# John D Mai

List of Publications by Year
in descending order



| 59 | 1,980 | 257450 24 | 254184 43 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 64 | 64 | 64 | 2842 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Harmonic acoustics for dynamic and selective particle manipulation. Nature Materials, 2022, 21, 540-546. | 27.5 | 66 |
| 2 | Acoustohydrodynamic tweezers via spatial arrangement of streaming vortices. Science Advances, 2021, 7, . | 10.3 | 34 |
| 3 | Acoustofluidic rotational tweezing enables high-speed contactless morphological phenotyping of zebrafish larvae. Nature Communications, 2021, 12, 1118. | 12.8 | 49 |
| 4 | Acoustofluidic centrifuge for nanoparticle enrichment and separation. Science Advances, 2021, 7, . | 10.3 | 100 |
| 5 | Biomimetic apposition compound eye fabricated using microfluidic-assisted 3D printing. Nature Communications, 2021, 12, 6458. | 12.8 | 51 |
| 6 | Generating multifunctional acoustic tweezers in Petri dishes for contactless, precise manipulation of bioparticles. Science Advances, 2020, 6, . | 10.3 | 59 |
| 7 | Acoustic streaming vortices enable contactless, digital control of droplets. Science Advances, 2020, 6, eaba0606. | 10.3 | 42 |
| 8 | Precision Printing of Customized Cylindrical Capsules with Multifunctional Layers for Oral Drug Delivery. ACS Applied Materials & Interfaces, 2019, 11, 39179-39191. | 8.0 | 19 |
| 9 | 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 |
| 10 | Ultrasound-assisted synthesis of chitosan from fungal precursors for biomedical applications. Chemical Engineering Journal, 2019, 357, 498-507. | 12.7 | 40 |
| 11 | Deep Learning with Hyperspectral and Normal Camera Images for Automated Recognition of Orally-administered Drugs. , 2019, , . | | 1 |
| 12 | 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 |
| 13 | Microfluidic approaches for cell-based molecular diagnosis. Biomicrofluidics, 2018, 12, 051501. | 2.4 | 6 |
| 14 | Three-Dimensional Electrohydrodynamic Printing and Spinning of Flexible Composite Structures for Oral Multidrug Forms. ACS Applied Materials & Interfaces, 2018, 10, 24876-24885. | 8.0 | 34 |
| 15 | Digital acoustofluidics enables contactless and programmable liquid handling. Nature Communications, 2018, 9, 2928. | 12.8 | 134 |
| 16 | High-throughput cell focusing and separation via acoustofluidic tweezers. Lab on A Chip, 2018, 18, 3003-3010. | 6.0 | 55 |
| 17 | Exploring bubble oscillation and mass transfer enhancement in acoustic-assisted liquid-liquid extraction with a microfluidic device. Scientific Reports, 2015, 5, 12572. | 3.3 | 31 |
| 18 | Measurement of glycated hemoglobin levels using an integrated microfluidic system. Microfluidics and Nanofluidics, 2015, 18, 613-621. | 2.2 | 14 |

