Wenhui Wang

List of Publications by Year
in descending order

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67 papers	1,598 citations	361413 20 h-index	315739 38 g-index
69 all docs	69 docs citations	69 times ranked	1561 citing authors

#	Article	IF	Citations
1	Vision-Based 40-nm-Accuracy Liquid Level Detection Compliant With Micromanipulation. IEEE Transactions on Industrial Electronics, 2022, 69, 8535-8544.	7.9	1
2	High content drug screening of primary cardiomyocytes based on microfluidics and real-time ultra-large-scale high-resolution imaging. Lab on A Chip, 2022, 22, 1206-1213.	6.0	12
3	Neural network-enhanced real-time impedance flow cytometry for single-cell intrinsic characterization. Lab on A Chip, 2022, 22, 240-249.	6.0	48
4	Delay-Spectral Focusing Dual-Comb Coherent Raman Spectroscopy for Rapid Detection in the High-Wavenumber Region. ACS Photonics, 2022, 9, 1385-1394.	6.6	10
5	On-chip circulating tumor cells isolation based on membrane filtration and immuno-magnetic bead clump capture. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2022, 5, .	3.2	4
6	Impedanceâ€Enabled Cameraâ€Free Intrinsic Mechanical Cytometry. Small Methods, 2022, 6, .	8.6	17
7	Biophysical phenotyping of C. elegans in a microfluidic chip for high-throughput drug screening. , 2021, , 261-293.		1
8	Dual-fiber microfluidic chip for multimodal manipulation of single cells. Biomicrofluidics, 2021, 15, 014106.	2.4	10
9	A microfluidic device enabling deterministic single cell trapping and release. Lab on A Chip, 2021, 21, 2486-2494.	6.0	23
10	High-throughput acoustofluidic microchannels for single cell rotation. Journal of Micromechanics and Microengineering, 2021, 31, 124004.	2.6	5
11	Comparing SNNs and RNNs on neuromorphic vision datasets: Similarities and differences. Neural Networks, 2020, 132, 108-120.	5.9	62
12	On-chip integrated optical stretching and electrorotation enabling single-cell biophysical analysis. Microsystems and Nanoengineering, 2020, 6, 57.	7.0	45
13	On-chip simultaneous rotation of large-scale cells by acoustically oscillating bubble array. Biomedical Microdevices, 2020, 22, 13.	2.8	32
14	On-chip immuno-agglutination assay based on a dynamic magnetic bead clump and a sheath-less flow cytometry. Biomicrofluidics, 2019, 13, 044102.	2.4	6
15	Highly integrated microfluidic device for cell pairing, fusion and culture. Biomicrofluidics, 2019, 13, 054109.	2.4	21
16	A Microfluidic Device Integrating Impedance Flow Cytometry and Electric Impedance Spectroscopy for High-Efficiency Single-Cell Electrical Property Measurement. Analytical Chemistry, 2019, 91, 15204-15212.	6.5	68
17	3D Electro-Rotation of Single Cells. Synthesis Lectures on Biomedical Engineering, 2019, 14, i-119.	0.1	3
18	A novel micromachined Fabry-Perot interferometer integrating nano-holes and dielectrophoresis for enhanced biochemical sensing. Biosensors and Bioelectronics, 2019, 127, 19-24.	10.1	16

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19	A cell electroâ€rotation microâ€device using polarized cells as electrodes. Electrophoresis, 2019, 40, 784-791.	2.4	21
20	On-demand dielectrophoretic immobilization and high-resolution imaging of C. elegans in microfluids. Sensors and Actuators B: Chemical, 2018, 259, 703-708.	7.8	14
21	Single-cell 3D electro-rotation. Methods in Cell Biology, 2018, 148, 97-116.	1.1	11
22	3D cell electrorotation and imaging for measuring multiple cellular biophysical properties. Lab on A Chip, 2018, 18, 2359-2368.	6.0	87
23	A novel biomems device for efficient on-chip single cell loading and 3D rotation. , 2017, , .		5
24	Microfluidics cell sample preparation for analysis: Advances in efficient cell enrichment and precise single cell capture. Biomicrofluidics, 2017, 11, 011501.	2.4	54
25	A mechanical cell disruption microfluidic platform based on an on-chip micropump. Biomicrofluidics, 2017, 11, 024112.	2.4	11
26	MEMS-based platforms for mechanical manipulation and characterization of cells. Journal of Micromechanics and Microengineering, 2017, 27, 123003.	2.6	36
27	Label-free and real-time monitoring of single cell attachment on template-stripped plasmonic nano-holes. Scientific Reports, 2017, 7, 11020.	3.3	23
28	Study of a Microfluidic Chip Integrating Single Cell Trap and 3D Stable Rotation Manipulation. Micromachines, 2016, 7, 141.	2.9	23
29	High-throughput and clogging-free microfluidic filtration platform for on-chip cell separation from undiluted whole blood. Biomicrofluidics, 2016, 10, 014118.	2.4	57
30	Label-free monitoring of molecular binding based on extraordinary optical transmission with enhanced accuracy. , 2016, , .		0
31	Towards on-chip single cell manipulation of trap and rotation. , 2016, , .		3
32	A fluidic circuit based, high-efficiency and large-scale single cell trap. Lab on A Chip, 2016, 16, 4507-4511.	6.0	37
33	A bubble- and clogging-free microfluidic particle separation platform with multi-filtration. Lab on A Chip, 2016, 16, 4517-4526.	6.0	36
34	Investigtion of extraordinary optical transmission properties for double-layered nano-hole perforated gold films. , 2016, , .		0
35	Modeling and simulation study of micro-nano structures for single-cell capture. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanomaterials, Nanoengineering and Nanosystems, 2016, 230, 91-98.	0.6	0
36	Multiple-Cylindrical Electrode System for Rotational Electric Field Generation in Particle Rotation Applications. International Journal of Advanced Robotic Systems, 2015, 12, 84.	2.1	7

