

# Wenhui Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5212321/publications.pdf>

Version: 2024-02-01

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	A Fully Automated Robotic System for Microinjection of Zebrafish Embryos. PLoS ONE, 2007, 2, e862.	2.5	217
2	AC electric field induced dipole-based on-chip 3D cell rotation. Lab on A Chip, 2014, 14, 2717-2727.	6.0	91
3	3D cell electrorotation and imaging for measuring multiple cellular biophysical properties. Lab on A Chip, 2018, 18, 2359-2368.	6.0	87
4	On-chip analysis of C. elegans muscular forces and locomotion patterns in microstructured environments. Lab on A Chip, 2013, 13, 1699.	6.0	77
5	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
6	Vision-based cellular force measurement using an elastic microfabricated device. Journal of Micromechanics and Microengineering, 2007, 17, 1281-1288.	2.6	67
7	Comparing SNNs and RNNs on neuromorphic vision datasets: Similarities and differences. Neural Networks, 2020, 132, 108-120.	5.9	62
8	High-throughput and clogging-free microfluidic filtration platform for on-chip cell separation from undiluted whole blood. Biomicrofluidics, 2016, 10, 014118.	2.4	57
9	A micropillar-based on-chip system for continuous force measurement of C. elegans. Journal of Micromechanics and Microengineering, 2012, 22, 095009.	2.6	55
10	Microfluidics cell sample preparation for analysis: Advances in efficient cell enrichment and precise single cell capture. Biomicrofluidics, 2017, 11, 011501.	2.4	54
11	A system for high-speed microinjection of adherent cells. Review of Scientific Instruments, 2008, 79, 104302.	1.3	51
12	Neural network-enhanced real-time impedance flow cytometry for single-cell intrinsic characterization. Lab on A Chip, 2022, 22, 240-249.	6.0	48
13	On-chip integrated optical stretching and electrorotation enabling single-cell biophysical analysis. Microsystems and Nanoengineering, 2020, 6, 57.	7.0	45
14	Haptic Microrobotic Cell Injection System. IEEE Systems Journal, 2014, 8, 371-383.	4.6	41
15	A fluidic circuit based, high-efficiency and large-scale single cell trap. Lab on A Chip, 2016, 16, 4507-4511.	6.0	37
16	A bubble- and clogging-free microfluidic particle separation platform with multi-filtration. Lab on A Chip, 2016, 16, 4517-4526.	6.0	36
17	MEMS-based platforms for mechanical manipulation and characterization of cells. Journal of Micromechanics and Microengineering, 2017, 27, 123003.	2.6	36
18	On-chip simultaneous rotation of large-scale cells by acoustically oscillating bubble array. Biomedical Microdevices, 2020, 22, 13.	2.8	32

#	ARTICLE	IF	CITATIONS
19	Study of a Microfluidic Chip Integrating Single Cell Trap and 3D Stable Rotation Manipulation. <i>Micromachines</i> , 2016, 7, 141.	2.9	23
20	Label-free and real-time monitoring of single cell attachment on template-stripped plasmonic nano-holes. <i>Scientific Reports</i> , 2017, 7, 11020.	3.3	23
21	A microfluidic device enabling deterministic single cell trapping and release. <i>Lab on A Chip</i> , 2021, 21, 2486-2494.	6.0	23
22	A Novel Wall Climbing Robot Based on Bernoulli Effect. , 2008, , .		21
23	Highly integrated microfluidic device for cell pairing, fusion and culture. <i>Biomicrofluidics</i> , 2019, 13, 054109.	2.4	21
24	A cell electro-rotation micro-device using polarized cells as electrodes. <i>Electrophoresis</i> , 2019, 40, 784-791.	2.4	21
25	Cell image recognition and visual servo control for automated cell injection. , 2009, , .		20
26	Investigating improvements to neural network based EMG to joint torque estimation. <i>Paladyn</i> , 2011, 2, 185-192.	2.7	17
27	Nonparametric control algorithms for a pneumatic artificial muscle. <i>Expert Systems With Applications</i> , 2012, 39, 8636-8644.	7.6	17
28	An integrated platform enabling optogenetic illumination of <i>Caenorhabditis elegans</i> neurons and muscular force measurement in microstructured environments. <i>Biomicrofluidics</i> , 2015, 9, 014123.	2.4	17
29	Impedance-Enabled Camera-Free Intrinsic Mechanical Cytometry. <i>Small Methods</i> , 2022, 6, .	8.6	17
30	A novel micromachined Fabry-Perot interferometer integrating nano-holes and dielectrophoresis for enhanced biochemical sensing. <i>Biosensors and Bioelectronics</i> , 2019, 127, 19-24.	10.1	16
31	Haptic guidance for microrobotic intracellular injection. , 2010, , .		15
32	On-demand dielectrophoretic immobilization and high-resolution imaging of <i>C. elegans</i> in microfluids. <i>Sensors and Actuators B: Chemical</i> , 2018, 259, 703-708.	7.8	14
33	High content drug screening of primary cardiomyocytes based on microfluidics and real-time ultra-large-scale high-resolution imaging. <i>Lab on A Chip</i> , 2022, 22, 1206-1213.	6.0	12
34	Haptic microrobotic intracellular injection assistance using virtual fixtures. , 2010, , .		11
35	A mechanical cell disruption microfluidic platform based on an on-chip micropump. <i>Biomicrofluidics</i> , 2017, 11, 024112.	2.4	11
36	Single-cell 3D electro-rotation. <i>Methods in Cell Biology</i> , 2018, 148, 97-116.	1.1	11

