosmosis. Analytical Chemistry, 2014, 86, 8711-8718.	6.5	15
33	Stationary Chemical Gradients for Concentration Gradient-Based Separation and Focusing in Nanofluidic Channels. Langmuir, 2014, 30, 5337-5348.	3.5	22
34	Manufacturing and wetting low-cost microfluidic cell separation devices. Biomicrofluidics, 2013, 7, 056501.	2.4	19
35	A scalable approach for high throughput branch flow filtration. Lab on A Chip, 2013, 13, 1724.	6.0	8
36	Nanochannel pH Gradient Electrofocusing of Proteins. Analytical Chemistry, 2013, 85, 7133-7138.	6.5	22

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37	Limits of Parabolic Flow Theory in Microfluidic Particle Separation: A Computational Study. , 2013, , .		1
38	Visible 532â€‰nm laser irradiation of human adipose tissueâ€derived stem cells: Effect on proliferation rates, mitochondria membrane potential and autofluorescence. Lasers in Surgery and Medicine, 2012, 44, 769-778.	2.1	33
39	Simultaneous Concentration and Separation of Proteins in a Nanochannel. Angewandte Chemie - International Edition, 2011, 50, 7546-7550.	13.8	66
40	Scaling deterministic lateral displacement arrays for high throughput and dilution-free enrichment of leukocytes. Journal of Micromechanics and Microengineering, 2011, 21, 054024.	2.6	75
41	Highly accurate deterministic lateral displacement device and its application to purification of fungal spores. Biomicrofluidics, 2010, 4, .	2.4	69
42	A method for reducing pressure-induced deformation in silicone microfluidics. Biomicrofluidics, 2010, 4, .	2.4	50
43	Efficient microfluidic particle separation arrays. Applied Physics Letters, 2009, 94, .	3.3	84
44	Fiveâ€Nanometer Diamond with Luminescent Nitrogenâ€Vacancy Defect Centers. Small, 2009, 5, 1649-1653.	10.0	156
45	Determining blood cell size using microfluidic hydrodynamics. Journal of Immunological Methods, 2008, 329, 151-156.	1.4	51
46	Crossing microfluidic streamlines to lyse, label and wash cells. Lab on A Chip, 2008, 8, 1448.	6.0	101
47	Microfluidic device for label-free measurement of platelet activation. Lab on A Chip, 2008, 8, 925.	6.0	72
48	Hydrodynamic metamaterials: Microfabricated arrays to steer, refract, and focus streams of biomaterials. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7434-7438.	7.1	86
49	Microfluidic high gradient magnetic cell separation. Journal of Applied Physics, 2006, 99, 08K101.	2.5	112
50	Deterministic hydrodynamics: Taking blood apart. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14779-14784.	7.1	540
51	Critical particle size for fractionation by deterministic lateral displacement. Lab on A Chip, 2006, 6, 655.	6.0	334
52	Continuous microfluidic immunomagnetic cell separation. Applied Physics Letters, 2004, 85, 5093-5095.	3.3	321
53	Jet Formation in Micro Post Arrays. Applied Mechanics and Materials, 0, 553, 367-372.	0.2	0