

# Jun Liu

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

2,958  
citations

279701

23  
h-index

330025

37  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2964  
citing authors

#	ARTICLE	IF	CITATIONS
1	NTU RGB+D: A Large Scale Dataset for 3D Human Activity Analysis. , 2016, , .		1,482
2	<i>In Situ</i> Mechanical Characterization of the Cell Nucleus by Atomic Force Microscopy. ACS Nano, 2014, 8, 3821-3828.	7.3	176
3	Recent advances in nanorobotic manipulation inside scanning electron microscopes. Microsystems and Nanoengineering, 2016, 2, 16024.	3.4	133
4	Skeleton-Based Online Action Prediction Using Scale Selection Network. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 1453-1467.	9.7	107
5	Robotic Micromanipulation: Fundamentals and Applications. Annual Review of Control, Robotics, and Autonomous Systems, 2019, 2, 181-203.	7.5	101
6	Human sperm rheotaxis: a passive physical process. Scientific Reports, 2016, 6, 23553.	1.6	83
7	Voyage inside the cell: Microsystems and nanoengineering for intracellular measurement and manipulation. Microsystems and Nanoengineering, 2015, 1, .	3.4	66
8	Robotic Adherent Cell Injection for Characterizing Cell-Cell Communication. IEEE Transactions on Biomedical Engineering, 2015, 62, 119-125.	2.5	65
9	Locating End-Effector Tips in Robotic Micromanipulation. IEEE Transactions on Robotics, 2014, 30, 125-130.	7.3	53
10	A Three-Dimensional Magnetic Tweezer System for Intraembryonic Navigation and Measurement. IEEE Transactions on Robotics, 2018, 34, 240-247.	7.3	52
11	Quantitative Analysis of Locomotive Behavior of Human Sperm Head and Tail. IEEE Transactions on Biomedical Engineering, 2013, 60, 390-396.	2.5	42
12	Digital Microfluidic Processing of Mammalian Embryos for Vitrification. PLoS ONE, 2014, 9, e108128.	1.1	41
13	TrajectoryCNN: A New Spatio-Temporal Feature Learning Network for Human Motion Prediction. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 2133-2146.	5.6	38
14	Automated Vitrification of Embryos: A Robotics Approach. IEEE Robotics and Automation Magazine, 2015, 22, 33-40.	2.2	36
15	Robotic Immobilization of Motile Sperm for Clinical Intracytoplasmic Sperm Injection. IEEE Transactions on Biomedical Engineering, 2019, 66, 444-452.	2.5	36
16	Evolutionarily conserved intercalated disc protein Tmem65 regulates cardiac conduction and connexin 43 function. Nature Communications, 2015, 6, 8391.	5.8	35
17	Characterizing Inner Pressure and Stiffness of Trophoblast and Inner Cell Mass of Blastocysts. Biophysical Journal, 2018, 115, 2443-2450.	0.2	35
18	TMEM43 Mutation p.S358L Alters Intercalated Disc Protein Expression and Reduces Conduction Velocity in Arrhythmogenic Right Ventricular Cardiomyopathy. PLoS ONE, 2014, 9, e109128.	1.1	31

