Qiang Tang

List of Publications by Year
in descending order

45	585	623734 14	677142 22
papers	citations	h-index	g-index

46	46	46	448
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diversity of acoustic streaming in a rectangular acoustofluidic field. Ultrasonics, 2015, 58, 27-34.	3.9	53
2	A small linear ultrasonic motor utilizing longitudinal and bending modes of a piezoelectric tube. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 705-709.	3.0	47
3	Temperature evaluation of traveling-wave ultrasonic motor considering interaction between temperature rise and motor parameters. Ultrasonics, 2015, 57, 159-166.	3.9	41
4	Parallel Labelâ€Free Isolation of Cancer Cells Using Arrays of Acoustic Microstreaming Traps. Advanced Materials Technologies, 2019, 4, 1800374.	5.8	35
5	Acoustofluidic multi-well plates for enrichment of micro/nano particles and cells. Lab on A Chip, 2020, 20, 3399-3409.	6.0	33
6	On-chip simultaneous rotation of large-scale cells by acoustically oscillating bubble array. Biomedical Microdevices, 2020, 22, 13.	2.8	32
7	Mobile acoustic streaming based trapping and 3-dimensional transfer of a single nanowire. Applied Physics Letters, 2012, 101, 093113.	3.3	29
8	Manipulations of silver nanowires in a droplet on a low-frequency ultrasonic stage. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 622-629.	3.0	21
9	Sound-Controlled Rotary Driving of a Single Nanowire. IEEE Nanotechnology Magazine, 2014, 13, 437-441.	2.0	21
10	A Branched Beam-Based Vibration Energy Harvester. Journal of Electronic Materials, 2014, 43, 3912-3921.	2.2	21
11	Eckart acoustic streaming in a heptagonal chamber by multiple acoustic transducers. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	21
12	Gas Identification by a Single Metal-Oxide-Semiconductor Sensor Assisted by Ultrasound. ACS Sensors, 2019, 4, 2491-2496.	7.8	21
13	Analyses of acoustic streaming field in the probe-liquid-substrate system for nanotrapping. Microfluidics and Nanofluidics, 2015, 19, 1395-1408.	2.2	17
14	Acoustofluidic black holes for multifunctional in-droplet particle manipulation. Science Advances, 2022, 8, eabm2592.	10.3	17
15	Physical principle of enhancing the sensitivity of a metal oxide gas sensor using bulk acoustic waves. Journal of Applied Physics, 2018, 124, .	2.5	14
16	Nano concentration by acoustically generated complex spiral vortex field. Applied Physics Letters, 2017, 110, .	3.3	13
17	Analyses of acoustofluidic field in ultrasonic needleâ€“liquidâ€“substrate system for micro-/nanoscale material concentration. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	13
18	Linear concentration of microscale samples under an ultrasonically vibrating needle in water on a substrate surface. Sensors and Actuators B: Chemical, 2014, 193, 472-477.	7.8	11

#	Article	IF	Citations
19	An ultrasonic manipulator with noncontact and contact-type nanowire trapping functions. Sensors and Actuators A: Physical, 2015, 232, 13-19.	4.1	10
20	Controlled removal of micro/nanoscale particles in submillimeter-diameter area on a substrate. Review of Scientific Instruments, 2017, 88, 105003.	1.3	9
21	High-Performance Ultrasonic Tweezers for Manipulation of Motile and Still Single Cells in a Droplet. Ultrasound in Medicine and Biology, 2019, 45, 3018-3027.	1.5	8
22	PSPICE-Based Analyses of the Vibration Energy Harvester System With Multiple Piezoelectric Units. Canadian Journal of Electrical and Computer Engineering, 2015, 38, 246-250.	2.0	7
23	2D acoustofluidic patterns in an ultrasonic chamber modulated by phononic crystal structures. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	7
24	Principle analysis for the micromanipulation probe-type ultrasonic nanomotor. Sensors and Actuators A: Physical, 2021, 318, 112524.	4.1	6
25	Ultrasonic drive of small mechanical components on a tapered metal strip. Ultrasonics, 2013, 53, 417-422.	3.9	5
26	Diversity of 2D Acoustofluidic Fields in an Ultrasonic Cavity Generated by Multiple Vibration Sources. Micromachines, 2019, 10, 803.	2.9	5
27	A new strategy to capture single biological micro particles at the interface between a water film and substrate by ultrasonic tweezers. Ultrasonics, 2020, 103, 106067.	3.9	5
28	System Design and SVM Identification Algorithm for the Ultrasonically Catalyzed Single-Sensor E-Nose. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	5
29	Sound induced lobed pattern in aqueous suspension film of micro particles. Sensors and Actuators A: Physical, 2011, 167, 77-83.	4.1	4
30	An ultrasonic stage for controlled spin of micro particles. Review of Scientific Instruments, 2012, 83, 045004.	1.3	4
31	An infrasonic vibration energy harvester using pendulum impact. International Journal of Applied Electromagnetics and Mechanics, 2015, 47, 467-474.	0.6	4
32	Rotational manipulation of massive particles in a 2D acoustofluidic chamber constituted by multiple nonlinear vibration sources. Chinese Physics B, 2022, 31, 044301.	1.4	3
33	Improvement in step resolution and response time of ultrasonic motor by using a piezoelectric resonant shunting circuit as damping control. Review of Scientific Instruments, 2020, 91, 125008.	1.3	3
34	An ultrasonic contact-type position restoration mechanism. Review of Scientific Instruments, 2014, 85, 124901.	1.3	2
35	Ultrasonic removal of coarse and fine droplets in air. Separation and Purification Technology, 2015, 153, 156-161.	7.9	2
36	Modeling and Analysis of the Two-Dimensional Axisymmetric Acoustofluidic Fields in the Probe-Type and Substrate-Type Ultrasonic Micro/Nano Manipulation Systems. Micromachines, 2020, 11, 22.	2.9	2

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37	Effect of Ultrasonic Excitation on Discharge Performance of a Button Zincâ€“Air Battery. Micromachines, 2021, 12, 792.	2.9	2
38	Sophisticated acoustofluidic patterns generated in quasi-SierpiÅ„ski-carpet shaped chambers with heterogeneous radiation surface distributions. Physica Scripta, 2022, 97, 085209.	2.5	1
39	Thermal characteristics of traveling wave rotary ultrasonic motors. , 2011, , .		0
40	PSPICE analyses of vibration energy harvester systems with multiple piezoelectric components. , 2013, , .		0
41	FEM analyses of acoustic streaming in a water droplet at the center of an ultrasonic stage. , 2014, , .		0
42	FEM analyses of acoustic streaming eddies in a rectangular acoustofluidic field. , 2014, , .		0
43	Analysis of complex spiral vortex field in nano particle concentration. , 2017, , .		0
44	A flexible ultrasonic micro tool-based AgNS fabrication process. Applied Nanoscience (Switzerland), 2018, 8, 1579-1586.	3.1	0
45	Controlled Aggregation And Transportation Of Nanoparticles Using Ultrasonic Needle Probe. , 2019, , .		0