

# Leslie Y Yeo

## List of Publications by Year in descending order

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244  
papers

11,127  
citations

31976

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37204

96  
g-index

251  
all docs

251  
docs citations

251  
times ranked

9054  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Microscale acoustofluidics: Microfluidics driven via acoustics and ultrasonics. <i>Reviews of Modern Physics</i> , 2011, 83, 647-704.  | 45.6 | 742       |
| 2  | Emerging Technologies for Next-Generation Point-of-Care Testing. <i>Trends in Biotechnology</i> , 2015, 33, 692-705.   | 9.3  | 583       |
| 3  | Surface Acoustic Wave Microfluidics. <i>Annual Review of Fluid Mechanics</i> , 2014, 46, 379-406.  | 25.0 | 456       |
| 4  | Microfluidic Devices for Bioapplications. <i>Small</i> , 2011, 7, 12-48.   | 10.0 | 455       |
| 5  | Ultrafast microfluidics using surface acoustic waves. <i>Biomicrofluidics</i> , 2009, 3, 012002.   | 2.4  | 330       |
| 6  | Fabrication of microfluidic devices using polydimethylsiloxane. <i>Biomicrofluidics</i> , 2010, 4, .   | 2.4  | 308       |
| 7  | Particle concentration and mixing in microdrops driven by focused surface acoustic waves. <i>Journal of Applied Physics</i> , 2008, 104, .   | 2.5  | 268       |
| 8  | Interfacial destabilization and atomization driven by surface acoustic waves. <i>Physics of Fluids</i> , 2008, 20, .   | 4.0  | 229       |
| 9  | Piezoelectric ultrasonic micro/milli-scale actuators. <i>Sensors and Actuators A: Physical</i> , 2009, 152, 219-233.   | 4.1  | 195       |
| 10 | Surface acoustic wave concentration of particle and bioparticle suspensions. <i>Biomedical Microdevices</i> , 2007, 9, 647-656.  | 2.8  | 191       |
| 11 | Interfacial Jetting Phenomena Induced by Focused Surface Vibrations. <i>Physical Review Letters</i> , 2009, 103, 024501.   | 7.8  | 173       |
| 12 | Microparticle collection and concentration via a miniature surface acoustic wave device. <i>Lab on A Chip</i> , 2007, 7, 618.  | 6.0  | 168       |
| 13 | Uniform mixing in paper-based microfluidic systems using surface acoustic waves. <i>Lab on A Chip</i> , 2012, 12, 773-779.   | 6.0  | 153       |
| 14 | Miniature inhalation therapy platform using surface acoustic wave microfluidic atomization. <i>Lab on A Chip</i> , 2009, 9, 2184.  | 6.0  | 151       |
| 15 | Electrospinning carbon nanotube polymer composite nanofibers. <i>Journal of Experimental Nanoscience</i> , 2006, 1, 177-209.   | 2.4  | 134       |
| 16 | Frequency effects on the scale and behavior of acoustic streaming. <i>Physical Review E</i> , 2014, 89, 013203.  | 2.1  | 130       |
| 17 | Paper-Based Microfluidic Surface Acoustic Wave Sample Delivery and Ionization Source for Rapid and Sensitive Ambient Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 3260-3266. | 6.5  | 113       |
| 18 | Atomization off thin water films generated by high-frequency substrate wave vibrations. <i>Physical Review E</i> , 2012, 86, 056312.   | 2.1  | 113       |

