

Ryuji Yokokawa

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5413782/ryuji-yokokawa-publications-by-year.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

114
papers

1,183
citations

20
h-index

30
g-index

165
ext. papers

1,502
ext. citations

4.7
avg, IF

4.35
L-index

#	Paper	IF	Citations
114	Evaluation of Trans-epithelial Electrical Resistance by Removal and Replenishment of Extracellular Ca ²⁺ . <i>IEEJ Transactions on Sensors and Micromachines</i> , 2022 , 142, 21-28	0.2	
113	Linear-Zero Mode Waveguides for Single-Molecule Fluorescence Observation of Nucleotides in Kinesin-Microtubule Motility Assay.. <i>Methods in Molecular Biology</i> , 2022 , 2430, 121-131	1.4	
112	Design of Mechanical and Electrical Properties for Multidirectional Control of Microtubules.. <i>Methods in Molecular Biology</i> , 2022 , 2430, 105-119	1.4	
111	Mechanical loading of intraluminal pressure mediates wound angiogenesis by regulating the TOCA family of F-BAR proteins.. <i>Nature Communications</i> , 2022 , 13, 2594	17.4	0
110	Growth rate-dependent flexural rigidity of microtubules influences pattern formation in collective motion. <i>Journal of Nanobiotechnology</i> , 2021 , 19, 218	9.4	2
109	Mesenchymal glioblastoma-induced mature de-novo vessel formation of vascular endothelial cells in a microfluidic device. <i>Molecular Biology Reports</i> , 2021 , 48, 395-403	2.8	2
108	Microphysiological systems in early stage drug development: Perspectives on current applications and future impact. <i>Journal of Toxicological Sciences</i> , 2021 , 46, 99-114	1.9	4
107	Targeted permeabilization of the cell wall and extraction of charged molecules from single cells in intact plant clusters using a focused electric field. <i>Analyst, The</i> , 2021 , 146, 1604-1611	5	0
106	Different motilities of microtubules driven by kinesin-1 and kinesin-14 motors patterned on nanopillars. <i>Science Advances</i> , 2020 , 6, eaax7413	14.3	6
105	A new perfusion culture method with a self-organized capillary network. <i>PLoS ONE</i> , 2020 , 15, e0240552	3.7	8
104	Nano-systems Driven by Motor Proteins. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2020 , 140, 585-587	0	
103	Distinct Kinetics in Electrophoretic Extraction of Cytoplasmic RNA from Single Cells. <i>Analytical Chemistry</i> , 2020 , 92, 1485-1492	7.8	3
102	Oxygen consumption rate of tumour spheroids during necrotic-like core formation. <i>Analyst, The</i> , 2020 , 145, 6342-6348	5	10
101	Vascularized cancer on a chip: The effect of perfusion on growth and drug delivery of tumor spheroid. <i>Biomaterials</i> , 2020 , 229, 119547	15.6	93
100	The Cooperative Motility of Microtubules on Nano-Patterned Kinesin-1 Turf 2019 ,		1
99	Spatial Patterning of Kinesin-1 and Dynein Motor Proteins in an In Vitro Assay using Aqueous Two-Phase Systems (ATPS). <i>Langmuir</i> , 2019 , 35, 13003-13010	4	2
98	Transport of microtubules according to the number and spacing of kinesin motors on gold nano-pillars. <i>Nanoscale</i> , 2019 , 11, 9879-9887	7.7	6

