James R Friend

List of Publications by Year
in descending order

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226	10,351	38742	39675
papers	citations	50 h-index	94 g-index

233	233	233	8318
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microscale acoustofluidics: Microfluidics driven via acoustics and ultrasonics. Reviews of Modern Physics, 2011, 83, 647-704.	45.6	742
2	Surface Acoustic Wave Microfluidics. Annual Review of Fluid Mechanics, 2014, 46, 379-406.	25.0	456
3	Microfluidic Devices for Bioapplications. Small, 2011, 7, 12-48.	10.0	455
4	Ultrafast microfluidics using surface acoustic waves. Biomicrofluidics, 2009, 3, 012002.	2.4	330
5	Fabrication of microfluidic devices using polydimethylsiloxane. Biomicrofluidics, 2010, 4, .	2.4	308
6	Electrochemical Control of Photoluminescence in Two-Dimensional MoS₂ Nanoflakes. ACS Nano, 2013, 7, 10083-10093.	14.6	282
7	Particle concentration and mixing in microdrops driven by focused surface acoustic waves. Journal of Applied Physics, 2008, 104, .	2.5	268
8	Interfacial destabilization and atomization driven by surface acoustic waves. Physics of Fluids, 2008, 20, .	4.0	229
9	Spring constant calibration of atomic force microscope cantilevers of arbitrary shape. Review of Scientific Instruments, 2012, 83, 103705.	1.3	228
10	Micro/nano acoustofluidics: materials, phenomena, design, devices, and applications. Lab on A Chip, 2018, 18, 1952-1996.	6.0	198
11	Piezoelectric ultrasonic micro/milli-scale actuators. Sensors and Actuators A: Physical, 2009, 152, 219-233.	4.1	195
12	Surface acoustic wave concentration of particle and bioparticle suspensions. Biomedical Microdevices, 2007, 9, 647-656.	2.8	191
13	Interfacial Jetting Phenomena Induced by Focused Surface Vibrations. Physical Review Letters, 2009, 103, 024501.	7.8	173
14	Microparticle collection and concentration via a miniature surface acoustic wave device. Lab on A Chip, 2007, 7, 618.	6.0	168
15	Plasmon Resonances of Highly Doped Two-Dimensional MoS₂. Nano Letters, 2015, 15, 883-890.	9.1	167
16	Uniform mixing in paper-based microfluidic systems using surface acoustic waves. Lab on A Chip, 2012, 12, 773-779.	6.0	153
17	Miniature inhalation therapy platform using surface acoustic wave microfluidic atomization. Lab on A Chip, 2009, 9, 2184.	6.0	151
18	Electrospinning carbon nanotube polymer composite nanofibers. Journal of Experimental Nanoscience, 2006, 1, 177-209.	2.4	134

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19	Frequency effects on the scale and behavior of acoustic streaming. Physical Review E, 2014, 89, 013203.	2.1	130
20	Paper-Based Microfluidic Surface Acoustic Wave Sample Delivery and Ionization Source for Rapid and Sensitive Ambient Mass Spectrometry. Analytical Chemistry, 2011, 83, 3260-3266.	6.5	113
21	Atomization off thin water films generated by high-frequency substrate wave vibrations. Physical Review E, 2012, 86, 056312.	2.1	113
22	Exploitation of surface acoustic waves to drive size-dependent microparticle concentration within a droplet. Lab on A Chip, 2010, 10, 2979.	6.0	110
23	Ultrasonic nebulization platforms for pulmonary drug delivery. Expert Opinion on Drug Delivery, 2010, 7, 663-679.	5.0	106
24	Rapid generation of protein aerosols and nanoparticles via surface acoustic wave atomization. Nanotechnology, 2008, 19, 455103.	2.6	103
25	Rapid fluid flow and mixing induced in microchannels using surface acoustic waves. Europhysics Letters, 2009, 87, 47003.	2.0	99
26	Evaporative self-assembly assisted synthesis of polymeric nanoparticles by surface acoustic wave atomization. Nanotechnology, 2008, 19, 145301.	2.6	98
27	Acoustofluidics for biomedical applications. Nature Reviews Methods Primers, 2022, 2, .	21.2	95
28	The extraction of liquid, protein molecules and yeast cells from paper through surface acoustic wave atomization. Lab on A Chip, 2010, 10, 470-476.	6.0	87
29	Unique fingering instabilities and soliton-like wave propagation in thin acoustowetting films. Nature Communications, 2012, 3, 1167.	12.8	86
30	Transmitting high power rf acoustic radiation via fluid couplants into superstrates for microfluidics. Applied Physics Letters, 2009, 94, .	3.3	84
31	Organosilane deposition for microfluidic applications. Biomicrofluidics, 2011, 5, 36501-365017.	2.4	84
32	Quantification of surface acoustic wave induced chaotic mixing-flows in microfluidic wells. Sensors and Actuators B: Chemical, 2011, 160, 1565-1572.	7.8	81
33	Effective pulmonary delivery of an aerosolized plasmid DNA vaccine via surface acoustic wave nebulization. Respiratory Research, 2014, 15, 60.	3.6	81
34	Particle concentration via acoustically driven microcentrifugation: microPIV flow visualization and numerical modelling studies. Microfluidics and Nanofluidics, 2010, 8, 73-84.	2.2	76
35	Template-free Synthesis and Encapsulation Technique for Layer-by-Layer Polymer Nanocarrier Fabrication. ACS Nano, 2011, 5, 9583-9591.	14.6	76
36	A scaffold cell seeding method driven by surface acoustic waves. Biomaterials, 2007, 28, 4098-4104.	11.4	74