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|----|--|------|-----------|
| 19 | Exploitation of surface acoustic waves to drive size-dependent microparticle concentration within a droplet. <i>Lab on A Chip</i> , 2010, 10, 2979.                                      | 6.0  | 110       |
| 20 | A New ac Electro spray Mechanism by Maxwell-Wagner Polarization and Capillary Resonance. <i>Physical Review Letters</i> , 2004, 92, 133902.  | 7.8  | 107       |
| 21 | Ultrasonic nebulization platforms for pulmonary drug delivery. <i>Expert Opinion on Drug Delivery</i> , 2010, 7, 663-679.  | 5.0  | 106       |
| 22 | Rapid generation of protein aerosols and nanoparticles via surface acoustic wave atomization. <i>Nanotechnology</i> , 2008, 19, 455103.  | 2.6  | 103       |
| 23 | Ultrafast, One-Step, Salt-Solution-Based Acoustic Synthesis of $\text{Ti}_3\text{C}_2$ MXene. <i>ACS Nano</i> , 2021, 15, 4287-4293.   | 14.6 | 103       |
| 24 | AC electro spray biomaterials synthesis. <i>Biomaterials</i> , 2005, 26, 6122-6128.  | 11.4 | 99        |
| 25 | Rapid fluid flow and mixing induced in microchannels using surface acoustic waves. <i>Europhysics Letters</i> , 2009, 87, 47003.   | 2.0  | 99        |
| 26 | Evaporative self-assembly assisted synthesis of polymeric nanoparticles by surface acoustic wave atomization. <i>Nanotechnology</i> , 2008, 19, 145301.                                  | 2.6  | 98        |
| 27 | Acoustically-Driven Trion and Exciton Modulation in Piezoelectric Two-Dimensional $\text{MoS}_2$ . <i>Nano Letters</i> , 2016, 16, 849-855.  | 9.1  | 91        |
| 28 | The extraction of liquid, protein molecules and yeast cells from paper through surface acoustic wave atomization. <i>Lab on A Chip</i> , 2010, 10, 470-476.                              | 6.0  | 87        |
| 29 | Unique fingering instabilities and soliton-like wave propagation in thin acoustowetting films. <i>Nature Communications</i> , 2012, 3, 1167.   | 12.8 | 86        |
| 30 | Transmitting high power rf acoustic radiation via fluid couplants into superstrates for microfluidics. <i>Applied Physics Letters</i> , 2009, 94, .                                      | 3.3  | 84        |
| 31 | Organosilane deposition for microfluidic applications. <i>Biomicrofluidics</i> , 2011, 5, 36501-365017.  | 2.4  | 84        |
| 32 | Quantification of surface acoustic wave induced chaotic mixing-flows in microfluidic wells. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 1565-1572.                             | 7.8  | 81        |
| 33 | Effective pulmonary delivery of an aerosolized plasmid DNA vaccine via surface acoustic wave nebulization. <i>Respiratory Research</i> , 2014, 15, 60.                                   | 3.6  | 81        |
| 34 | Film drainage between two surfactant-coated drops colliding at constant approach velocity. <i>Journal of Colloid and Interface Science</i> , 2003, 257, 93-107.                          | 9.4  | 79        |
| 35 | Particle concentration via acoustically driven microcentrifugation: microPIV flow visualization and numerical modelling studies. <i>Microfluidics and Nanofluidics</i> , 2010, 8, 73-84. | 2.2  | 76        |
| 36 | Template-free Synthesis and Encapsulation Technique for Layer-by-Layer Polymer Nanocarrier Fabrication. <i>ACS Nano</i> , 2011, 5, 9583-9591.  | 14.6 | 76        |

