

Yu Sun

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

284
papers

9,973
citations

55
h-index

89
g-index

334
ext. papers

11,949
ext. citations

6.1
avg, IF

6.36
L-index

#	Paper	IF	Citations
284	Live imaging YAP signalling in mouse embryo development.. <i>Open Biology</i> , 2022 , 12, 210335	7	0
283	An SEM-Based Nanomanipulation System for Multiphysical Characterization of Single InGaN/GaN Nanowires. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022 , 1-11	4.9	1
282	Robotic Rotational Positioning of End-Effectors for Micromanipulation. <i>IEEE Transactions on Robotics</i> , 2022 , 1-11	6.5	
281	Biophysical Measurement of Cellular and Intracellular Structures Using Magnetic Tweezers 2022 , 269-284		
280	Microengineered platforms for characterizing the contractile function of in vitro cardiac models.. <i>Microsystems and Nanoengineering</i> , 2022 , 8, 26	7.7	3
279	Automation Techniques and Systems for ICSI 2021 , 129-140		0
278	Fracture and Fatigue of AlO-Graphene Nanolayers. <i>Nano Letters</i> , 2021 , 21, 437-444	11.5	1
277	Estimating Obstacle Maps for USVs Based on a Multistage Feature Aggregation and Semantic Feature Separation Network. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2021 , 102, 1	2.9	1
276	Automated motility and morphology measurement of live spermatozoa. <i>Andrology</i> , 2021 , 9, 1205-1213	4.2	2
275	Advances in reconstructing intestinal functionalities in vitro: From two/three dimensional-cell culture platforms to human intestine-on-a-chip. <i>Talanta</i> , 2021 , 226, 122097	6.2	3
274	Combinatorial screen of dynamic mechanical stimuli for predictive control of MSC mechano-responsiveness. <i>Science Advances</i> , 2021 , 7,	14.3	4
273	Advances in sperm analysis: techniques, discoveries and applications. <i>Nature Reviews Urology</i> , 2021 , 18, 447-467	5.5	3
272	Existing and Potential Applications of Elastography for Measuring the Viscoelasticity of Biological Tissues In Vivo. <i>Frontiers in Physics</i> , 2021 , 9,	3.9	2
271	Quantitative selection of single human sperm with high DNA integrity for intracytoplasmic sperm injection. <i>Fertility and Sterility</i> , 2021 , 116, 1308-1318	4.8	1
270	Model Reference Adaptive Control for Aortic Pressure Regulation in Ex Vivo Heart Perfusion. <i>IEEE Transactions on Control Systems Technology</i> , 2021 , 29, 884-892	4.8	0
269	Optical Measurement of Highly Reflective Surfaces From a Single Exposure. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 17, 1882-1891	11.9	5
268	Evaluation of machine learning-driven automated Kleihauer-Betke counting: A method comparison study. <i>International Journal of Laboratory Hematology</i> , 2021 , 43, 372-377	2.5	1