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37	Microfluidic Colloidal Island Formation and Erasure Induced by Surface Acoustic Wave Radiation. Physical Review Letters, 2008, 101, 084502.	7.8	74
38	Surface Vibration Induced Spatial Ordering of Periodic Polymer Patterns on a Substrate. Langmuir, 2008, 24, 10629-10632.	3.5	71
39	A brief review of actuation at the micro-scale using electrostatics, electromagnetics and piezoelectric ultrasonics. Acoustical Science and Technology, 2010, 31, 115-123.	0.5	69
40	Capillary wave motion excited by high frequency surface acoustic waves. Physics of Fluids, 2010, 22, .	4.0	66
41	UV epoxy bonding for enhanced SAW transmission and microscale acoustofluidic integration. Lab on A Chip, 2012, 12, 2970.	6.0	66
42	Mixed mode of dissolving immersed nanodroplets at a solidâ€“water interface. Soft Matter, 2015, 11, 1889-1900.	2.7	65
43	Effect of surface acoustic waves on the viability, proliferation and differentiation of primary osteoblast-like cells. Biomicrofluidics, 2009, 3, 034102.	2.4	64
44	Piezoelectric ultrasonic resonant motor with stator diameter less than 250 Âµm: theProteusmotor. Journal of Micromechanics and Microengineering, 2009, 19, 022001.	2.6	63
45	Pulmonary monoclonal antibody delivery via a portable microfluidic nebulization platform. Biomicrofluidics, 2015, 9, 052603.	2.4	63
46	Continuous flow actuation between external reservoirs in small-scale devices driven by surface acoustic waves. Lab on A Chip, 2014, 14, 750-758.	6.0	62
47	A non-contact linear bearing and actuator via ultrasonic levitation. Sensors and Actuators A: Physical, 2007, 135, 740-747.	4.1	60
48	Microscale Capillary Wave Turbulence Excited by High Frequency Vibration. Langmuir, 2013, 29, 3835-3845.	3.5	58
49	Cell agglomeration in the wells of a 24-well plate using acoustic streaming. Lab on A Chip, 2017, 17, 876-886.	6.0	58
50	Enabling practical surface acoustic wave nebulizer drug delivery via amplitude modulation. Lab on A Chip, 2014, 14, 1858-1865.	6.0	57
51	Planar microfluidic drop splitting and merging. Lab on A Chip, 2015, 15, 1942-1951.	6.0	54
52	Fluid-structure interaction in deformable microchannels. Physics of Fluids, 2012, 24, .	4.0	53
53	Sonogenetic control of mammalian cells using exogenous Transient Receptor Potential A1 channels. Nature Communications, 2022, 13, 600.	12.8	53
54	A Low-Profile Design for the Noncontact Ultrasonically Levitated Stage. Japanese Journal of Applied Physics, 2005, 44, 4662-4665.	1.5	51