#	ARTICLE	IF	CITATIONS
19	Robotic Probing of Nanostructures inside Scanning Electron Microscopy. IEEE Transactions on Robotics, 2014, 30, 758-765.	7.3	28
20	Robotic Pick-And-Place of Multiple Embryos for Vitrification. IEEE Robotics and Automation Letters, 2017, 2, 570-576.	3.3	27
21	A Flexure-Guided Piezo Drill for Penetrating the Zona Pellucida of Mammalian Oocytes. IEEE Transactions on Biomedical Engineering, 2018, 65, 678-686.	2.5	27
22	An augmented reality system for image guidance of transcatheter procedures for structural heart disease. PLoS ONE, 2019, 14, e0219174.	1.1	26
23	A System for Counting Fetal and Maternal Red Blood Cells. IEEE Transactions on Biomedical Engineering, 2014, 61, 2823-2829.	2.5	25
24	Multipoint Simultaneous Tracking of Wireless Capsule Endoscope Using Magnetic Sensor Array. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	25
25	Automated Robotic Measurement of 3-D Cell Morphologies. IEEE Robotics and Automation Letters, 2017, 2, 499-505.	3.3	22
26	Fluorescence and SEM correlative microscopy for nanomanipulation of subcellular structures. Light: Science and Applications, 2014, 3, e224-e224.	7.7	19
27	Sign Language Recognition Based on R(2+1)D With Spatial&quot;Temporal&quot;Channel Attention. IEEE Transactions on Human-Machine Systems, 2022, 52, 687-698.	2.5	16
28	High-throughput measurement of gap junctional intercellular communication. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1708-H1713.	1.5	15
29	A System for Automated Detection of Ampoule Injection Impurities. IEEE Transactions on Automation Science and Engineering, 2017, 14, 1119-1128.	3.4	14
30	Image Registration in Medical Robotics and Intelligent Systems: Fundamentals and Applications. Advanced Intelligent Systems, 2019, 1, 1900048.	3.3	13
31	WSUIE: Weakly Supervised Underwater Image Enhancement for Improved Visual Perception. IEEE Robotics and Automation Letters, 2021, 6, 8237-8244.	3.3	13
32	Effect of Cell Inner Pressure on Deposition Volume in Microinjection. Langmuir, 2018, 34, 10287-10292.	1.6	8
33	Using Soft Robotic Technology to Fabricate a Proof&quot;of&quot;Concept Transcatheter Tricuspid Valve Replacement (TTVR) Device. Advanced Materials Technologies, 2019, 4, 1800610.	3.0	7
34	Locating end-effector tips in automated micromanipulation. , 2013, , .		5
35	Automated vitrification of mammalian embryos on a digital microfluidic device. , 2014, , .		5
36	Controlled ultrasonic micro-dissection of thin tissue sections. Biomedical Microdevices, 2014, 16, 567-573.	1.4	5

#	ARTICLE	IF	CITATIONS
37	Robotic fluidic jet for automated cellular and intracellular mechanical characterization. , 2016, , .		4
38	Automatic Microscopy Analysis with Transfer Learning for Classification of Human Sperm. Applied Sciences (Switzerland), 2021, 11, 5369.	1.3	4
39	Human Sperm Tracking, Analysis, and Manipulation. , 2013, , 251-264.		4
40	Microinjection Technique for Assessment of Gap Junction Function. Methods in Molecular Biology, 2016, 1437, 145-154.	0.4	4
41	ZigBee Wireless Sensor Networks Based Detection and Help System for Elderly Abnormal Behaviors in Service Robot Intelligent Space. Applied Mechanics and Materials, 0, 48-49, 1378-1382.	0.2	3
42	Automated nanoprobing under scanning electron microscopy. , 2013, , .		3
43	Correlative microscopy for nanomanipulation of sub-cellular structures. , 2014, , .		3
44	Energy-Based Periodicity Mining With Deep Features for Action Repetition Counting in Unconstrained Videos. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 4812-4825.	5.6	3
45	Automated micro-aspiration of mouse embryo limb bud tissue. , 2015, , .		2
46	Automated robotic vitrification of embryos. , 2015, , .		2
47	Appendix C: Automated Vitrification of Mammalian Embryos on a Digital Microfluidic Device. Methods in Molecular Biology, 2017, 1568, 309-316.	0.4	2
48	One-Shot SADI-EPE: A Visual Framework of Event Progress Estimation. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1659-1671.	5.6	2
49	DBNet: A New Generalized Structure Efficient for Classification. , 2019, , .		2
50	Development of a Hybrid Training Simulator for Structural Heart Disease Interventions. Advanced Intelligent Systems, 2020, 2, 2000109.	3.3	2
51	Automated microrobotic characterization of cell-cell communication. , 2014, , .		1
52	An automated system for investigating sperm orientation in fluid flow. , 2016, , .		1
53	Three-dimensional robotic control of a 5-micrometer magnetic bead for intra-embryonic navigation and measurement. , 2017, , .		1
54	Decode a ticking time-bomb. Journal of Thoracic Disease, 2020, 12, 4598-4601.	0.6	1

#	ARTICLE	IF	CITATIONS
55	Reply from authors: Anatomical or functional repair for ischemic mitral regurgitation: Find the right antidote!. Journal of Thoracic and Cardiovascular Surgery, 2022, 163, e181-e182.	0.4	1
56	Single Cell Deposition. Methods in Cell Biology, 2012, 112, 403-420.	0.5	1
57	A system for automated counting of fetal and maternal red blood cells in clinical KB test. , 2014, , .		0
58	Mechanical characterization of cancer cell nuclei in situ. , 2014, , .		0
59	Robotic Immobilization of Motile Sperm. , 2018, , .		0
60	Commentary: Strength at the cutting edge. JTCVS Techniques, 2020, 2, 58-59.	0.2	0