267	. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 68, 8422-8432	8.9	5
266	A microdevice platform for characterizing the effect of mechanical strain magnitudes on the maturation of iPSC-Cardiomyocytes. <i>Biosensors and Bioelectronics</i> , 2021 , 175, 112875	11.8	13
265	Shock Isolation Capability of an Electromagnetic Variable Stiffness Isolator With Bidirectional Stiffness Regulation. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 26, 2038-2047	5.5	2
264	. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 26, 1178-1182	5.5	4
263	Efficient obstacle detection based on prior estimation network and spatially constrained mixture model for unmanned surface vehicles. <i>Journal of Field Robotics</i> , 2021 , 38, 212-228	6.7	6
262	Microfluidic devices for immobilization and micromanipulation of single cells and small organisms 2021 , 391-412		
261	Robotic and microfluidic systems for single cell injection 2021 , 241-260		
260	Legless soft robots capable of rapid, continuous, and steered jumping. <i>Nature Communications</i> , 2021 , 12, 7028	17.4	3
259	A Microfluidic Device With Optically-Controlled Electrodes for On-Demand Electrical Impedance Measurement of Targeted Single Cells. <i>Journal of Microelectromechanical Systems</i> , 2020 , 29, 1563-1569	2.5	5
258	Three-dimensional niche stiffness synergizes with Wnt7a to modulate the extent of satellite cell symmetric self-renewal divisions. <i>Molecular Biology of the Cell</i> , 2020 , 31, 1703-1713	3.5	10
257	Recapitulating pancreatic tumor microenvironment through synergistic use of patient organoids and organ-on-a-chip vasculature. <i>Advanced Functional Materials</i> , 2020 , 30, 2000545	15.6	24
256	Hedgehog-Activated Fat4 and PCP Pathways Mediate Mesenchymal Cell Clustering and Villus Formation in Gut Development. <i>Developmental Cell</i> , 2020 , 52, 647-658.e6	10.2	12
255	Single-Beat Measurement of Left Ventricular Contractility in Normothermic Ex Situ Perfused Porcine Hearts. <i>IEEE Transactions on Biomedical Engineering</i> , 2020 , 67, 3288-3295	5	5
254	Magnetic Measurement and Stimulation of Cellular and Intracellular Structures. <i>ACS Nano</i> , 2020 , 14, 3805-3821	16.7	21
253	Automated Parallel Electrical Characterization of Cells Using Optically-Induced Dielectrophoresis. <i>IEEE Transactions on Automation Science and Engineering</i> , 2020 , 17, 1084-1092	4.9	14
252	Spatial mapping of tissue properties in vivo reveals a 3D stiffness gradient in the mouse limb bud. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 4781-4791	11.5	33
251	Fatigue of graphene. <i>Nature Materials</i> , 2020 , 19, 405-411	27	59
250	Magnetic Micromanipulation for Measurement of Stiffness Heterogeneity and Anisotropy in the Mouse Mandibular Arch. <i>Research</i> , 2020 , 2020, 7914074	7.8	6

249	Robotic Manipulation of Deformable Cells for Orientation Control. <i>IEEE Transactions on Robotics</i> , 2020 , 36, 271-283	6.5	21
248	Culture on Tissue-Specific Coatings Derived from α -Amylase-Digested Decellularized Adipose Tissue Enhances the Proliferation and Adipogenic Differentiation of Human Adipose-Derived Stromal Cells. <i>Biotechnology Journal</i> , 2020 , 15, e1900118	5.6	6
247	Human cardiac fibrosis-on-a-chip model recapitulates disease hallmarks and can serve as a platform for drug testing. <i>Biomaterials</i> , 2020 , 233, 119741	15.6	49
246	. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020 , 25, 316-326	5.5	20
245	Model-Based Robotic Cell Aspiration: Tackling Nonlinear Dynamics and Varying Cell Sizes. <i>IEEE Robotics and Automation Letters</i> , 2020 , 5, 173-178	4.2	5
244	Primed Left Ventricle Heart Perfusion Creates Physiological Aortic Pressure in Porcine Hearts. <i>ASAIO Journal</i> , 2020 , 66, 55-63	3.6	4
243	. <i>IEEE Robotics and Automation Letters</i> , 2020 , 5, 339-345	4.2	4
242	Graphene fatigue through van der Waals interactions. <i>Science Advances</i> , 2020 , 6,	14.3	12
241	A CNT-PDMS wearable device for simultaneous measurement of wrist pulse pressure and cardiac electrical activity. <i>Materials Science and Engineering C</i> , 2020 , 117, 111345	8.3	9
240	Electrical impedance-based contractile stress measurement of human iPSC-Cardiomyocytes. <i>Biosensors and Bioelectronics</i> , 2020 , 166, 112399	11.8	7
239	Label-free conduction velocity mapping and gap junction assessment of functional iPSC-Cardiomyocyte monolayers. <i>Biosensors and Bioelectronics</i> , 2020 , 167, 112468	11.8	9
238	The conductive function of biopolymer corrects myocardial scar conduction blockage and resynchronizes contraction to prevent heart failure. <i>Biomaterials</i> , 2020 , 258, 120285	15.6	18
237	The NEMP family supports metazoan fertility and nuclear envelope stiffness. <i>Science Advances</i> , 2020 , 6, eabb4591	14.3	3
236	IRX3/5 regulate mitotic chromatid segregation and limb bud shape. <i>Development (Cambridge)</i> , 2020 , 147,	6.6	2
235	Investigating the detection limit of subsurface holes under graphite with atomic force acoustic microscopy. <i>Nanoscale</i> , 2019 , 11, 10961-10967	7.7	10
234	Construction of All-in-Focus Images Assisted by Depth Sensing. <i>Sensors</i> , 2019 , 19,	3.8	2
233	Micropipette Aspiration of Single Cells for Both Mechanical and Electrical Characterization. <i>IEEE Transactions on Biomedical Engineering</i> , 2019 , 66, 3185-3191	5	18
232	Intracellular manipulation and measurement with multipole magnetic tweezers. <i>Science Robotics</i> , 2019 , 4,	18.6	66

