Xiaoming Liu

List of Publications by Year
in descending order

31	394	687335 13	794568 19
papers	citations	h-index	g-index

32	32	32	326
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	All-Purpose Magnetic Micromanipulation System With Two Modes: Chopstick-Like Two-Finger Microhand and Hydrodynamic Tweezer. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1582-1593.	5.8	4
2	Recent Progress of Magnetically Actuated DNA Micro/Nanorobots. Cyborg and Bionic Systems, 2022, 2022, .	7.9	17
3	Vision-Based Automated Control of Magnetic Microrobots. Micromachines, 2022, 13, 337.	2.9	9
4	A Review on Microfluidic Platforms Applied to Nerve Regeneration. Applied Sciences (Switzerland), 2022, 12, 3534.	2.5	5
5	Magnetically Driven Soft Continuum Microrobot for Intravascular Operations in Microscale. Cyborg and Bionic Systems, 2022, 2022, .	7.9	34
6	A tetrahedral DNA nanorobot with conformational change in response to molecular trigger. Nanoscale, 2021, 13, 15552-15559.	5.6	15
7	Bubbles in microfluidics: an all-purpose tool for micromanipulation. Lab on A Chip, 2021, 21, 1016-1035.	6.0	40
8	Controlled rotation of micro-objects using acoustically driven microbubbles. Applied Physics Letters, 2021, 118, .	3.3	7
9	A Wearable Navigation Device for Visually Impaired People Based on the Real-Time Semantic Visual SLAM System. Sensors, 2021, 21, 1536.	3.8	21
10	Magnetic Driven Two-Finger Micro-Hand with Soft Magnetic End-Effector for Force-Controlled Stable Manipulation in Microscale. Micromachines, 2021, 12, 410.	2.9	2
11	Efficient Single-Cell Mechanical Measurement by Integrating a Cell Arraying Microfluidic Device With Magnetic Tweezer. IEEE Robotics and Automation Letters, 2021, 6, 2978-2984.	5.1	16
12	In-Situ Bonding of Multi-Layer Microfluidic Devices Assisted by an Automated Alignment System. IEEE Robotics and Automation Letters, 2021, 6, 2611-2617.	5.1	0
13	Automated Cell Mechanical Characterization by On-Chip Sequential Squeezing: From Static to Dynamic. Langmuir, 2021, 37, 8083-8094.	3.5	8
14	On-Chip Cellâ€“Cell Interaction Monitoring at Single-Cell Level by Efficient Immobilization of Multiple Cells in Adjustable Quantities. Analytical Chemistry, 2020, 92, 11607-11616.	6.5	16
15	Advances in Micromanipulation Actuated by Vibration-Induced Acoustic Waves and Streaming Flow. Applied Sciences (Switzerland), 2020, 10, 1260.	2.5	20
16	Dexterous Vibrationless Micromanipulation by Magnetic-Field Driven Micro-gripper. , 2019, , .		0
17	Mobile Robot Capable of Crossing Floors for Library Management. , 2019, , .		5
18	Micro Channel for Analyzing Mechanical Adaption of Cancer Cell. , 2019, , .		0

#	Article	IF	Citations
19	Multifunctional Noncontact Micromanipulation Using Whirling Flow Generated by Vibrating a Single Piezo Actuator. Small, 2019, 15, e1804421.	10.0	34
20	Automated Fluidic Assembly of Microvessel-Like Structures Using a Multimicromanipulator System. IEEE/ASME Transactions on Mechatronics, 2018, 23, 667-678.	5.8	19
21	Vortex-Driven Rotation for Three-Dimensional Imaging Under Microscopy. IEEE Nanotechnology Magazine, 2018, 17, 688-691.	2.0	10
22	Microfluidic Device for Analyzing Self-adaption of Cancer Cell During Squeezing in channel. , 2018, , .		2
23	High-Throughput Microchannels for Single Cell Immobilization. , 2018, , .		1
24	Automated Tracking System for Time Lapse Observation of C. elegans. , 2018, , .		4
25	Stable Grasp and Accurate Release of Microbeads by a Two-finger Microhand. , 2018, , .		2
26	Hydrodynamic Tweezers: Trapping and Transportation in Microscale Using Vortex Induced by Oscillation of a Single Piezoelectric Actuator. Sensors, 2018, 18, 2002.	3.8	17
27	Assembly of RGD-Modified Hydrogel Micromodules into Permeable Three-Dimensional Hollow Microtissues Mimicking in Vivo Tissue Structures. ACS Applied Materials & Interfaces, 2017, 9, 41669-41679.	8.0	50
28	Non-contact transportation and rotation of micro objects by vibrating glass needle circularly under water. , 2017, , .		2
29	Automated bubble-based assembly of cell-laden microgels into vascular-like microtubes. , 2015, , .		2
30	Magnetic assembly of microfluidic spun alginate microfibers for fabricating three-dimensional cell-laden hydrogel constructs. Microfluidics and Nanofluidics, 2015, 19, 1169-1180.	2.2	31
31	Dexterous nanomanipulation of 2D hydrogel microstructure for 3D assembly by multi-robot cooperation. , 2014, , .		0