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55	Electrokinetic actuation of low conductivity dielectric liquids. Sensors and Actuators B: Chemical, 2009, 140, 287-294.	7.8	49
56	Acoustic Nanofluidics via Roomâ€Temperature Lithium Niobate Bonding: A Platform for Actuation and Manipulation of Nanoconfined Fluids and Particles. Advanced Functional Materials, 2016, 26, 7861-7872.	14.9	49
57	Enzyme-free release of adhered cells from standard culture dishes using intermittent ultrasonic traveling waves. Communications Biology, 2019, 2, 393.	4.4	49
58	Rapid production of protein-loaded biodegradable microparticles using surface acoustic waves. Biomicrofluidics, 2009, 3, 014102.	2.4	48
59	Microfluidic blood plasma separation via bulk electrohydrodynamic flows. Biomicrofluidics, 2007, 1, 014103.	2.4	47
60	Soft robotic steerable microcatheter for the endovascular treatment of cerebral disorders. Science Robotics, 2021, 6, .	17.6	47
61	Surface acoustic waves as an energy source for drop scale synthetic chemistry. Lab on A Chip, 2009, 9, 754.	6.0	46
62	Miniaturized Labâ€onâ€aâ€Disc (miniLOAD). Small, 2012, 8, 1881-1888.	10.0	46
63	Resonant Mode Design for Noncontact Ultrasonic Motor with Levitated Rotor. Japanese Journal of Applied Physics, 2005, 44, 4666-4668.	1.5	42
64	Direct visualization of surface acoustic waves along substrates using smoke particles. Applied Physics Letters, 2007, 91, .	3.3	42
65	A piezoelectric ultrasonic linear micromotor using a slotted stator. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1868-1874.	3.0	42
66	Monolithic Phononic Crystals with a Surface Acoustic Band Gap from Surface Phonon-Polariton Coupling. Physical Review Letters, 2014, 113, 215503.	7.8	41
67	Toward Complete Miniaturisation of Flow Injection Analysis Systems: Microfluidic Enhancement of Chemiluminescent Detection. Analytical Chemistry, 2014, 86, 10812-10819.	6.5	41
68	Dynamics of liquid films exposed to high-frequency surface vibration. Physical Review E, 2015, 91, 053015.	2.1	41
69	Microscale anechoic architecture: acoustic diffusers for ultra low power microparticle separation via traveling surface acoustic waves. Lab on A Chip, 2015, 15, 43-46.	6.0	41
70	A simple bidirectional linear microactuator for nanopositioning - the "Baltan" microactuator. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1160-1168.	3.0	40
71	Support Mechanism for the Ball Rotor in the Three-Degree-of-Freedom Ultrasonic Motor. Japanese Journal of Applied Physics, 2003, 42, 3000-3001.	1.5	39
72	Acousticâ€“Excitonic Coupling for Dynamic Photoluminescence Manipulation of Quasiâ€2D MoS₂ Nanoflakes. Advanced Optical Materials, 2015, 3, 888-894.	7.3	39

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73	Nozzleless spray cooling using surface acoustic waves. Journal of Aerosol Science, 2015, 79, 48-60.	3.8	39
74	MADVent: A lowâ€cost ventilator for patients with COVIDâ€19. Medical Devices & Sensors, 2020, 3, e10106.	2.7	38
75	A piezoelectric linear actuator formed from a multitude of bimorphs. Sensors and Actuators A: Physical, 2004, 109, 242-251.	4.1	36
76	A Piezoelectric Micromotor Using In-Plane Shearing of PZT Elements. IEEE/ASME Transactions on Mechatronics, 2004, 9, 467-473.	5.8	35
77	Triple Degree-of-Freedom Piezoelectric Ultrasonic Micromotor via Flexural-Axial. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1716-1724.	3.0	35
78	Substrate dependent drop deformation and wetting under high frequency vibration. Soft Matter, 2011, 7, 7976.	2.7	35
79	Double flow reversal in thin liquid films driven by megahertz-order surface vibration. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130765.	2.1	35
80	Simple, low cost MHz-order acoustomicrofluidics using aluminium foil electrodes. Lab on A Chip, 2014, 14, 1802-1805.	6.0	35
81	Enabling Rapid Charging Lithium Metal Batteries via Surface Acoustic Waveâ€Driven Electrolyte Flow. Advanced Materials, 2020, 32, e1907516.	21.0	35
82	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
83	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
84	The axialâ€“torsional vibration of pretwisted beams. Journal of Sound and Vibration, 2009, 321, 115-136.	3.9	33
85	Poloidal Flow and Toroidal Particle Ring Formation in a Sessile Drop Driven by Megahertz Order Vibration. Langmuir, 2014, 30, 11243-11247.	3.5	33
86	Microliter ultrafast centrifuge platform for size-based particle and cell separation and extraction using novel omnidirectional spiral surface acoustic waves. Lab on A Chip, 2021, 21, 904-915.	6.0	33
87	An ultrasonically levitated noncontact stage using traveling vibrations on precision ceramic guide rails. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 597-604.	3.0	31
88	Rotational microfluidic motor for on-chip microcentrifugation. Applied Physics Letters, 2011, 98, .	3.3	31
89	A single-element tuning fork piezoelectric linear actuator. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 179-186.	3.0	30
90	Electric tempest in a teacup: The tea leaf analogy to microfluidic blood plasma separation. Applied Physics Letters, 2006, 89, 103516.	3.3	30