231	Oscillatory cortical forces promote three dimensional cell intercalations that shape the murine mandibular arch. <i>Nature Communications</i> , 2019 , 10, 1703	17.4	29
230	Combined Sensing, Cognition, Learning, and Control for Developing Future Neuro-Robotics Systems: A Survey. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2019 , 11, 148-161	3	7
229	Robotic Immobilization of Motile Sperm for Clinical Intracytoplasmic Sperm Injection. <i>IEEE Transactions on Biomedical Engineering</i> , 2019 , 66, 444-452	5	17
228	Guest Editorial Neuro-Robotics Systems: Sensing, Cognition, Learning, and Control. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2019 , 11, 145-147	3	3
227	Robotic Orientation Control of Deformable Cells 2019 ,		1
226	Dynamic Bioreactors with Integrated Microfabricated Devices for Mechanobiological Screening. <i>Tissue Engineering - Part C: Methods</i> , 2019 , 25, 581-592	2.9	5
225	A Novel Method for Extrinsic Calibration of Multiple RGB-D Cameras Using Descriptor-Based Patterns. <i>Sensors</i> , 2019 , 19,	3.8	7
224	Stiffness and ATP recovery of stored red blood cells in serum. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 51	7.7	11
223	Nanomechanical elasticity and fracture studies of lithium phosphate (LPO) and lithium tantalate (LTO) solid-state electrolytes. <i>Nanoscale</i> , 2019 , 11, 18730-18738	7.7	11
222	Automated Laser Ablation of Motile Sperm for Immobilization. <i>IEEE Robotics and Automation Letters</i> , 2019 , 4, 323-329	4.2	2
221	Local strain mapping of GO nanosheets under in situ TEM tensile testing. <i>Applied Materials Today</i> , 2019 , 14, 102-107	6.6	3
220	Robotic Micromanipulation: Fundamentals and Applications. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2019 , 2, 181-203	11.8	50
219	Stiffness increase of red blood cells during storage. <i>Microsystems and Nanoengineering</i> , 2018 , 4,	7.7	32
218	Nonlinear fracture toughness measurement and crack propagation resistance of functionalized graphene multilayers. <i>Science Advances</i> , 2018 , 4, eaao7202	14.3	48
217	A Three-Dimensional Magnetic Tweezer System for Intraembryonic Navigation and Measurement. <i>IEEE Transactions on Robotics</i> , 2018 , 34, 240-247	6.5	29
216	Microdevice arrays with strain sensors for 3D mechanical stimulation and monitoring of engineered tissues. <i>Biomaterials</i> , 2018 , 172, 30-40	15.6	21
215	Effect of lattice stacking orientation and local thickness variation on the mechanical behavior of few layer graphene oxide. <i>Carbon</i> , 2018 , 136, 168-175	10.4	11
214	A Flexure-Guided Piezo Drill for Penetrating the Zona Pellucida of Mammalian Oocytes. <i>IEEE Transactions on Biomedical Engineering</i> , 2018 , 65, 678-686	5	14

