David A Issadore

List of Publications by Year
in descending order

72 papers	4,181 citations	94433 37 h-index	114465 63 g-index
76 all docs	76 docs citations	76 times ranked	5948 citing authors

#	Article	IF	Citations
1	Ultrahigh Throughput Onâ€Chip Synthesis of Microgels with Tunable Mechanical Properties. Advanced Materials Technologies, 2022, 7, 2101160.	5.8	8
2	Anisotropic Rodâ€Shaped Particles Influence Injectable Granular Hydrogel Properties and Cell Invasion. Advanced Materials, 2022, 34, e2109194.	21.0	48
3	Anisotropic Rodâ€Shaped Particles Influence Injectable Granular Hydrogel Properties and Cell Invasion (Adv. Mater. 12/2022). Advanced Materials, 2022, 34, .	21.0	5
4	Pico-washing: simultaneous liquid addition and removal for continuous-flow washing of microdroplets. Microsystems and Nanoengineering, 2022, 8, 46.	7.0	5
5	Extracellular Vesicleâ€“Based Multianalyte Liquid Biopsy as a Diagnostic for Cancer. Annual Review of Biomedical Data Science, 2022, 5, 269-292.	6.5	6
6	Ultrasensitive Single Extracellular Vesicle Detection Using High Throughput Droplet Digital Enzyme-Linked Immunosorbent Assay. Nano Letters, 2022, 22, 4315-4324.	9.1	26
7	Advancing microfluidic diagnostic chips into clinical use: a review of current challenges and opportunities. Lab on A Chip, 2022, 22, 3110-3121.	6.0	14
8	Surface Topography-Adaptive Robotic Superstructures for Biofilm Removal and Pathogen Detection on Human Teeth. ACS Nano, 2022, 16, 11998-12012.	14.6	20
9	Microâ€•and Nanoâ€Devices for Studying Subcellular Biology. Small, 2021, 17, e2005793.	10.0	15
10	Proteomic Profiling of Extracellular Vesicles Separated from Plasma of Former National Football League Players at Risk for Chronic Traumatic Encephalopathy. , 2021, 12, 1363.		12
11	Scalable mRNA and siRNA Lipid Nanoparticle Production Using a Parallelized Microfluidic Device. Nano Letters, 2021, 21, 5671-5680.	9.1	120
12	Microfluidic formulation of nanoparticles for biomedical applications. Biomaterials, 2021, 274, 120826.	11.4	143
13	Scaling up the throughput of microfluidic droplet-based materials synthesis: A review of recent progress and outlook. Applied Physics Reviews, 2021, 8, 031304.	11.3	27
14	Extracellular vesicles as distinct biomarker reservoirs for mild traumatic brain injury diagnosis. Brain Communications, 2021, 3, fcab151.	3.3	19
15	Multi-Dimensional Mapping of Brain-Derived Extracellular Vesicle MicroRNA Biomarker for Traumatic Brain Injury Diagnostics. Journal of Neurotrauma, 2020, 37, 2424-2434.	3.4	50
16	Use of Oppositely Polarized External Magnets To Improve the Accumulation and Penetration of Magnetic Nanocarriers into Solid Tumors. ACS Nano, 2020, 14, 142-152.	14.6	59
17	A web-based automated machine learning platform to analyze liquid biopsy data. Lab on A Chip, 2020, 20, 2166-2174.	6.0	15
18	Clinical Applications of Extracellular Vesicles in the Diagnosis and Treatment of Traumatic Brain Injury. Journal of Neurotrauma, 2020, 37, 2045-2056.	3.4	25