97	Microtubule polymerization in alignment by an on-chip temperature gradient platform. <i>Sensors and Actuators B: Chemical</i> , 2019 , 298, 126813	8.5	3
96	Dynamics of RNA in single cells under focused electric field. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2019 , 2019, J22109	0	
95	Perfusable Vascular Network with a Tissue Model in a Microfluidic Device. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	2
94	SINC-seq: correlation of transient gene expressions between nucleus and cytoplasm reflects single-cell physiology. <i>Genome Biology</i> , 2018 , 19, 66	18.3	27
93	Numerical analyses on single-cell electroporation and RNA extraction under focused electric field. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2018 , 2018, J0530202	0	
92	Isotachophoresis-based RNA extraction from fixed single cells. <i>The Proceedings of the Symposium on Micro-Nano Science and Technology</i> , 2018 , 2018.9, 30am3PN37	0	
91	Engineering a Perfusable Vascular Network in a Microfluidic Device for a Morphological Analysis. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2018 , 138, 275-280	0.2	
90	Preface to the Special Issue on The Awarded Papers of The 34th Sensor Symposium IEEJ Transactions on Sensors and Micromachines, 2018 , 138, 268-269	0.2	
89	Characterization of Microtubules Gliding on Surfaces Roughness Structure. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2018 , 138, 503-508	0.2	
88	Simultaneous Observation of Kinesin-Driven Microtubule Motility and Binding of Adenosine Triphosphate Using Linear Zero-Mode Waveguides. <i>ACS Nano</i> , 2018 , 12, 11975-11985	16.7	10
87	Electrical Lysis and RNA Extraction from Single Cells Fixed by Dithiobis(succinimidyl propionate). <i>Analytical Chemistry</i> , 2018 , 90, 12512-12518	7.8	10
86	Engineering of vascularized 3D cell constructs to model cellular interactions through a vascular network. <i>Biomicrofluidics</i> , 2018 , 12, 042204	3.2	24
85	Linear zero mode waveguides for the study of chemo-mechanical coupling mechanism of kinesin 2017 ,		1
84	Integrating perfusable vascular networks with a three-dimensional tissue in a microfluidic device. <i>Integrative Biology (United Kingdom)</i> , 2017 , 9, 506-518	3.7	106
83	Control of molecular shuttles by designing electrical and mechanical properties of microtubules. <i>Science Robotics</i> , 2017 , 2,	18.6	24
82	Pick-and-Place Assembly of Single Microtubules. <i>Small</i> , 2017 , 13, 1701136	11	5
81	Mathematical modeling for meshwork formation of endothelial cells in fibrin gels. <i>Journal of Theoretical Biology</i> , 2017 , 429, 95-104	2.3	3
80	Microtubule density and landing rate as parameters to analyze tau protein in the MT-kinesin gliding assay. <i>Sensors and Actuators B: Chemical</i> , 2017 , 238, 954-961	8.5	3

79	Design and Fabrication of Linear-shaped Zero Mode Waveguides for Single Molecule Observation of Kinesin and Fluorescent ATP. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2017 , 137, 159-164	0.2	
78	Preface to the Special Issue on World State-of-the-art Research on Sensors and Micromachines <i>IEEJ Transactions on Sensors and Micromachines</i> , 2017 , 137, 1-1	0.2	
77	Preface to the Special Issue on Selected papers in The Technical Meetings on Sensors and Micromachines 2016 <i>IEEJ Transactions on Sensors and Micromachines</i> , 2017 , 137, 123-123	0.2	
76	Extraction efficiency of RNA at single cell level via microfluidic isotachopheresis. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2016 , 2016, J0540301	0	
75	Pneumatically-driven Microfluidic Device for Evaluating Active Transport by Kinesin Motor Protein. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2016 , 136, 384-389	0.2	
74	Velocity Control of Microtubules with High Spatial Resolution on an Au-coated Surface with an SU-8 Thermal Isolation Layer. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2016 , 136, 77-82	0.2	
73	Tissue culture on a chip: Developmental biology applications of self-organized capillary networks in microfluidic devices. <i>Development Growth and Differentiation</i> , 2016 , 58, 505-15	3	10
72	Single-molecule fluorescence imaging of kinesin using linear zero-mode waveguides 2016 ,		2
71	On-chip microtubule gliding assay for parallel measurement of tau protein species. <i>Lab on A Chip</i> , 2016 , 16, 1691-7	7.2	8
70	Multiple independent autonomous hydraulic oscillators driven by a common gravity head. <i>Nature Communications</i> , 2015 , 6, 7301	17.4	33
69	Dynamic formation of a microchannel array enabling kinesin-driven microtubule transport between separate compartments on a chip. <i>Lab on A Chip</i> , 2015 , 15, 2055-63	7.2	6
68	Synergistic effect of ATP for RuvA-RuvB-Holliday junction DNA complex formation. <i>Scientific Reports</i> , 2015 , 5, 18177	4.9	8
67	Control of microtubule trajectory within an electric field by altering surface charge density. <i>Scientific Reports</i> , 2015 , 5, 7669	4.9	22
66	Vascular network formation for a long-term spheroid culture by co-culturing endothelial cells and fibroblasts 2015 ,		4
65	J0540101 Purity of cytoplasmic RNA extracted from single cells via electrical lysis and isotachopheresis. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2015 , 2015, _J0540101--_J0540101-	0	
64	W221002 Integration of Micro/Nano Fabrications and Biophysics. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2015 , 2015, _W221002-1-_W221002-2	0	
63	Tug-of-war of microtubule filaments at the boundary of a kinesin- and dynein-patterned surface. <i>Scientific Reports</i> , 2014 , 4, 5281	4.9	11
62	In situ velocity control of gliding microtubules with temperature monitoring by fluorescence excitation on a patterned gold thin film. <i>Materials Research Express</i> , 2014 , 1, 045405	1.7	5