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37	Study of flow rate induced measurement error in flow-through nano-hole plasmonic sensor. Biomicrofluidics, 2015, 9, 064111.	2.4	1
38	An integrated platform enabling optogenetic illumination ofCaenorhabditis elegansneurons and muscular force measurement in microstructured environments. Biomicrofluidics, 2015, 9, 014123.	2.4	17
39	AC electric field induced dipole-based on-chip 3D cell rotation. Lab on A Chip, 2014, 14, 2717-2727.	6.0	91
40	Haptic Microrobotic Cell Injection System. IEEE Systems Journal, 2014, 8, 371-383.	4.6	41
41	Preliminary evaluation of a lower-limb exoskeleton - Stair climbing. , 2013, , .		4
42	On-chip analysis of C. elegans muscular forces and locomotion patterns in microstructured environments. Lab on A Chip, 2013, 13, 1699.	6.0	77
43	Preliminary Evaluation of Intelligent Intention Estimation Algorithms for an Actuated Lower-Limb Exoskeleton. International Journal of Advanced Robotic Systems, 2013, 10, 147.	2.1	9
44	Injection system for cellular assembly of 3D bio-tissue engineered constructs. , 2012, , .		2
45	A micropillar-based on-chip system for continuous force measurement ofC. elegans. Journal of Micromechanics and Microengineering, 2012, 22, 095009.	2.6	55
46	Nonparametric control algorithms for a pneumatic artificial muscle. Expert Systems With Applications, 2012, 39, 8636-8644.	7.6	17
47	Towards stereo vision SLAM based pose estimation for ship hull inspection. , 2011, , .		3
48	Investigating improvements to neural network based EMG to joint torque estimation. Paladyn, 2011, 2, 185-192.	2.7	17
49	Study of Flea Jumping Mechanism for Biomimetic Robot Design. Journal of Biomechanical Science and Engineering, 2010, 5, 41-52.	0.3	5
50	Image-based measurement of alveoli volume expansion in an animal model of a diseased lung. International Journal of Computer Applications in Technology, 2010, 39, 58.	0.5	0
51	Force pattern characterisation of Caenorhabditis elegans in motion. International Journal of Computer Applications in Technology, 2010, 39, 137.	0.5	7
52	Self organizing fuzzy control of pneumatic artificial muscle for active orthotic device. , 2010, , .		3
53	Notice of Retraction: Embedding design projects into multidisciplinary engineering education. , 2010, , .		0
54	Haptic microrobotic intracellular injection assistance using virtual fixtures. , 2010, , .		11

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55	Haptic guidance for microrobotic intracellular injection. , 2010, , .		15
56	Automated vision-based force measurement of moving C. elegans. , 2010, , .		2
57	Neuro-fuzzy microrobotic system identification for haptic intracellular injection. , 2009, , .		3
58	Design and modeling of a flea-like jumping robot. , 2009, , .		3
59	Cell image recognition and visual servo control for automated cell injection. , 2009, , .		20
60	Towards Haptic Microrobotic Intracellular Injection. , 2009, , .		8
61	Application of machine vision for automated cell injection. International Journal of Mechatronics and Manufacturing Systems, 2009, 2, 120.	0.1	4
62	A Novel Wall Climbing Robot Based on Bernoulli Effect. , 2008, , .		21
63	Force Pattern Characterization of C. elegans in Motion. , 2008, , .		3
64	A system for high-speed microinjection of adherent cells. Review of Scientific Instruments, 2008, 79, 104302.	1.3	51
65	Vision-based cellular force measurement using an elastic microfabricated device. Journal of Micromechanics and Microengineering, 2007, 17, 1281-1288.	2.6	67
66	A Fully Automated Robotic System for Microinjection of Zebrafish Embryos. PLoS ONE, 2007, 2, e862.	2.5	217
67	Vision-Based Cellular Force Measurement Using an Elastic Microfabricated Device. , 2006, , .		1