

# John D Mai

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

1,980  
citations

257450

24  
h-index

254184

43  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2842  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rare cell isolation and analysis in microfluidics. Lab on A Chip, 2014, 14, 626.	6.0	273
2	Theory and experiment on particle trapping and manipulation via optothermally generated bubbles. Lab on A Chip, 2014, 14, 384-391.	6.0	136
3	Digital acoustofluidics enables contactless and programmable liquid handling. Nature Communications, 2018, 9, 2928.	12.8	134
4	Accelerating drug discovery via organs-on-chips. Lab on A Chip, 2013, 13, 4697.	6.0	117
5	Nucleic acid amplification using microfluidic systems. Lab on A Chip, 2013, 13, 1225.	6.0	114
6	Acoustofluidic centrifuge for nanoparticle enrichment and separation. Science Advances, 2021, 7, .	10.3	100
7	Microwave bonding of polymer-based substrates for potential encapsulated micro/nanofluidic device fabrication. Sensors and Actuators A: Physical, 2004, 114, 340-346.	4.1	76
8	Harmonic acoustics for dynamic and selective particle manipulation. Nature Materials, 2022, 21, 540-546.	27.5	66
9	A wind-flutter energy converter for powering wireless sensors. Sensors and Actuators A: Physical, 2012, 173, 163-171.	4.1	60
10	Generating multifunctional acoustic tweezers in Petri dishes for contactless, precise manipulation of bioparticles. Science Advances, 2020, 6, .	10.3	59
11	2D Human Gesture Tracking and Recognition by the Fusion of MEMS Inertial and Vision Sensors. IEEE Sensors Journal, 2014, 14, 1160-1170.	4.7	56
12	High-throughput cell focusing and separation via acoustofluidic tweezers. Lab on A Chip, 2018, 18, 3003-3010.	6.0	55
13	Biomimetic apposition compound eye fabricated using microfluidic-assisted 3D printing. Nature Communications, 2021, 12, 6458.	12.8	51
14	Acoustofluidic rotational tweezing enables high-speed contactless morphological phenotyping of zebrafish larvae. Nature Communications, 2021, 12, 1118.	12.8	49
15	Micro heat exchanger by using MEMS impinging jets. , 1999, , .		45
16	Electrochemically created highly surface roughened Ag nanoplate arrays for SERS biosensing applications. Journal of Materials Chemistry C, 2014, 2, 8350-8356.	5.5	43
17	Extracellular-controlled breast cancer cell formation and growth using non-UV patterned hydrogels via optically-induced electrokinetics. Lab on A Chip, 2014, 14, 1367.	6.0	42
18	Acoustic streaming vortices enable contactless, digital control of droplets. Science Advances, 2020, 6, eaba0606.	10.3	42

#	ARTICLE	IF	CITATIONS
19	Ultrasound-assisted synthesis of chitosan from fungal precursors for biomedical applications. <i>Chemical Engineering Journal</i> , 2019, 357, 498-507.	12.7	40
20	Simultaneous separation and concentration of micro- and nano-particles by optically induced electrokinetics. <i>Sensors and Actuators A: Physical</i> , 2013, 193, 103-111.	4.1	37
21	Three-Dimensional Electrohydrodynamic Printing and Spinning of Flexible Composite Structures for Oral Multidrug Forms. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24876-24885.	8.0	34
22	Acoustohydrodynamic tweezers via spatial arrangement of streaming vortices. <i>Science Advances</i> , 2021, 7, .	10.3	34
23	Exploring bubble oscillation and mass transfer enhancement in acoustic-assisted liquid-liquid extraction with a microfluidic device. <i>Scientific Reports</i> , 2015, 5, 12572.	3.3	31
24	Sensors and actuators on non-planar substrates. <i>Sensors and Actuators A: Physical</i> , 1999, 73, 80-88.	4.1	30
25	Label-Free Measurements of Reaction Kinetics Using a Droplet-Based Optofluidic Device. <i>Journal of the Association for Laboratory Automation</i> , 2015, 20, 17-24.	2.8	24
26	Development of an Indoor Airflow Energy Harvesting System for Building Environment Monitoring. <i>Energies</i> , 2014, 7, 2985-3003.	3.1	21
27	Precision Printing of Customized Cylindrical Capsules with Multifunctional Layers for Oral Drug Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 39179-39191.	8.0	19
28	Distinguishing cells by their first-order transient motion response under an optically induced dielectrophoretic force field. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	16
29	Rapid Fabrication of Nanomaterial Electrodes Using Digitally Controlled Electrokinetics. <i>IEEE Nanotechnology Magazine</i> , 2014, 13, 245-253.	2.0	15
30	Design and simulation of self-powered radio frequency identification (RFID) tags for mobile temperature monitoring. <i>Science China Technological Sciences</i> , 2013, 56, 1-7.	4.0	14
31	Combining the Masking and Scaffolding Modalities of Colloidal Crystal Templates: Plasmonic Nanoparticle Arrays with Multiple Periodicities. <i>Chemistry of Materials</i> , 2014, 26, 6432-6438.	6.7	14
32	Measurement of glycated hemoglobin levels using an integrated microfluidic system. <i>Microfluidics and Nanofluidics</i> , 2015, 18, 613-621.	2.2	14
33	Optically induced dielectrophoresis sorting with automated medium exchange in an integrated optofluidic device resulting in higher cell viability. <i>Lab on A Chip</i> , 2014, 14, 2837-2843.	6.0	12
34	Gold nano-particle-based thermal sensors fabricated using microspotting and DEP techniques. <i>Sensors and Actuators A: Physical</i> , 2012, 178, 32-39.	4.1	11
35	Inducing self-rotation of cells with natural and artificial melanin in a linearly polarized alternating current electric field. <i>Biomicrofluidics</i> , 2013, 7, 054112.	2.4	10
36	Non-ultraviolet-based patterning of polymer structures by optically induced electrohydrodynamic instability. <i>Applied Physics Letters</i> , 2013, 103, 214101.	3.3	10