#	ARTICLE	IF	CITATIONS
37	Dual-fiber microfluidic chip for multimodal manipulation of single cells. <i>Biomicrofluidics</i> , 2021, 15, 014106.	2.4	10
38	Delay-Spectral Focusing Dual-Comb Coherent Raman Spectroscopy for Rapid Detection in the High-Wavenumber Region. <i>ACS Photonics</i> , 2022, 9, 1385-1394.	6.6	10
39	Preliminary Evaluation of Intelligent Intention Estimation Algorithms for an Actuated Lower-Limb Exoskeleton. <i>International Journal of Advanced Robotic Systems</i> , 2013, 10, 147.	2.1	9
40	Towards Haptic Microrobotic Intracellular Injection. , 2009, , .		8
41	Force pattern characterisation of <i>Caenorhabditis elegans</i> in motion. <i>International Journal of Computer Applications in Technology</i> , 2010, 39, 137.	0.5	7
42	Multiple-Cylindrical Electrode System for Rotational Electric Field Generation in Particle Rotation Applications. <i>International Journal of Advanced Robotic Systems</i> , 2015, 12, 84.	2.1	7
43	On-chip immuno-agglutination assay based on a dynamic magnetic bead clump and a sheath-less flow cytometry. <i>Biomicrofluidics</i> , 2019, 13, 044102.	2.4	6
44	Study of Flea Jumping Mechanism for Biomimetic Robot Design. <i>Journal of Biomechanical Science and Engineering</i> , 2010, 5, 41-52.	0.3	5
45	A novel biomems device for efficient on-chip single cell loading and 3D rotation. , 2017, , .		5
46	High-throughput acoustofluidic microchannels for single cell rotation. <i>Journal of Micromechanics and Microengineering</i> , 2021, 31, 124004.	2.6	5
47	Application of machine vision for automated cell injection. <i>International Journal of Mechatronics and Manufacturing Systems</i> , 2009, 2, 120.	0.1	4
48	Preliminary evaluation of a lower-limb exoskeleton - Stair climbing. , 2013, , .		4
49	On-chip circulating tumor cells isolation based on membrane filtration and immuno-magnetic bead clump capture. <i>Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering</i> , 2022, 5, .	3.2	4
50	Force Pattern Characterization of <i>C. elegans</i> in Motion. , 2008, , .		3
51	Neuro-fuzzy microrobotic system identification for haptic intracellular injection. , 2009, , .		3
52	Design and modeling of a flea-like jumping robot. , 2009, , .		3
53	Self organizing fuzzy control of pneumatic artificial muscle for active orthotic device. , 2010, , .		3
54	Towards stereo vision SLAM based pose estimation for ship hull inspection. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
55	Towards on-chip single cell manipulation of trap and rotation. , 2016, , .		3
56	3D Electro-Rotation of Single Cells. Synthesis Lectures on Biomedical Engineering, 2019, 14, i-119.	0.1	3
57	Automated vision-based force measurement of moving C. elegans. , 2010, , .		2
58	Injection system for cellular assembly of 3D bio-tissue engineered constructs. , 2012, , .		2
59	Vision-Based Cellular Force Measurement Using an Elastic Microfabricated Device. , 2006, , .		1
60	Study of flow rate induced measurement error in flow-through nano-hole plasmonic sensor. Biomicrofluidics, 2015, 9, 064111.	2.4	1
61	Biophysical phenotyping of C. elegans in a microfluidic chip for high-throughput drug screening. , 2021, , 261-293.		1
62	Vision-Based 40-nm-Accuracy Liquid Level Detection Compliant With Micromanipulation. IEEE Transactions on Industrial Electronics, 2022, 69, 8535-8544.	7.9	1
63	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
64	Notice of Retraction: Embedding design projects into multidisciplinary engineering education. , 2010, , .		0
65	Label-free monitoring of molecular binding based on extraordinary optical transmission with enhanced accuracy. , 2016, , .		0
66	Investigation of extraordinary optical transmission properties for double-layered nano-hole perforated gold films. , 2016, , .		0
67	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