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91	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
92	Vibrationâ€Induced Deagglomeration and Shearâ€Induced Alignment of Carbon Nanotubes in Air. Advanced Functional Materials, 2015, 25, 1014-1023.	14.9	30
93	Piezoelectric ultrasonic bidirectional linear actuator for micropositioning fulfilling Feynmanâ€™s criteria. Applied Physics Letters, 2008, 92, 014107.	3.3	29
94	The dynamics of surface acoustic waveâ€driven scaffold cell seeding. Biotechnology and Bioengineering, 2009, 103, 387-401.	3.3	29
95	Straightforward biodegradable nanoparticle generation through megahertz-order ultrasonic atomization. Applied Physics Letters, 2006, 89, 064105.	3.3	28
96	Enhanced Ion Current Rectification in 2D Grapheneâ€Based Nanofluidic Devices. Advanced Science, 2015, 2, 1500062.	11.2	28
97	Double aperture focusing transducer for controlling microparticle motions in trapezoidal microchannels with surface acoustic waves. Applied Physics Letters, 2009, 95, 134101.	3.3	26
98	Motility induced changes in viscosity of suspensions of swimming microbes in extensional flows. Soft Matter, 2015, 11, 4658-4668.	2.7	26
99	Pulsed Low-Frequency Magnetic Fields Induce Tumor Membrane Disruption and Altered Cell Viability. Biophysical Journal, 2020, 118, 1552-1563.	0.5	26
100	Hydroxypropyl Cellulose Methacrylate as a Photoâ€Patternable and Biodegradable Hybrid Paper Substrate for Cell Culture and Other Bioapplications. Advanced Healthcare Materials, 2014, 3, 543-554.	7.6	25
101	Aluminium coating of lead zirconate titanateâ€”A study of cold spray variables. Surface and Coatings Technology, 2010, 205, 2016-2022.	4.8	24
102	Rapid microscale in-gel processing and digestion of proteins using surface acoustic waves. Lab on A Chip, 2010, 10, 1518.	6.0	24
103	Graphene-Based Planar Nanofluidic Rectifiers. Journal of Physical Chemistry C, 2014, 118, 21856-21865.	3.1	24
104	Numerical modeling of electro-conjugate fluid flows. Sensors and Actuators A: Physical, 2010, 161, 152-157.	4.1	23
105	Unique flow transitions and particle collection switching phenomena in a microchannel induced by surface acoustic waves. Applied Physics Letters, 2010, 97, 234106.	3.3	23
106	Improving and Predicting Fluid Atomization via Hysteresisâ€Free Thickness Vibration of Lithium Niobate. Advanced Functional Materials, 2018, 28, 1704359.	14.9	22
107	Focused surface acoustic wave locally removes cells from culture surface. Lab on A Chip, 2021, 21, 1299-1306.	6.0	22
108	In Situ Generation of Tunable Porosity Gradients in Hydrogelâ€Based Scaffolds for Microfluidic Cell Culture. Advanced Healthcare Materials, 2014, 3, 1655-1670.	7.6	21