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19	Proteomic and biological profiling of extracellular vesicles from Alzheimer's disease human brain tissues. Alzheimer's and Dementia, 2020, 16, 896-907.	0.8	105
20	A Multianalyte Panel Consisting of Extracellular Vesicle miRNAs and mRNAs, cfDNA, and CA19-9 Shows Utility for Diagnosis and Staging of Pancreatic Ductal Adenocarcinoma. Clinical Cancer Research, 2020, 26, 3248-3258.	7.0	64
21	Scalable Synthesis of Janus Particles with High Naturality. ACS Sustainable Chemistry and Engineering, 2020, 8, 17680-17686.	6.7	16
22	Robust Microfabrication of Highly Parallelized Three-Dimensional Microfluidics on Silicon. Scientific Reports, 2019, 9, 12213.	3.3	30
23	Large-Scale Production of Compound Bubbles Using Parallelized Microfluidics for Efficient Extraction of Metal Ions. Lab on A Chip, 2019, 19, 665-673.	6.0	12
24	Use of magnetic fields and nanoparticles to trigger drug release and improve tumor targeting. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2019, 11, e1571.	6.1	97
25	Mobile platform for rapid subâ€“picogram-per-milliliter, multiplexed, digital droplet detection of proteins. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4489-4495.	7.1	133
26	Moldable Perfluoropolyetherâ€“Polyethylene Glycol Networks with Tunable Wettability and Solvent Resistance for Rapid Prototyping of Droplet Microfluidics. Chemistry of Materials, 2018, 30, 2583-2588.	6.7	13
27	Injectable Granular Hydrogels with Multifunctional Properties for Biomedical Applications. Advanced Materials, 2018, 30, e1705912.	21.0	224
28	Machine learning to detect signatures of disease in liquid biopsies â€“ a user's guide. Lab on A Chip, 2018, 18, 395-405.	6.0	106
29	Diagnosis of traumatic brain injury using miRNA signatures in nanomagnetically isolated brain-derived extracellular vesicles. Lab on A Chip, 2018, 18, 3617-3630.	6.0	53
30	Radiofrequencyâ€Triggered Drug Release from Nanoliposomes with Millimeterâ€Scale Resolution Using a Superimposed Static Gating Field. Small, 2018, 14, e1802563.	10.0	30
31	Silicon and glass very large scale microfluidic droplet integration for terascale generation of polymer microparticles. Nature Communications, 2018, 9, 1222.	12.8	148
32	miRNA Profiling of Magnetic Nanoporeâ€“Isolated Extracellular Vesicles for the Diagnosis of Pancreatic Cancer. Cancer Research, 2018, 78, 3688-3697.	0.9	63
33	Ultra-high throughput detection (1 million droplets per second) of fluorescent droplets using a cell phone camera and time domain encoded optofluidics. Lab on A Chip, 2017, 17, 1083-1094.	6.0	49
34	Combining Machine Learning and Nanofluidic Technology To Diagnose Pancreatic Cancer Using Exosomes. ACS Nano, 2017, 11, 11182-11193.	14.6	196
35	Microfluidic diafiltration-on-chip using an integrated magnetic peristaltic micropump. Lab on A Chip, 2017, 17, 3796-3803.	6.0	19
36	A magnetic micropore chip for rapid (<1 hour) unbiased circulating tumor cell isolation and in situ RNA analysis. Lab on A Chip, 2017, 17, 3086-3096.	6.0	38

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37	Liter-scale production of uniform gas bubbles via parallelization of flow-focusing generators. Lab on A Chip, 2017, 17, 2667-2673.	6.0	40
38	Multicolor detection of fluorescent droplets on a cell phone using time domain encoded optofluidics. , 2017, , .		1
39	Magnetic Nickel iron Electroformed Trap (MagNET): a master/replica fabrication strategy for ultra-high throughput (>100 mL h‹sup›â^'1‹/sup›) immunomagnetic sorting. Lab on A Chip, 2016, 16, 3049-3057.	6.0	5
40	Toolbox for Exploring Modular Gene Regulation in Synthetic Biology Training. ACS Synthetic Biology, 2016, 5, 781-785.	3.8	13
41	Diagnostic technologies for circulating tumour cells and exosomes. Bioscience Reports, 2016, 36, e00292.	2.4	63
42	Recent developments in scale-up of microfluidic emulsion generation via parallelization. Korean Journal of Chemical Engineering, 2016, 33, 1757-1766.	2.7	83
43	Detection and isolation of circulating exosomes and microvesicles for cancer monitoring and diagnostics using micro-/nano-based devices. Analyst, The, 2016, 141, 450-460.	3.5	175
44	Smartphone-enabled optofluidic exosome diagnostic for concussion recovery. Scientific Reports, 2016, 6, 31215.	3.3	64
45	Multiplexed detection of viral infections using rapid in situ RNA analysis on a chip. Lab on A Chip, 2015, 15, 3170-3182.	6.0	22
46	Kilo-scale droplet generation in three-dimensional monolithic elastomer device (3D MED). Lab on A Chip, 2015, 15, 4387-4392.	6.0	119
47	Point-of-Care Rare Cell Cancer Diagnostics. Methods in Molecular Biology, 2015, 1256, 123-137.	0.9	9
48	Miniaturized, multiplexed readout of droplet-based microfluidic assays using time-domain modulation. Lab on A Chip, 2014, 14, 4638-4646.	6.0	17
49	Trackâ€Etched Magnetic Micropores for Immunomagnetic Isolation of Pathogens. Advanced Healthcare Materials, 2014, 3, 1078-1085.	7.6	25
50	Magnetic Separation: Track-Etched Magnetic Micropores for Immunomagnetic Isolation of Pathogens (Adv. Healthcare Mater. 7/2014). Advanced Healthcare Materials, 2014, 3, 950-950.	7.6	0
51	Miniaturized nuclear magnetic resonance platform for detection and profiling of circulating tumor cells. Lab on A Chip, 2014, 14, 14-23.	6.0	70
52	Microchip-based detection of magnetically labeled cancer biomarkers. Advanced Drug Delivery Reviews, 2014, 66, 101-109.	13.7	43
53	A multi-scale PDMS fabrication strategy to bridge the size mismatch between integrated circuits and microfluidics. Lab on A Chip, 2014, 14, 4552-4558.	6.0	29
54	Magnetic sensing technology for molecular analyses. Lab on A Chip, 2014, 14, 2385.	6.0	79