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|----|---|------|-----------|
| 37 | A scaffold cell seeding method driven by surface acoustic waves. <i>Biomaterials</i> , 2007, 28, 4098-4104.   | 11.4 | 74        |
| 38 | Microfluidic Colloidal Island Formation and Erasure Induced by Surface Acoustic Wave Radiation. <i>Physical Review Letters</i> , 2008, 101, 084502.                                     | 7.8  | 74        |
| 39 | Surface Vibration Induced Spatial Ordering of Periodic Polymer Patterns on a Substrate. <i>Langmuir</i> , 2008, 24, 10629-10632.  | 3.5  | 71        |
| 40 | A brief review of actuation at the micro-scale using electrostatics, electromagnetics and piezoelectric ultrasonics. <i>Acoustical Science and Technology</i> , 2010, 31, 115-123.      | 0.5  | 69        |
| 41 | Capillary wave motion excited by high frequency surface acoustic waves. <i>Physics of Fluids</i> , 2010, 22, .  | 4.0  | 66        |
| 42 | UV epoxy bonding for enhanced SAW transmission and microscale acoustofluidic integration. <i>Lab on A Chip</i> , 2012, 12, 2970.  | 6.0  | 66        |
| 43 | Mixed mode of dissolving immersed nanodroplets at a solid-water interface. <i>Soft Matter</i> , 2015, 11, 1889-1900.  | 2.7  | 65        |
| 44 | High frequency acoustic cell stimulation promotes exosome generation regulated by a calcium-dependent mechanism. <i>Communications Biology</i> , 2020, 3, 553.                          | 4.4  | 65        |
| 45 | Effect of surface acoustic waves on the viability, proliferation and differentiation of primary osteoblast-like cells. <i>Biomicrofluidics</i> , 2009, 3, 034102.                       | 2.4  | 64        |
| 46 | Highly Ordered Arrays of Femtoliter Surface Droplets. <i>Small</i> , 2015, 11, 4850-4855.   | 10.0 | 64        |
| 47 | Piezoelectric ultrasonic resonant motor with stator diameter less than 250 $\mu\text{m}$ : the Proteus motor. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 022001. | 2.6  | 63        |
| 48 | Pulmonary monoclonal antibody delivery via a portable microfluidic nebulization platform. <i>Biomicrofluidics</i> , 2015, 9, 052603.  | 2.4  | 63        |
| 49 | HYbrid Resonant Acoustics (HYDRA). <i>Advanced Materials</i> , 2016, 28, 1970-1975.   | 21.0 | 63        |
| 50 | STATIC AND SPONTANEOUS ELECTROWETTING. <i>Modern Physics Letters B</i> , 2005, 19, 549-569.   | 1.9  | 62        |
| 51 | Continuous flow actuation between external reservoirs in small-scale devices driven by surface acoustic waves. <i>Lab on A Chip</i> , 2014, 14, 750-758.                                | 6.0  | 62        |
| 52 | Acoustically-mediated intracellular delivery. <i>Nanoscale</i> , 2018, 10, 13165-13178.   | 5.6  | 59        |
| 53 | Microscale Capillary Wave Turbulence Excited by High Frequency Vibration. <i>Langmuir</i> , 2013, 29, 3835-3845.  | 3.5  | 58        |
| 54 | Rapid Enhancement of Cellular Spheroid Assembly by Acoustically Driven Microcentrifugation. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1013-1022.                       | 5.2  | 58        |

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|----|---|------|-----------|
| 55 | Enabling practical surface acoustic wave nebulizer drug delivery via amplitude modulation. <i>Lab on A Chip</i> , 2014, 14, 1858-1865.  | 6.0  | 57        |
| 56 | Planar microfluidic drop splitting and merging. <i>Lab on A Chip</i> , 2015, 15, 1942-1951.   | 6.0  | 54        |
| 57 | Fluid-structure interaction in deformable microchannels. <i>Physics of Fluids</i> , 2012, 24, .   | 4.0  | 53        |
| 58 | Electrohydrodynamic surface microvortices for mixing and particle trapping. <i>Applied Physics Letters</i> , 2006, 88, 233512.  | 3.3  | 52        |
| 59 | Continuous tuneable droplet ejection <i>via</i> pulsed surface acoustic wave jetting. <i>Soft Matter</i> , 2018, 14, 5721-5727.   | 2.7  | 52        |
| 60 | CFD simulation of aerosol delivery to a human lung via surface acoustic wave nebulization. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 2035-2050.                                  | 2.8  | 50        |
| 61 | Electrokinetic actuation of low conductivity dielectric liquids. <i>Sensors and Actuators B: Chemical</i> , 2009, 140, 287-294.   | 7.8  | 49        |
| 62 | Hydrophobic-Force-Driven Removal of Organic Compounds from Water by Reduced Graphene Oxides Generated in Agarose Hydrogels. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11177-11181. | 13.8 | 49        |
| 63 | The Dynamics of Marangoni-Driven Local Film Drainage between Two Drops. <i>Journal of Colloid and Interface Science</i> , 2001, 241, 233-247.   | 9.4  | 48        |
| 64 | Electrowetting films on parallel line electrodes. <i>Physical Review E</i> , 2006, 73, 011605.  | 2.1  | 48        |
| 65 | Rapid production of protein-loaded biodegradable microparticles using surface acoustic waves. <i>Biomicrofluidics</i> , 2009, 3, 014102.  | 2.4  | 48        |
| 66 | Universal nanodroplet branches from confining the Ouzo effect. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10332-10337.                       | 7.1  | 48        |
| 67 | Microfluidic blood plasma separation via bulk electrohydrodynamic flows. <i>Biomicrofluidics</i> , 2007, 1, 014103.   | 2.4  | 47        |
| 68 | Surface acoustic waves as an energy source for drop scale synthetic chemistry. <i>Lab on A Chip</i> , 2009, 9, 754.   | 6.0  | 46        |
| 69 | Miniaturized Lab-on-a-Disc (miniLOAD). <i>Small</i> , 2012, 8, 1881-1888.   | 10.0 | 46        |
| 70 | Engineering of Nebulized Metal-Phenolic Capsules for Controlled Pulmonary Deposition. <i>Advanced Science</i> , 2020, 7, 1902650.   | 11.2 | 46        |
| 71 | Acoustomicrofluidic Synthesis of Pristine Ultrathin $Ti_3C_2T_x$ MXene Nanosheets and Quantum Dots. <i>ACS Nano</i> , 2021, 15, 12099-12108.  | 14.6 | 46        |
| 72 | Marangoni instability of a thin liquid film resting on a locally heated horizontal wall. <i>Physical Review E</i> , 2003, 67, 056315.   | 2.1  | 45        |