61	Fabrication of a Perfusable Glass Microfluidic Channel for Microtubule Manipulation using an Electric Field. <i>IEEE Transactions on Sensors and Micromachines</i> , 2014 , 134, 64-69	0.2	
60	25 Years for integrating Micromachines and Biomaterials. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2014 , 134, 288-288	0	
59	Biosensing MAPs as "roadblocks": kinesin-based functional analysis of tau protein isoforms and mutants using suspended microtubules (SMTs). <i>Lab on A Chip</i> , 2013 , 13, 3217-24	7.2	12
58	Microfluidic oscillators with widely tunable periods. <i>Lab on A Chip</i> , 2013 , 13, 1644-8	7.2	23
57	Suspended microtubules demonstrate high sensitivity and low experimental variability in kinesin bead assay. <i>Analyst, The</i> , 2013 , 138, 1653-6	5	4
56	Colocalization of quantum dots by reactive molecules carried by motor proteins on polarized microtubule arrays. <i>ACS Nano</i> , 2013 , 7, 447-55	16.7	37
55	2P119 Single-molecule visualization of RuvB oligomer for characterizing a AAA ⁺ class hexameric ATPase with zero-mode waveguides(04. Nucleic acid binding proteins,Poster). <i>Seibutsu Butsuri</i> , 2013 , 53, S178	0	
54	Specific transport of target molecules by motor proteins in microfluidic channels. <i>ChemPhysChem</i> , 2013 , 14, 1618-25	3.2	9
53	Constant flow-driven microfluidic oscillator for different duty cycles. <i>Analytical Chemistry</i> , 2012 , 84, 1152-6	7.6	34
52	Perfusable multi-scale channels fabricated by integration of nanoimprint lithography (NIL) and UV lithography (UVL). <i>Microelectronic Engineering</i> , 2012 , 98, 58-63	2.5	9
51	Highly-sensitive fluorescence detection and imaging with microfabricated total internal reflection (TIR)-based devices. <i>Journal of Micro-Nano Mechatronics</i> , 2012 , 7, 45-59		2
50	Microfluidic automation using elastomeric valves and droplets: reducing reliance on external controllers. <i>Small</i> , 2012 , 8, 2925-34	11	27
49	Metal-based piezoelectric microelectromechanical systems scanner composed of Pb(Zr, Ti)O ₃ thin film on titanium substrate. <i>Microsystem Technologies</i> , 2012 , 18, 765-771	1.7	12
48	A perfusable microfluidic device with on-chip total internal reflection fluorescence microscopy (TIRFM) for in situ and real-time monitoring of live cells. <i>Biomedical Microdevices</i> , 2012 , 14, 791-7	3.7	10
47	Composition Dependence of Piezoelectric Properties of Pb(Zr,Ti)O ₃ Films Prepared by Combinatorial Sputtering. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 09LA12	1.4	15
46	Analyzing threshold pressure limitations in microfluidic transistors for self-regulated microfluidic circuits. <i>Applied Physics Letters</i> , 2012 , 101, 234107	3.4	15
45	Micro fabrication of lead-free (K,Na)NbO ₃ piezoelectric thin films by dry etching. <i>Micro and Nano Letters</i> , 2012 , 7, 1223-1225	0.9	6
44	Real-time monitoring of Ca ²⁺ concentration in pancreatic beta cells by a microfluidic device integrated with Total Internal Reflection (TIR)-based chip 2011 ,		1