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109	RF-Activated Standing Surface Acoustic Wave for On-Chip Particle Manipulation. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1898-1904.	4.6	21
110	Note: Calibration of atomic force microscope cantilevers using only their resonant frequency and quality factor. Review of Scientific Instruments, 2014, 85, 116101.	1.3	20
111	Inducing Mild Traumatic Brain Injury in C. elegans via Cavitation-Free Surface Acoustic Wave-Driven Ultrasonic Irradiation. Scientific Reports, 2019, 9, 12775.	3.3	20
112	Practical microcircuits for handheld acoustofluidics. Lab on A Chip, 2021, 21, 1352-1363.	6.0	20
113	An ultrasonic linear motor using ridge-mode traveling waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1735-1742.	3.0	19
114	Facile Analytical Extraction of the Hyperelastic Constants for the Two-Parameter Mooneyâ€“Rivlin Model from Experiments on Soft Polymers. Soft Robotics, 2021, 8, 365-370.	8.0	19
115	Droplet Ejection at Controlled Angles via Acoustofluidic Jetting. Physical Review Letters, 2020, 125, 184504.	7.8	19
116	Manipulation and Mixing of 200 Femtoliter Droplets in Nanofluidic Channels Using MHzâ€Order Surface Acoustic Waves. Advanced Science, 2021, 8, 2100408.	11.2	19
117	A torsional transducer through in-plane shearing of paired planar piezoelectric elements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 871-878.	3.0	18
118	Modelling and testing of a piezoelectric ultrasonic micro-motor suitable forin vivomicro-robotic applications. Journal of Micromechanics and Microengineering, 2010, 20, 115018.	2.6	18
119	Precise drop dispensation on superhydrophobic surfaces using acoustic nebulization. Soft Matter, 2013, 9, 3631.	2.7	18
120	Uncertainty in least-squares fits to the thermal noise spectra of nanomechanical resonators with applications to the atomic force microscope. Review of Scientific Instruments, 2014, 85, 025104.	1.3	18
121	Design and Fabrication of Negative-Refractive-Index Metamaterial Unit Cells for Near-Megahertz Enhanced Acoustic Transmission in Biomedical Ultrasound Applications. Physical Review Applied, 2021, 15, .	3.8	18
122	Multi-degree-of-freedom ultrasonic micromotor for guidewire and catheter navigation: The NeuroGlide actuator. Applied Physics Letters, 2012, 100, .	3.3	17
123	Characteristics of Ultrasonic Suction Pump Without Moving Parts. Japanese Journal of Applied Physics, 2005, 44, 4658-4661.	1.5	16
124	Laguerre Runge--Kutta--Fehlberg Method for Simulating Laser Pulse Propagation in Biological Tissue. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 105-112.	2.9	16
125	Fast Surface Acoustic Wave-Matrix-Assisted Laser Desorption Ionization Mass Spectrometry of Cell Response from Islets of Langerhans. Analytical Chemistry, 2013, 85, 2623-2629.	6.5	16
126	Ultrasound Mediated Cellular Deflection Results in Cellular Depolarization. Advanced Science, 2022, 9, e2101950.	11.2	16