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|----|--|------|-----------|
| 73 | PHASE INVERSION AND ASSOCIATED PHENOMENA. <i>Multiphase Science and Technology</i> , 2000, 12, 66.   | 0.5  | 45        |
| 74 | Nanoscale pillar hypersonic surface phononic crystals. <i>Physical Review B</i> , 2016, 94, .  | 3.2  | 43        |
| 75 | Direct visualization of surface acoustic waves along substrates using smoke particles. <i>Applied Physics Letters</i> , 2007, 91, .  | 3.3  | 42        |
| 76 | A piezoelectric ultrasonic linear micromotor using a slotted stator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010, 57, 1868-1874.                               | 3.0  | 42        |
| 77 | Diatrack particle tracking software: Review of applications and performance evaluation. <i>Traffic</i> , 2017, 18, 840-852.  | 2.7  | 42        |
| 78 | A simple predictive tool for modelling phase inversion in liquid-liquid dispersions. <i>Chemical Engineering Science</i> , 2002, 57, 1069-1072.  | 3.8  | 41        |
| 79 | Monolithic Phononic Crystals with a Surface Acoustic Band Gap from Surface Phonon-Polariton Coupling. <i>Physical Review Letters</i> , 2014, 113, 215503.  | 7.8  | 41        |
| 80 | Toward Complete Miniaturisation of Flow Injection Analysis Systems: Microfluidic Enhancement of Chemiluminescent Detection. <i>Analytical Chemistry</i> , 2014, 86, 10812-10819.                         | 6.5  | 41        |
| 81 | Dynamics of liquid films exposed to high-frequency surface vibration. <i>Physical Review E</i> , 2015, 91, 053015.   | 2.1  | 41        |
| 82 | Microscale anechoic architecture: acoustic diffusers for ultra low power microparticle separation via traveling surface acoustic waves. <i>Lab on A Chip</i> , 2015, 15, 43-46.                          | 6.0  | 41        |
| 83 | Acoustic-Excitonic Coupling for Dynamic Photoluminescence Manipulation of Quasi-2D MoS <sub>2</sub> Nanoflakes. <i>Advanced Optical Materials</i> , 2015, 3, 888-894.                                    | 7.3  | 39        |
| 84 | Nozzleless spray cooling using surface acoustic waves. <i>Journal of Aerosol Science</i> , 2015, 79, 48-60.  | 3.8  | 39        |
| 85 | Assessment of the potential of a high frequency acoustomicrofluidic nebulisation platform for inhaled stem cell therapy. <i>Integrative Biology (United Kingdom)</i> , 2016, 8, 12-20.                   | 1.3  | 37        |
| 86 | Submicron Particle and Cell Concentration in a Closed Chamber Surface Acoustic Wave Microcentrifuge. <i>Analytical Chemistry</i> , 2020, 92, 10024-10032.  | 6.5  | 37        |
| 87 | High Frequency Sonoprocessing: A New Field of Cavitation-Free Acoustic Materials Synthesis, Processing, and Manipulation. <i>Advanced Science</i> , 2021, 8, 2001983.                                    | 11.2 | 37        |
| 88 | Triple Degree-of-Freedom Piezoelectric Ultrasonic Micromotor via Flexural-Axial. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009, 56, 1716-1724.                   | 3.0  | 35        |
| 89 | Substrate dependent drop deformation and wetting under high frequency vibration. <i>Soft Matter</i> , 2011, 7, 7976.   | 2.7  | 35        |
| 90 | Double flow reversal in thin liquid films driven by megahertz-order surface vibration. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20130765. | 2.1  | 35        |