213	A Paper-Based Piezoelectric Accelerometer. <i>Micromachines</i> , 2018 , 9,	3.3	29
212	Effect of Cell Inner Pressure on Deposition Volume in Microinjection. <i>Langmuir</i> , 2018 , 34, 10287-10292	4	3
211	Microdevice Platform for Continuous Measurement of Contractility, Beating Rate, and Beating Rhythm of Human-Induced Pluripotent Stem Cell-Cardiomyocytes inside a Controlled Incubator Environment. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21173-21183	9.5	20
210	Characterizing Inner Pressure and Stiffness of Trophoblast and Inner Cell Mass of Blastocysts. <i>Biophysical Journal</i> , 2018 , 115, 2443-2450	2.9	21
209	Characterizing the electrical breakdown properties of single n-i-n-n+:GaN nanowires. <i>Applied Physics Letters</i> , 2018 , 113, 193103	3.4	2
208	SMC Difference of Normal and Cancerous Human Urothelial Cells Quantified with an Opto-Electrokinetic Device 2018 ,		2
207	A Feedforward Mechanism Mediated by Mechanosensitive Ion Channel PIEZO1 and Tissue Mechanics Promotes Glioma Aggression. <i>Neuron</i> , 2018 , 100, 799-815.e7	13.9	107
206	An autoantibody identifies arrhythmogenic right ventricular cardiomyopathy and participates in its pathogenesis. <i>European Heart Journal</i> , 2018 , 39, 3932-3944	9.5	70
205	Static and dynamic calibration of torsional spring constants of cantilevers. <i>Review of Scientific Instruments</i> , 2018 , 89, 093701	1.7	3
204	Automated Non-Invasive Measurement of Single Sperm Motility and Morphology. <i>IEEE Transactions on Medical Imaging</i> , 2018 , 37, 2257-2265	11.7	14
203	Mechanical stability of the cell nucleus - roles played by the cytoskeleton in nuclear deformation and strain recovery. <i>Journal of Cell Science</i> , 2018 , 131,	5.3	43
202	A System for Automated Detection of Ampoule Injection Impurities. <i>IEEE Transactions on Automation Science and Engineering</i> , 2017 , 14, 1119-1128	4.9	8
201	Guest Editorial Special Section on the Thirteenth IEEE International Symposium on Safety, Security, and Rescue Robotics. <i>IEEE Transactions on Automation Science and Engineering</i> , 2017 , 14, 3-4	4.9	
200	Appendix C: Automated Vitrification of Mammalian Embryos on a Digital Microfluidic Device. <i>Methods in Molecular Biology</i> , 2017 , 1568, 309-316	1.4	0
199	Coordinating Biointeraction and Bioreaction of a Nanocarrier Material and an Anticancer Drug to Overcome Membrane Rigidity and Target Mitochondria in Multidrug-Resistant Cancer Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1700804	15.6	23
198	Cell and Tissue Scale Forces Coregulate Fgfr2-Dependent Tetrads and Rosettes in the Mouse Embryo. <i>Biophysical Journal</i> , 2017 , 112, 2209-2218	2.9	13
197	Moldable elastomeric polyester-carbon nanotube scaffolds for cardiac tissue engineering. <i>Acta Biomaterialia</i> , 2017 , 52, 81-91	10.8	91
196	Automated Robotic Measurement of 3-D Cell Morphologies. <i>IEEE Robotics and Automation Letters</i> , 2017 , 2, 499-505	4.2	15