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127	Viscoelastic flow in a two-dimensional collapsible channel. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1204-1218.	2.4	15
128	Self-assembled highly crystalline TiO2 mesostructures for sunlight-driven, pH-responsive photodegradation of dyes. Materials Research Bulletin, 2014, 55, 13-18.	5.2	15
129	The Vibration Behavior of Subâ€Micrometer Gas Vesicles in Response to Acoustic Excitation Determined via Laser Doppler Vibrometry. Advanced Functional Materials, 2020, 30, 2000239.	14.9	15
130	Traveling wave excitation in a flexural vibration ring by using a torsional-flexural composite transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2001, 48, 1054-1059.	3.0	14
131	Surface acoustic wave solid-state rotational micromotor. Applied Physics Letters, 2012, 100, .	3.3	14
132	Polariton-based band gap and generation of surface acoustic waves in acoustic superlattice lithium niobate. Journal of Applied Physics, 2013, 114, 054904.	2.5	14
133	Controlled morphogenesis and self-assembly of bismutite nanocrystals into three-dimensional nanostructures and their applications. Journal of Materials Chemistry A, 2014, 2, 2275-2282.	10.3	14
134	Focused ion beam milling of microchannels in lithium niobate. Biomicrofluidics, 2012, 6, 012819.	2.4	13
135	An emerging reactor technology for chemical synthesis: Surface acoustic wave-assisted closed-vessel Suzuki coupling reactions. Ultrasonics Sonochemistry, 2014, 21, 1305-1309.	8.2	13
136	Powerful Acoustogeometric Streaming from Dynamic Geometric Nonlinearity. Physical Review Letters, 2021, 126, 164502.	7.8	13
137	Medical Devices for Low- and Middle-Income Countries: A Review and Directions for Development. Journal of Medical Devices, Transactions of the ASME, 2020, 14, 010803.	0.7	13
138	Extensional viscosity of copper nanowire suspensions in an aqueous polymer solution. Soft Matter, 2015, 11, 8076-8082.	2.7	12
139	Acoustically enhanced heat transport. Review of Scientific Instruments, 2016, 87, 014902.	1.3	12
140	Efficient subculture process for adherent cells by selective collection using cultivation substrate vibration. IEEE Transactions on Biomedical Engineering, 2016, 64, 1-1.	4.2	12
141	Optimized, Omnidirectional Surface Acoustic Wave Source: 152Â° Y-Rotated Cut of Lithium Niobate for Acoustofluidics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2176-2186.	3.0	12
142	Piezoelectric ultrasonic resonant micromotor with a volume of less than 1 mm³ for use in medical microbots. , 2009, , .		11
143	UV/ozone-assisted low temperature preparation of mesoporous TiO₂with tunable phase composition and enhanced solar light photocatalytic activity. Journal of Materials Chemistry A, 2014, 2, 18791-18795.	10.3	11
144	A review: controlling the propagation of surface acoustic waves via waveguides for potential use in acoustofluidics. Mechanical Engineering Reviews, 2020, 7, 19-00402-19-00402.	4.7	11

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145	Fabrication of Surface Acoustic Wave Devices on Lithium Niobate. Journal of Visualized Experiments, 2020, , .	0.3	11
146	Using laser Doppler vibrometry to measure capillary surface waves on fluid-fluid interfaces. Biomicrofluidics, 2010, 4, .	2.4	10
147	Surface acoustic wave micromotor with arbitrary axis rotational capability. Applied Physics Letters, 2011, 99, .	3.3	10
148	Nanofabrication of highly ordered, tunable metallic mesostructures via quasi-hard-templating of lyotropic liquid crystals. Scientific Reports, 2015, 4, 7420.	3.3	10
149	A Local Nanofiber-Optic Ear. ACS Photonics, 2016, 3, 1762-1767.	6.6	10
150	Numerical analysis of the symmetric hybrid transducer ultrasonic motor. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2001, 48, 1625-1631.	3.0	9
151	Ultraviolet laser induced domain inversion on chromium coated lithium niobate crystals. Optical Materials Express, 2014, 4, 241.	3.0	9
152	Single ventilator for multiple patients during COVID19 surge: matching and balancing patients. Critical Care, 2020, 24, 357.	5.8	9
153	Rapid and Accurate Pressure Sensing Device for Direct Measurement of Intraocular Pressure. Translational Vision Science and Technology, 2020, 9, 28.	2.2	9
154	Two pathways are required for ultrasound-evoked behavioral changes in Caenorhabditis elegans. PLoS ONE, 2022, 17, e0267698.	2.5	9
155	Nebulization of siRNA for inhalation therapy based on a microfluidic surface acoustic wave platform. Ultrasonics Sonochemistry, 2022, 88, 106088.	8.2	9
156	A traveling-wave, modified ring linear piezoelectric microactuator with enclosed piezoelectric elements - the "scream" actuator. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1343-1353.	3.0	8
157	Micromotor of Less Than 1 mm^3 Volume for In Vivo Medical Procedures. , 2009, , .		8
158	UV Direct Write Metal Enhanced Redox (MER) Domain Engineering for Realization of Surface Acoustic Devices on Lithium Niobate. Advanced Materials Interfaces, 2014, 1, 1400006.	3.7	8
159	Decontaminating surfaces with atomized disinfectants generated by a novel thickness-mode lithium niobate device. Applied Microbiology and Biotechnology, 2018, 102, 6459-6467.	3.6	8
160	Rotating bouncing disks, tossing pizza dough, and the behavior of ultrasonic motors. Physical Review E, 2009, 80, 046201.	2.1	7
161	Robotics and Artificial Intelligence in Endovascular Neurosurgery. Cureus, 2022, 14, e23662.	0.5	7
162	Ultrasonic characterization of poling in lead zirconate titanate ceramics. Applied Physics Letters, 2001, 79, 2794-2796.	3.3	6