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|-----|---|------|-----------|
| 91  | Simple, low cost MHz-order acoustofluidics using aluminium foil electrodes. Lab on A Chip, 2014, 14, 1802-1805.   | 6.0  | 35        |
| 92  | Extensional flow of low-viscosity fluids in capillary bridges formed by pulsed surface acoustic wave jetting. New Journal of Physics, 2011, 13, 023005.   | 2.9  | 34        |
| 93  | The appearance of boundary layers and drift flows due to high-frequency surface waves. Journal of Fluid Mechanics, 2012, 707, 482-495.  | 3.4  | 34        |
| 94  | The axial-torsional vibration of pretwisted beams. Journal of Sound and Vibration, 2009, 321, 115-136.  | 3.9  | 33        |
| 95  | Poloidal Flow and Toroidal Particle Ring Formation in a Sessile Drop Driven by Megahertz Order Vibration. Langmuir, 2014, 30, 11243-11247.  | 3.5  | 33        |
| 96  | Acoustofluidic assembly of oriented and simultaneously activated metal-organic frameworks. Nature Communications, 2019, 10, 2282.   | 12.8 | 33        |
| 97  | Ultrafast Acoustofluidic Exfoliation of Stratified Crystals. Advanced Materials, 2018, 30, e1704756.  | 21.0 | 32        |
| 98  | Rotational microfluidic motor for on-chip microcentrifugation. Applied Physics Letters, 2011, 98, .   | 3.3  | 31        |
| 99  | Liquid Phase Acoustic Wave Exfoliation of Layered MoS <sub>2</sub> : Critical Impact of Electric Field in Efficiency. Chemistry of Materials, 2018, 30, 5593-5601.  | 6.7  | 31        |
| 100 | Electric tempest in a teacup: The tea leaf analogy to microfluidic blood plasma separation. Applied Physics Letters, 2006, 89, 103516.  | 3.3  | 30        |
| 101 | An ultrasonic piezoelectric motor utilizing axial-torsional coupling in a pretwisted non-circular cross-sectioned prismatic beam. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 832-840. | 3.0  | 30        |
| 102 | Vibration-induced Deagglomeration and Shear-induced Alignment of Carbon Nanotubes in Air. Advanced Functional Materials, 2015, 25, 1014-1023.   | 14.9 | 30        |
| 103 | On-chip Generation of Vortical Flows for Microfluidic Centrifugation. Small, 2020, 16, e1903605.  | 10.0 | 30        |
| 104 | Piezoelectric ultrasonic bidirectional linear actuator for micropositioning fulfilling Feynman's criteria. Applied Physics Letters, 2008, 92, 014107.   | 3.3  | 29        |
| 105 | The dynamics of surface acoustic wave-driven scaffold cell seeding. Biotechnology and Bioengineering, 2009, 103, 387-401.   | 3.3  | 29        |
| 106 | Enhanced Ion Current Rectification in 2D Graphene-Based Nanofluidic Devices. Advanced Science, 2015, 2, 1500062.  | 11.2 | 28        |
| 107 | Acoustically-driven thread-based tuneable gradient generators. Lab on A Chip, 2016, 16, 2820-2828.  | 6.0  | 28        |
| 108 | Cassie-Wenzel wetting transition on nanostructured superhydrophobic surfaces induced by surface acoustic waves. Applied Physics Letters, 2020, 116, .   | 3.3  | 27        |