195	. <i>IEEE Robotics and Automation Letters</i> , 2017 , 2, 570-576	4.2	14
194	MEMS-based platforms for mechanical manipulation and characterization of cells. <i>Journal of Micromechanics and Microengineering</i> , 2017 , 27, 123003	2	23
193	Role of graphene in enhancing the mechanical properties of TiO/graphene heterostructures. <i>Nanoscale</i> , 2017 , 9, 11678-11684	7.7	17
192	Three-dimensional robotic control of a 5-micrometer magnetic bead for intra-embryonic navigation and measurement 2017 ,		1
191	Microfluidic measurement of RBC bending stiffness changes in blood storage 2017 ,		2
190	Accuracy analysis of a multi-closed-loop deployable mechanism. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2016 , 230, 611-621	1.3	11
189	Mechanical properties of wrinkled graphene generated by topological defects. <i>Carbon</i> , 2016 , 108, 204-214.	4.4	55
188	Human sperm rheotaxis: a passive physical process. <i>Scientific Reports</i> , 2016 , 6, 23553	4.9	61
187	Recent advances in nanorobotic manipulation inside scanning electron microscopes. <i>Microsystems and Nanoengineering</i> , 2016 , 2, 16024	7.7	81
186	A Review of Nanomanipulation in Scanning Electron Microscopes 2016 , 347-379		0
185	A Closed-Loop Controlled Nanomanipulation System for Probing Nanostructures Inside Scanning Electron Microscopes. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 1233-1241	5.5	30
184	A microfabricated platform with on-chip strain sensing and hydrogel arrays for 3D mechanical stimulation of cells 2016 ,		1
183	Interfacial Shear Strength of Multilayer Graphene Oxide Films. <i>ACS Nano</i> , 2016 , 10, 1939-47	16.7	55
182	A microfabricated platform with hydrogel arrays for 3D mechanical stimulation of cells. <i>Acta Biomaterialia</i> , 2016 , 34, 113-124	10.8	28
181	Microinjection Technique for Assessment of Gap Junction Function. <i>Methods in Molecular Biology</i> , 2016 , 1437, 145-54	1.4	4
180	Stimuli-Responsive Drug Delivery Microchips 2016 , 3833-3840		
179	An automated system for investigating sperm orientation in fluid flow 2016 ,		1
178	Stiffening of sickle cell trait red blood cells under simulated strenuous exercise conditions. <i>Microsystems and Nanoengineering</i> , 2016 , 2, 16061	7.7	8

177	Robotic fluidic jet for automated cellular and intracellular mechanical characterization 2016 ,		4
176	Microfluidic Assessment of Frying Oil Degradation. <i>Scientific Reports</i> , 2016 , 6, 27970	4.9	10
175	A Stick-Slip Positioning Stage Robust to Load Variations. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 2165-2173	5.5	27
174	A MEMSXY-stage integrating compliant mechanism for nanopositioning at sub-nanometer resolution. <i>Journal of Micromechanics and Microengineering</i> , 2016 , 26, 025014	2	18
173	In situ TEM tensile testing of carbon-linked graphene oxide nanosheets using a MEMS device. <i>Nanotechnology</i> , 2016 , 27, 28LT01	3.4	13
172	Embedded silver PDMS electrodes for single cell electrical impedance spectroscopy. <i>Journal of Micromechanics and Microengineering</i> , 2016 , 26, 095006	2	7
171	On-chip sample preparation for complete blood count from raw blood. <i>Lab on A Chip</i> , 2015 , 15, 1533-44	7.2	26
170	Automated robotic vitrification of embryos 2015 ,		1
169	Decreased deformability of lymphocytes in chronic lymphocytic leukemia. <i>Scientific Reports</i> , 2015 , 5, 7613	4.9	33
168	. <i>IEEE Robotics and Automation Magazine</i> , 2015 , 22, 33-40	3.4	17
167	Anisotropic stress orients remodelling of mammalian limb bud ectoderm. <i>Nature Cell Biology</i> , 2015 , 17, 569-79	23.4	74
166	Suspended, Shrinkage-Free, Electrospun PLGA Nanofibrous Scaffold for Skin Tissue Engineering. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 10872-7	9.5	64
165	Evolutionarily conserved intercalated disc protein Tmem65 regulates cardiac conduction and connexin 43 function. <i>Nature Communications</i> , 2015 , 6, 8391	17.4	23
164	Polyacrylamide gel substrates that simulate the mechanical stiffness of normal and malignant neuronal tissues increase protoporphyrin IX synthesis in glioma cells. <i>Journal of Biomedical Optics</i> , 2015 , 20, 098002	3.5	14
163	Strengthening in Graphene Oxide Nanosheets: Bridging the Gap between Interplanar and Intraplanar Fracture. <i>Nano Letters</i> , 2015 , 15, 6528-34	11.5	45
162	High strength measurement of monolayer graphene oxide. <i>Carbon</i> , 2015 , 81, 497-504	10.4	117
161	Robotic adherent cell injection for characterizing cell-cell communication. <i>IEEE Transactions on Biomedical Engineering</i> , 2015 , 62, 119-25	5	49
160	A MEMS XY-stage with sub-nanometer positioning resolution 2015 ,		1

