Junhui Hu

List of Publications by Year
in descending order

41 papers	579 citations	623734 14 h-index	677142 22 g-index
43 all docs	43 docs citations	43 times ranked	323 citing authors

#	Article	IF	Citations
1	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
2	Acoustofluidic black holes for multifunctional in-droplet particle manipulation. Science Advances, 2022, 8, eabm2592.	10.3	17
3	Exploration for a BP-ANN model for gas identification and concentration measurement with an ultrasonically radiated catalytic combustion gas sensor. Sensors and Actuators B: Chemical, 2022, 362, 131733.	7.8	8
4	Principle analysis for the micromanipulation probe-type ultrasonic nanomotor. Sensors and Actuators A: Physical, 2021, 318, 112524.	4.1	6
5	Effect of Ultrasonic Excitation on Discharge Performance of a Button Zincâ€“Air Battery. Micromachines, 2021, 12, 792.	2.9	2
6	Focused Ultrasound Assistance to the MOS Gas Sensor System. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1009-1016.	3.0	6
7	A novel strategy to identify gases by a single catalytic combustible sensor working in its linear range. Sensors and Actuators B: Chemical, 2020, 321, 128514.	7.8	13
8	Acoustofluidic multi-well plates for enrichment of micro/nano particles and cells. Lab on A Chip, 2020, 20, 3399-3409.	6.0	33
9	An Ultrasonic Tweezer With Multiple Manipulation Functions Based on the Double-Parabolic-Reflector Wave-Guided High-Power Ultrasonic Transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2471-2474.	3.0	4
10	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
11	Gas Identification by a Single Metal-Oxide-Semiconductor Sensor Assisted by Ultrasound. ACS Sensors, 2019, 4, 2491-2496.	7.8	21
12	A low temperature-rise and facile manipulation method for single micro objects at the air-substrate interface. Journal of Micromechanics and Microengineering, 2019, 29, 105007.	2.6	1
13	A high-performance structure for the bulk acoustic wave metal oxide semiconductor gas sensor. Smart Materials and Structures, 2019, 28, 105015.	3.5	3
14	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
15	Analyses of acoustofluidic field in ultrasonic needleâ€“liquidâ€“substrate system for micro-/nanoscale material concentration. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	13
16	Ultrasound assisted low-concentration VOC sensing. Sensors and Actuators B: Chemical, 2018, 254, 1234-1241.	7.8	24
17	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
18	A flexible ultrasonic micro tool-based AgNS fabrication process. Applied Nanoscience (Switzerland), 2018, 8, 1579-1586.	3.1	0

#	Article	IF	Citations
19	Controlled concentration and transportation of nanoparticles at the interface between a plain substrate and droplet. Sensors and Actuators B: Chemical, 2018, 274, 381-392.	7.8	14
20	Eckart acoustic streaming in a heptagonal chamber by multiple acoustic transducers. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	21
21	Nano concentration by acoustically generated complex spiral vortex field. Applied Physics Letters, 2017, 110, .	3.3	13
22	Controlled removal of micro/nanoscale particles in submillimeter-diameter area on a substrate. Review of Scientific Instruments, 2017, 88, 105003.	1.3	9
23	Capture of Individual Micrometal Wires in Air by Ultrasonic Tweezers. IEEE/ASME Transactions on Mechatronics, 2015, 20, 3053-3059.	5.8	11
24	Analyses of acoustic streaming field in the probe-liquid-substrate system for nanotrapping. Microfluidics and Nanofluidics, 2015, 19, 1395-1408.	2.2	17
25	Diversity of acoustic streaming in a rectangular acoustofluidic field. Ultrasonics, 2015, 58, 27-34.	3.9	53
26	An ultrasonic manipulator with noncontact and contact-type nanowire trapping functions. Sensors and Actuators A: Physical, 2015, 232, 13-19.	4.1	10
27	Modeling and analysis of the droplet-ultrasonic stage system for nano concentration. Sensors and Actuators A: Physical, 2015, 225, 111-118.	4.1	6
28	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
29	Mobile acoustic streaming based trapping and 3-dimensional transfer of a single nanowire. Applied Physics Letters, 2012, 101, 093113.	3.3	29
30	Low temperature polycrystalline silicon film formation by metal induced crystallization with nickel salt derived by ultrasonic spray pyrolysis. Crystal Research and Technology, 2011, 46, 935-938.	1.3	0
31	Dependence of acoustic trapping capability on the orientation and shape of particles. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1443-1450.	3.0	12
32	Vibration energy harvesting based on integrated piezoelectric components operating in different modes. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 386-394.	3.0	14
33	Periodic silicon nanocones arrays with controllable dimensions prepared by two-step etching using nanosphere lithography and NH<inf>4</inf>OH/H<inf>2</inf>O<inf>2</inf> solution. , 2010, , .		0
34	Trapping of particles by the leakage of a standing wave ultrasonic field. Journal of Applied Physics, 2009, 106, 034903.	2.5	32
35	Output voltage regulation of a k15 mode piezoelectric transformer by an external L/C component. Ultrasonics, 2009, 49, 532-537.	3.9	0
36	Analysis of the ultrasonic collection of small particles by a tapered metal strip. Sensors and Actuators A: Physical, 2008, 141, 321-327.	4.1	3

#	Article	IF	Citations
37	Ultrasonic collection of small particles by a tapered metal strip. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 571-578.	3.0	17
38	Extraction of biologic particles by pumping effect in a Ï€-shaped ultrasonic actuator. Ultrasonics, 2006, 45, 15-21.	3.9	17
39	A /spl pi/-shaped ultrasonic tweezers concept for manipulation of small particles. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 1499-1507.	3.0	37
40	Optimum Operation Conditions of an Ultrasonic Motor Driving Fluid Directly. Japanese Journal of Applied Physics, 1996, 35, 3289-3294.	1.5	36
41	Temperature field of the piezoelectric transformer operating in longitudinal vibration mode. , 0, , .		3