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|-----|---|------|-----------|
| 109 | Double aperture focusing transducer for controlling microparticle motions in trapezoidal microchannels with surface acoustic waves. <i>Applied Physics Letters</i> , 2009, 95, 134101.                    | 3.3  | 26        |
| 110 | Motility induced changes in viscosity of suspensions of swimming microbes in extensional flows. <i>Soft Matter</i> , 2015, 11, 4658-4668.   | 2.7  | 26        |
| 111 | Amplitude modulation schemes for enhancing acoustically-driven microcentrifugation and micromixing. <i>Biomicrofluidics</i> , 2016, 10, 054106.   | 2.4  | 26        |
| 112 | Drop manipulation and surgery using electric fields. <i>Journal of Colloid and Interface Science</i> , 2007, 306, 368-378.  | 9.4  | 25        |
| 113 | Hydroxypropyl Cellulose Methacrylate as a Photo-Patternable and Biodegradable Hybrid Paper Substrate for Cell Culture and Other Bioapplications. <i>Advanced Healthcare Materials</i> , 2014, 3, 543-554. | 7.6  | 25        |
| 114 | Rapid microscale in-gel processing and digestion of proteins using surface acoustic waves. <i>Lab on A Chip</i> , 2010, 10, 1518.   | 6.0  | 24        |
| 115 | Graphene-Based Planar Nanofluidic Rectifiers. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21856-21865.  | 3.1  | 24        |
| 116 | Stability and efficacy of synthetic cationic antimicrobial peptides nebulized using high frequency acoustic waves. <i>Biomicrofluidics</i> , 2016, 10, 034115.  | 2.4  | 24        |
| 117 | Aggregation of a dense suspension of particles in a microwell using surface acoustic wave microcentrifugation. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.                                       | 2.2  | 24        |
| 118 | Acoustotemplating: rapid synthesis of freestanding quasi-2D MOF/graphene oxide heterostructures for supercapacitor applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7058-7072.           | 10.3 | 24        |
| 119 | Numerical modeling of electro-conjugate fluid flows. <i>Sensors and Actuators A: Physical</i> , 2010, 161, 152-157.   | 4.1  | 23        |
| 120 | Unique flow transitions and particle collection switching phenomena in a microchannel induced by surface acoustic waves. <i>Applied Physics Letters</i> , 2010, 97, 234106.                               | 3.3  | 23        |
| 121 | Free Radical Generation from High-Frequency Electromechanical Dissociation of Pure Water. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4655-4661.   | 4.6  | 23        |
| 122 | Acoustofection: High-Frequency Vibrational Membrane Permeabilization for Intracellular siRNA Delivery into Nonadherent Cells. <i>ACS Applied Bio Materials</i> , 2021, 4, 2781-2789.                      | 4.6  | 23        |
| 123 | Continuous Production of Janus and Composite Liquid Marbles with Tunable Coverage. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 17751-17756.  | 8.0  | 22        |
| 124 | Plug-and-actuate on demand: multimodal individual addressability of microarray plates using modular hybrid acoustic wave technology. <i>Lab on A Chip</i> , 2018, 18, 406-411.                            | 6.0  | 22        |
| 125 | In Situ Generation of Tunable Porosity Gradients in Hydrogel-Based Scaffolds for Microfluidic Cell Culture. <i>Advanced Healthcare Materials</i> , 2014, 3, 1655-1670.                                    | 7.6  | 21        |
| 126 | RF-Activated Standing Surface Acoustic Wave for On-Chip Particle Manipulation. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2014, 62, 1898-1904.   | 4.6  | 21        |