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|---|---|---|---|
| 19 | Label-Free Measurements of Reaction Kinetics Using a Droplet-Based Optofluidic Device. Journal of the Association for Laboratory Automation, 2015, 20, 17-24. | 2.8 | 24 |
| 20 | Development of an Indoor Airflow Energy Harvesting System for Building Environment Monitoring. Energies, 2014, 7, 2985-3003. | 3.1 | 21 |
| 21 | Combining the Masking and Scaffolding Modalities of Colloidal Crystal Templates: Plasmonic Nanoparticle Arrays with Multiple Periodicities. Chemistry of Materials, 2014, 26, 6432-6438. | 6.7 | 14 |
| 22 | 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 |
| 23 | Rare cell isolation and analysis in microfluidics. Lab on A Chip, 2014, 14, 626. | 6.0 | 273 |
| 24 | Theory and experiment on particle trapping and manipulation via optothermally generated bubbles. Lab on A Chip, 2014, 14, 384-391. | 6.0 | 136 |
| 25 | Optically induced dielectropheresis sorting with automated medium exchange in an integrated optofluidic device resulting in higher cell viability. Lab on A Chip, 2014, 14, 2837-2843. | 6.0 | 12 |
| 26 | 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 |
| 27 | Electrochemically created highly surface roughened Ag nanoplate arrays for SERS biosensing applications. Journal of Materials Chemistry C, 2014, 2, 8350-8356. | 5.5 | 43 |
| 28 | Optically induced electrohydrodynamic instability-based micro-patterning of fluidic thin films. Microfluidics and Nanofluidics, 2014, 16, 1097-1106. | 2.2 | 8 |
| 29 | Rapid Fabrication of Nanomaterial Electrodes Using Digitally Controlled Electrokinetics. IEEE Nanotechnology Magazine, 2014, 13, 245-253. | 2.0 | 15 |
| 30 | Controlling SWCNT assembling density by electrokinetics. Sensors and Actuators A: Physical, 2013, 201, 36-42. | 4.1 | 6 |
| 31 | An indoor air duct flow energy conversion system: modeling and experiments. , 2013, , . | | 3 |
| 32 | Inducing self-rotation of cells with natural and artificial melanin in a linearly polarized alternating current electric field. Biomicrofluidics, 2013, 7, 054112. | 2.4 | 10 |
| 33 | Simultaneous separation and concentration of micro- and nano-particles by optically induced electrokinetics. Sensors and Actuators A: Physical, 2013, 193, 103-111. | 4.1 | 37 |
| 34 | Accelerating drug discovery via organs-on-chips. Lab on A Chip, 2013, 13, 4697. | 6.0 | 117 |
| 35 | Design and simulation of self-powered radio frequency identification (RFID) tags for mobile temperature monitoring. Science China Technological Sciences, 2013, 56, 1-7. | 4.0 | 14 |
| 36 | Nucleic acid amplification using microfluidic systems. Lab on A Chip, 2013, 13, 1225. | 6.0 | 114 |

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|---|---|---|---|
| 37 | Distinguishing cells by their first-order transient motion response under an optically induced dielectrophoretic force field. Applied Physics Letters, 2013, 103, . | 3.3 | 16 |
| 38 | Entropy-based separation of yeast cells using a microfluidic system of conjoined spheres. Journal of Applied Physics, 2013, 114, 194702. | 2.5 | 5 |
| 39 | Non-ultraviolet-based patterning of polymer structures by optically induced electrohydrodynamic instability. Applied Physics Letters, 2013, 103, 214101. | 3.3 | 10 |
| 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 | 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 |
| 42 | IEEE NMDC 2012 Welcome Message. , 2012, , . | | 0 |
| 43 | An indoor air duct flow energy conversion system for powering Wireless Sensors. , 2012, , . | | 0 |
| 44 | Rapid micro-patterning of a conductive PANI/MWNTs-polymer composite using an optically-induced electrokinetics chip. , 2012, , . | | 1 |
| 45 | A wind-flutter energy converter for powering wireless sensors. Sensors and Actuators A: Physical, 2012, 173, 163-171. | 4.1 | 60 |
| 46 | Gold nano-particle-based thermal sensors fabricated using microspotting and DEP techniques. Sensors and Actuators A: Physical, 2012, 178, 32-39. | 4.1 | 11 |
| 47 | Low-Cost Nanolithography. IEEE Nanotechnology Magazine, 2011, 5, 25-28. | 1.3 | 3 |
| 48 | A software-based networking solution for chemical and biological sensors. , 2011, , . | | 0 |
| 49 | A microfluidic system for rapid bacterial pathogen detection. , 2007, , . | | 3 |
| 50 | Polymer-based Capacitive Micromachined Ultrasonic Transducers (CMUT) for Micro Surgical Imaging Applications. , 2006, , . | | 7 |
| 51 | 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 |
| 52 | Microwave techniques for high-density electronics interconnect bonding and hybridization. IEEE Transactions on Nuclear Science, 2004, 51, 3038-3042. | 2.0 | 3 |
| 53 | MEMS-fabricated ICPF actuators for biological manipulation. , 2003, 5051, 332. | | 3 |
| 54 | 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 |

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|---|---|---|---|
| 55 | Sensors and actuators on non-planar substrates. Sensors and Actuators A: Physical, 1999, 73, 80-88. | 4.1 | 30 |
| 56 | Micro heat exchanger by using MEMS impinging jets. , 1999, , . | | 45 |
| 57 | Microwave bonding of polymer-based substrates for micro-nano fluidic applications. , 0, , . | | 8 |
| 58 | 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 |
| 59 | Bayesian MRF Modeling and Graph Cuts for Phase Unwrapping with Discontinuity Phase Flawsï¼šA Comparative Study. Applied Mechanics and Materials, 0, 496-500, 1915-1918. | 0.2 | 0 |