159	Robotic Micromanipulation of Cells and Small Organisms. <i>Advanced Micro & Nanosystems</i> , 2015 , 339-368		
158	Voyage inside the cell: Microsystems and nanoengineering for intracellular measurement and manipulation. <i>Microsystems and Nanoengineering</i> , 2015 , 1,	7.7	54
157	Mechanical characterization of thin films using a MEMS device inside SEM 2015 ,		2
156	Mechanical differences of sickle cell trait (SCT) and normal red blood cells. <i>Lab on A Chip</i> , 2015 , 15, 3138-46		22
155	Automated micro-aspiration of mouse embryo limb bud tissue 2015 ,		2
154	Microfabricated perfusable cardiac biowire: a platform that mimics native cardiac bundle. <i>Lab on A Chip</i> , 2014 , 14, 869-82	7.2	98
153	A review of non-contact micro- and nano-printing technologies. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 053001	2	88
152	Nano-dissection and sequencing of DNA at single sub-nuclear structures. <i>Small</i> , 2014 , 10, 3267-74	11	18
151	Automated vitrification of mammalian embryos on a digital microfluidic device 2014 ,		4
150	Robotic Probing of Nanostructures inside Scanning Electron Microscopy. <i>IEEE Transactions on Robotics</i> , 2014 , 30, 758-765	6.5	18
149	Characterization of red blood cell deformability change during blood storage. <i>Lab on A Chip</i> , 2014 , 14, 577-83	7.2	50
148	Controlled ultrasonic micro-dissection of thin tissue sections. <i>Biomedical Microdevices</i> , 2014 , 16, 567-73	3.7	3
147	A system for counting fetal and maternal red blood cells. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 2823-9	5	17
146	Characterizing mechanical behavior of atomically thin films: A review. <i>Journal of Materials Research</i> , 2014 , 29, 338-347	2.5	31
145	In situ mechanical characterization of the cell nucleus by atomic force microscopy. <i>ACS Nano</i> , 2014 , 8, 3821-8	16.7	130
144	Biophysical characterization of bladder cancer cells with different metastatic potential. <i>Cell Biochemistry and Biophysics</i> , 2014 , 68, 241-6	3.2	36
143	Fluorescence and SEM correlative microscopy for nanomanipulation of subcellular structures. <i>Light: Science and Applications</i> , 2014 , 3, e224-e224	16.7	13
142	2014 ,		2

141	Locating End-Effector Tips in Robotic Micromanipulation. <i>IEEE Transactions on Robotics</i> , 2014 , 30, 125-130	5	35
140	High-throughput measurement of gap junctional intercellular communication. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014 , 306, H1708-13	5.2	12
139	Digital microfluidic processing of mammalian embryos for vitrification. <i>PLoS ONE</i> , 2014 , 9, e108128	3.7	30
138	TMEM43 mutation p.S358L alters intercalated disc protein expression and reduces conduction velocity in arrhythmogenic right ventricular cardiomyopathy. <i>PLoS ONE</i> , 2014 , 9, e109128	3.7	24
137	Electrical measurement of red blood cell deformability on a microfluidic device. <i>Lab on A Chip</i> , 2013 , 13, 3275-83	7.2	66
136	Automated Pick-Place of Silicon Nanowires. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013 , 10, 554-561	4.9	40
135	Automated micropipette aspiration of single cells. <i>Annals of Biomedical Engineering</i> , 2013 , 41, 1208-16	4.7	62
134	Locating end-effector tips in automated micromanipulation 2013 ,		4
133	Automated nanoprobng under scanning electron microscopy 2013 ,		1
132	Quantitative analysis of locomotive behavior of human sperm head and tail. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 390-6	5	31
131	A Load-Lock-Compatible Nanomanipulation System for Scanning Electron Microscope. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 230-237	5.5	57
130	Microfluidic characterization of specific membrane capacitance and cytoplasm conductivity of single cells. <i>Biosensors and Bioelectronics</i> , 2013 , 42, 496-502	11.8	45
129	Nanorobotic Manipulation of 1D Nanomaterials in Scanning Electron Microscopes 2013 , 155-165		2
128	Recent advances in microfluidic techniques for single-cell biophysical characterization. <i>Lab on A Chip</i> , 2013 , 13, 2464-83	7.2	184
127	Determination of local and global elastic moduli of valve interstitial cells cultured on soft substrates. <i>Journal of Biomechanics</i> , 2013 , 46, 1967-71	2.9	39
126	Partially filled electrodes for digital microfluidic devices. <i>Applied Physics Letters</i> , 2013 , 103, 024103	3.4	9
125	Mesenchymal stem cell mechanobiology and emerging experimental platforms. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20130179	4.1	103
124	Microfluidic devices for single-cell trapping and automated micro-robotic injection 2013 , 351-365e		1