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55	Hybrid soft-lithography/laser machined microchips for the parallel generation of droplets. Lab on A Chip, 2013, 13, 4750.	6.0	58
56	Î¼Hall Chip for Sensitive Detection of Bacteria. Advanced Healthcare Materials, 2013, 2, 1224-1228.	7.6	55
57	Rare cell isolation and profiling on a hybrid magnetic/size-sorting chip. Biomicrofluidics, 2013, 7, 54107.	2.4	46
58	Microwave dielectric heating of non-aqueous droplets in a microfluidic device for nanoparticle synthesis. Nanoscale, 2013, 5, 5468.	5.6	36
59	Laser micromachined hybrid open/paper microfluidic chips. Biomicrofluidics, 2013, 7, 064109.	2.4	14
60	Magnetic Nanoparticles and microNMR for Diagnostic Applications. Theranostics, 2012, 2, 55-65.	10.0	152
61	Microfluidic Cell Sorter (Î¼FCS) for Onâ€chip Capture and Analysis of Single Cells. Advanced Healthcare Materials, 2012, 1, 432-436.	7.6	43
62	Ultrasensitive Clinical Enumeration of Rare Cells ex Vivo Using a Micro-Hall Detector. Science Translational Medicine, 2012, 4, 141ra92.	12.4	211
63	Self-assembled magnetic filter for highly efficient immunomagnetic separation. Lab on A Chip, 2011, 11, 147-151.	6.0	49
64	Miniature magnetic resonance system for point-of-care diagnostics. Lab on A Chip, 2011, 11, 2282.	6.0	124
65	Specific Pathogen Detection Using Bioorthogonal Chemistry and Diagnostic Magnetic Resonance. Bioconjugate Chemistry, 2011, 22, 2390-2394.	3.6	59
66	Nanoparticle-Mediated Measurement of Targetâ€“Drug Binding in Cancer Cells. ACS Nano, 2011, 5, 9216-9224.	14.6	21
67	Ubiquitous Detection of Gram-Positive Bacteria with Bioorthogonal Magnetofluorescent Nanoparticles. ACS Nano, 2011, 5, 8834-8841.	14.6	127
68	Scaling of transverse nuclear magnetic relaxation due to magnetic nanoparticle aggregation. Journal of Magnetism and Magnetic Materials, 2010, 322, 3122-3126.	2.3	32
69	A microfluidic microprocessor: controlling biomimetic containers and cells using hybrid integrated circuit/microfluidic chips. Lab on A Chip, 2010, 10, 2937.	6.0	26
70	High-Voltage Dielectrophoretic and Magnetophoretic Hybrid Integrated Circuit/Microfluidic Chip. Journal of Microelectromechanical Systems, 2009, 18, 1220-1225.	2.5	26
71	Microwave dielectric heating of drops in microfluidic devices. Lab on A Chip, 2009, 9, 1701.	6.0	86
72	Integrated circuit/microfluidic chip to programmably trap and move cells and droplets with dielectrophoresis. Lab on A Chip, 2008, 8, 81-87.	6.0	144