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163	Acoustic Waveguides for Actuators. Japanese Journal of Applied Physics, 2004, 43, 3040-3044.	1.5	6
164	Concentration and mixing of particles in microdrops driven by focused surface acoustic waves. , 2008, , .		6
165	MicroPIV and micromixing study of corona wind induced microcentrifugation flows in a cylindrical cavity. Microfluidics and Nanofluidics, 2010, 8, 231-241.	2.2	6
166	Note: Improved calibration of atomic force microscope cantilevers using multiple reference cantilevers. Review of Scientific Instruments, 2015, 86, 056106.	1.3	6
167	Driving useful morphological changes in magnetic nanoparticle structures through the application of acoustic waves and magnetic fields. Applied Physics Letters, 2018, 113, 034103.	3.3	6
168	Microscale Concert Hall Acoustics to Produce Uniform Ultrasound Stimulation for Targeted Sonogenetics in hsTRPA1â€Transfected Cells. Advanced NanoBiomed Research, 2022, 2, .	3.6	6
169	Numerical analysis of the hybrid transducer ultrasonic motor: comparison of characteristics calculated by transmission-line and lumped-element models. Ultrasonics, 2002, 39, 559-565.	3.9	5
170	Investigation of SAW atomization. , 2009, , .		5
171	A miniaturized surface acoustic wave atomizer with a disposable pump-free liquid supply system for continuous atomization. , 2011, , .		5
172	Unapodization: a method to produce laterally uniform surface acoustic waves for acoustofluidics. Journal of Micromechanics and Microengineering, 2021, 31, 104001.	2.6	5
173	Novel Coronavirus Disease 2019 (COVID-19) Aerosolization Box: Design Modifications for Patient Safety. Journal of Cardiothoracic and Vascular Anesthesia, 2020, 34, 2274-2276.	1.3	5
174	SAW atomization application on inhaled pulmonary drug delivery. , 2008, , .		4
175	Fabrication of Nanoheight Channels Incorporating Surface Acoustic Wave Actuation via Lithium Niobate for Acoustic Nanofluidics. Journal of Visualized Experiments, 2020, , .	0.3	4
176	MHz-Order Surface Acoustic Wave Thruster for Underwater Silent Propulsion. Micromachines, 2020, 11, 419.	2.9	4
177	Vacuum exhausted isolation locker (VEIL) to reduce inpatient droplet/aerosol transmission during COVID-19 pandemic. Infection Control and Hospital Epidemiology, 2021, , 1-10.	1.8	4
178	Well-free agglomeration and on-demand three-dimensional cell cluster formation using guided surface acoustic waves through a couplant layer. Biomedical Microdevices, 2022, 24, .	2.8	4
179	An ultrasonically levitated non-contact sliding table with the traveling vibrations on fine-ceramic beams. , 0, , .		3
180	The behavior of bouncing disks and pizza tossing. Europhysics Letters, 2009, 85, 60002.	2.0	3

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181	A study on axial and torsional resonant mode matching for a mechanical system with complex nonlinear geometries. Review of Scientific Instruments, 2010, 81, 063901.	1.3	3
182	ZnO/sapphire based layered surface acoustic wave devices for microfluidic applications. , 2011, , .		3
183	Arbitrary axis rotating surface acoustic wave micro motor. , 2011, , .		3
184	Ab Initio DFT Simulations of Nanostructures. , 2012, , 11-17.		3
185	Electrowetting, Applications. , 2008, , 606-615.		3
186	Vibration analysis of pretwisted beams for the design of hybrid axial-torsional transducers. , 2007, , .		2
187	Unraveling interfacial jetting phenomena induced by focused surface acoustic waves. , 2009, , .		2
188	Inducing rapid fluid flows in microchannels with surface acoustic waves. , 2009, , .		2
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