123	Mechanical characterization of benign and malignant urothelial cells from voided urine. <i>Applied Physics Letters</i> , 2013 , 102, 123704	3.4	19
122	Microdevice array-based identification of distinct mechanobiological response profiles in layer-specific valve interstitial cells. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 673-80	3.7	40
121	Robotic Micropipette Aspiration of Biological Cells. <i>Springer Tracts in Advanced Robotics</i> , 2013 , 591-602	0.5	
120	Human Sperm Tracking, Analysis, and Manipulation 2013 , 251-264		4
119	Controlled aspiration and positioning of biological cells in a micropipette. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 1032-40	5	41
118	Three-dimensional rotation of mouse embryos. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 1049-56	5	74
117	Elastic and viscoelastic characterization of mouse oocytes using micropipette indentation. <i>Annals of Biomedical Engineering</i> , 2012 , 40, 2122-30	4.7	36
116	Miniaturized platform with on-chip strain sensors for compression testing of arrayed materials. <i>Lab on A Chip</i> , 2012 , 12, 4178-84	7.2	14
115	Automated nanomanipulation for nano device construction 2012 ,		1
114	Effect of oscillating fluid flow stimulation on osteocyte mRNA expression. <i>Journal of Biomechanics</i> , 2012 , 45, 247-51	2.9	58
113	Microfluidic approaches for cancer cell detection, characterization, and separation. <i>Lab on A Chip</i> , 2012 , 12, 1753-67	7.2	228
112	In vitro and in vivo testing of glucose-responsive insulin-delivery microdevices in diabetic rats. <i>Lab on A Chip</i> , 2012 , 12, 2533-9	7.2	45
111	Automated nanomanipulation for nanodevice construction. <i>Nanotechnology</i> , 2012 , 23, 065304	3.4	28
110	High-throughput biophysical measurement of human red blood cells. <i>Lab on A Chip</i> , 2012 , 12, 2560-7	7.2	122
109	Quantification of the specific membrane capacitance of single cells using a microfluidic device and impedance spectroscopy measurement. <i>Biomicrofluidics</i> , 2012 , 6, 34112	3.2	34
108	Characterization of the Elasticity of Valve Interstitial Cells on Soft Substrates Using Atomic Force Microscopy 2012 ,		1
107	Single Cell Deposition. <i>Methods in Cell Biology</i> , 2012 , 112, 403-420	1.8	1
106	Electrodeformation for single cell mechanical characterization. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 054012	2	56

105	A MEMS microgripper with changeable gripping tips 2011 ,		1
104	Piezoresistivity characterization of silicon nanowires using a MEMS device 2011 ,		1
103	Electrodeformation for single cell mechanical characterization 2011 ,		2
102	A fast and simple method to fabricate circular microchannels in polydimethylsiloxane (PDMS). <i>Lab on A Chip</i> , 2011 , 11, 545-51	7.2	77
101	Effect of nanowire number, diameter, and doping density on nano-FET biosensor sensitivity. <i>ACS Nano</i> , 2011 , 5, 6661-8	16.7	95
100	Microfluidic devices for mechanical characterisation of single cells in suspension. <i>Micro and Nano Letters</i> , 2011 , 6, 327	0.9	29
99	Automated sperm immobilization for intracytoplasmic sperm injection. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 935-42	5	31
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