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37	Microwave bonding of polymer-based substrates for micro-nano fluidic applications. , 0, , .		8
38	Optically induced electrohydrodynamic instability-based micro-patterning of fluidic thin films. Microfluidics and Nanofluidics, 2014, 16, 1097-1106.	2.2	8
39	Polymer-based Capacitive Micromachined Ultrasonic Transducers (CMUT) for Micro Surgical Imaging Applications. , 2006, , .		7
40	Automated Rotation Rate Tracking of Pigmented Cells by a Customized Block-Matching Algorithm. Journal of the Association for Laboratory Automation, 2013, 18, 161-170.	2.8	7
41	Controlling SWCNT assembling density by electrokinetics. Sensors and Actuators A: Physical, 2013, 201, 36-42.	4.1	6
42	Microfluidic approaches for cell-based molecular diagnosis. Biomicrofluidics, 2018, 12, 051501.	2.4	6
43	Entropy-based separation of yeast cells using a microfluidic system of conjoined spheres. Journal of Applied Physics, 2013, 114, 194702.	2.5	5
44	Single-step fabrication of electrodes with controlled nanostructured surface roughness using optically-induced electrodeposition. Journal of Micromechanics and Microengineering, 2018, 28, 025011.	2.6	5
45	MEMS-fabricated ICPF actuators for biological manipulation. , 2003, 5051, 332.		3
46	Microwave techniques for high-density electronics interconnect bonding and hybridization. IEEE Transactions on Nuclear Science, 2004, 51, 3038-3042.	2.0	3
47	A microfluidic system for rapid bacterial pathogen detection. , 2007, , .		3
48	Low-Cost Nanolithography. IEEE Nanotechnology Magazine, 2011, 5, 25-28.	1.3	3
49	An indoor air duct flow energy conversion system: modeling and experiments. , 2013, , .		3
50	Nanoporous hollow fibers as a phantom material for the validation of diffusion magnetic resonance imaging. Journal of Applied Polymer Science, 2019, 136, 47617.	2.6	3
51	Simulation of Thin Metal Film Bonding for MEMS Applications Inside a Microwave Cavity. International Journal of Nonlinear Sciences and Numerical Simulation, 2002, 3, .	1.0	2
52	Rapid micro-patterning of a conductive PANI/MWNTs-polymer composite using an optically-induced electrokinetics chip. , 2012, , .		1
53	Deep Learning with Hyperspectral and Normal Camera Images for Automated Recognition of Orally-administered Drugs. , 2019, , .		1
54	A software-based networking solution for chemical and biological sensors. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
55	IEEE NMDC 2012 Welcome Message. , 2012, , .		0
56	An indoor air duct flow energy conversion system for powering Wireless Sensors. , 2012, , .		0
57	Influence of Clique Potential Parameters on Classification Using Bayesian MRF Model for Remote Sensing Image in Dali Erhai Basin. Advanced Materials Research, 0, 658, 508-512.	0.3	0
58	Bayesian MRF Modeling and Graph Cuts for Phase Unwrapping with Discontinuity Phase Flaws: A Comparative Study. Applied Mechanics and Materials, 0, 496-500, 1915-1918.	0.2	0
59	Molecularly imprinted sensor integrated with thin-film bulk acoustic resonator for drug detection. Guangxue Jingmi Gongcheng/Optics and Precision Engineering, 2013, 21, 2272-2278.	0.5	0