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|-----|--|------|-----------|
| 127 | <i>In situ</i> generation of plasma-activated aerosols via surface acoustic wave nebulization for portable spray-based surface bacterial inactivation. <i>Lab on A Chip</i> , 2020, 20, 1856-1868.   | 6.0  | 21        |
| 128 | A description of phase inversion behaviour in agitated liquid-liquid dispersions under the influence of the Marangoni effect. <i>Chemical Engineering Science</i> , 2002, 57, 3505-3520.   | 3.8  | 20        |
| 129 | Graphene-mediated microfluidic transport and nebulization via high frequency Rayleigh wave substrate excitation. <i>Lab on A Chip</i> , 2016, 16, 3503-3514.   | 6.0  | 20        |
| 130 | Lamb to Rayleigh Wave Conversion on Superstrates as a Means to Facilitate Disposable Acoustomicrofluidic Applications. <i>Analytical Chemistry</i> , 2019, 91, 12358-12368.  | 6.5  | 20        |
| 131 | Simulation Studies of Phase Inversion in Agitated Vessels Using a Monte Carlo Technique. <i>Journal of Colloid and Interface Science</i> , 2002, 248, 443-454.   | 9.4  | 19        |
| 132 | Increasing Exfoliation Yield in the Synthesis of MoS <sub>2</sub> Quantum Dots for Optoelectronic and Other Applications through a Continuous Multicycle Acoustomicrofluidic Approach. <i>ACS Applied Nano Materials</i> , 2018, 1, 2503-2508. | 5.0  | 19        |
| 133 | Modelling and testing of a piezoelectric ultrasonic micro-motor suitable for <i>in vivo</i> micro-robotic applications. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 115018.  | 2.6  | 18        |
| 134 | Precise drop dispensation on superhydrophobic surfaces using acoustic nebulization. <i>Soft Matter</i> , 2013, 9, 3631.  | 2.7  | 18        |
| 135 | High frequency acoustic nebulization for pulmonary delivery of antibiotic alternatives against <i>Staphylococcus aureus</i> . <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2020, 151, 181-188.                              | 4.3  | 18        |
| 136 | Multi-degree-of-freedom ultrasonic micromotor for guidewire and catheter navigation: The NeuroGlide actuator. <i>Applied Physics Letters</i> , 2012, 100, .  | 3.3  | 17        |
| 137 | High frequency acoustic permeabilisation of drugs through tissue for localised mucosal delivery. <i>Lab on A Chip</i> , 2018, 18, 3272-3284.   | 6.0  | 17        |
| 138 | Acoustopipetting: Tunable Nanoliter Sample Dispensing Using Surface Acoustic Waves. <i>Analytical Chemistry</i> , 2019, 91, 5621-5628.   | 6.5  | 17        |
| 139 | Coalescence of Droplets in a Microwell Driven by Surface Acoustic Waves. <i>Langmuir</i> , 2021, 37, 1578-1587.  | 3.5  | 17        |
| 140 | Laguerre Runge-Kutta-Fehlberg Method for Simulating Laser Pulse Propagation in Biological Tissue. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2008, 14, 105-112.   | 2.9  | 16        |
| 141 | Fast Surface Acoustic Wave-Matrix-Assisted Laser Desorption Ionization Mass Spectrometry of Cell Response from Islets of Langerhans. <i>Analytical Chemistry</i> , 2013, 85, 2623-2629.  | 6.5  | 16        |
| 142 | Acoustically-mediated microfluidic nanofiltration through graphene films. <i>Nanoscale</i> , 2017, 9, 6497-6508.   | 5.6  | 16        |
| 143 | Ultrafast assembly of swordlike Cu <sub>3</sub> (1,3,5-benzenetricarboxylate) <sub>n</sub> metal-organic framework crystals with exposed active metal sites. <i>Nanoscale Horizons</i> , 2020, 5, 1050-1057.                                   | 8.0  | 16        |
| 144 | Programmable Phototaxis of Metal-Phenolic Particle Microswimmers. <i>Advanced Materials</i> , 2021, 33, e2006177.  | 21.0 | 16        |

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|-----|---|------|-----------|
| 145 | Viscoelastic flow in a two-dimensional collapsible channel. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010, 165, 1204-1218.   | 2.4  | 15        |
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