43	Metal-based piezoelectric MEMS scanner mirrors composed of PZT thin films on titanium substrates 2011 ,		3
42	1M1548 P46 Single-molecule visualization of a AAA ⁺ DNA recombination ATPase with zero-mode waveguides toward elucidation of its hexamer formation(Molecular motor 2,The 49th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2011 , 51, S65	0	
41	Piezoelectric properties of microfabricated (K,Na)NbO ₃ thin films. <i>Sensors and Actuators A: Physical</i> , 2011 , 171, 223-227	3.9	24
40	Measuring the force of adhesion between multiple kinesins and a microtubule using the fluid force produced by microfluidic flow. <i>Microfluidics and Nanofluidics</i> , 2011 , 11, 519-527	2.8	3
39	Open-access and multi-directional electroosmotic flow chip for positioning heterotypic cells. <i>Lab on A Chip</i> , 2011 , 11, 1507-12	7.2	9
38	Multilayer Thin-Film Capacitor Fabricated by Radio-Frequency Magnetron Sputtering. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 09NA01	1.4	7
37	D-2-1 Fabrication of Sub-micrometer Channels for Bio-assay Perfusion Device by Integrating Nanoimprint Lithography and UV Lithography. <i>The Proceedings of the Conference on Information Intelligence and Precision Equipment IIP</i> , 2011 , 2011, 28-29	0	
36	Polarity orientation of microtubules and its applications with motor proteins. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2010 , 1, 045002	1.6	
35	Biomotor-based nanotransport system constructed by pick-and-place assembly of individual molecules 2010 ,		1
34	Orientation Dependence of Transverse Piezoelectric Properties of Epitaxial BaTiO ₃ Films. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 09MA09	1.4	14
33	A nano-needle/microtubule composite gliding on a kinesin-coated surface for target molecule transport. <i>Lab on A Chip</i> , 2010 , 10, 86-91	7.2	15
32	Orientation Dependence of Shear Mode Piezoelectric Properties of Epitaxial Pb(Zrx,Ti1-x)O ₃ Thin Films. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 09MA07	1.4	6
31	High efficiency energy harvester of transferred epitaxial PZT films on stainless steel sheets 2010 ,		2
30	Individual evaluation of DEP, EP and AC-EOF effects on DNA molecules in a DNA concentrator. <i>Sensors and Actuators B: Chemical</i> , 2010 , 143, 769-775	8.5	24
29	J0207-2-1 Heterotypic cell positioning using electroosmotic flow and observation of cell-cell interactions. <i>The Proceedings of the JSME Annual Meeting</i> , 2010 , 2010.6, 239-240		
28	T1601-1-4 Fabrication of piezoelectric cantilever-shaped actuators with lead-free KNbO ₃ -NaNbO ₃ thin films. <i>The Proceedings of the JSME Annual Meeting</i> , 2010 , 2010.8, 193-194		
27	J0207-1-6 Bi-directional transport of motor protein by electrophoresis. <i>The Proceedings of the JSME Annual Meeting</i> , 2010 , 2010.6, 135-136		
26	Nano monorail for molecular motors: Individually manipulated microtubules for kinesin motion 2009 ,		1

25	A cell lysis and protein purification single molecule assay devices for evaluation of genetically engineered proteins. <i>Electronics and Communications in Japan</i> , 2009 , 92, 20-30	0.4	
24	Fabrication of optically smooth, through-wafer silicon molds for PDMS total internal reflection-based devices. <i>Microsystem Technologies</i> , 2009 , 15, 1845-1853	1.7	4
23	Sequential processing from cell lysis to protein assay on a chip enabling the optimization of an F(1)-ATPase single molecule assay condition. <i>Lab on A Chip</i> , 2009 , 9, 3567-73	7.2	13
22	Versatile microfluidic total internal reflection (TIR)-based devices: application to microbeads velocity measurement and single molecule detection with upright and inverted microscope. <i>Lab on A Chip</i> , 2009 , 9, 244-50	7.2	20
21	Active transport of oil droplets along oriented microtubules by kinesin molecular motors. <i>Lab on A Chip</i> , 2009 , 9, 1694-700	7.2	30
20	A Monolithic Dual-Color Total-Internal-Reflection-Based Chip for Highly Sensitive and High-Resolution Dual-Fluorescence Imaging. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 1371-1381	2.5	1
19	Fabrication and characterization of multiple nanowires using microtubule structures 2009 ,		1
18	2008 ,		2
17	Polarity orientation of microtubules utilizing a dynein-based gliding assay. <i>Nanotechnology</i> , 2008 , 19, 125505	3.4	9
16	DNA molecule manipulation by motor proteins for analysis at the single-molecule level. <i>Analytical and Bioanalytical Chemistry</i> , 2008 , 391, 2735-43	4.4	12
15	Simultaneous and bidirectional transport of kinesin-coated microspheres and dynein-coated microspheres on polarity-oriented microtubules. <i>Biotechnology and Bioengineering</i> , 2008 , 101, 1-8	4.9	48
14	A Cell Lysis and Protein Purification - Single Molecule Assay Devices for Evaluation of Genetically Engineered Proteins. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2008 , 128, 167-175	0.2	
13	Suppression of Stiction Force by All-Vapor Processes using HF, Ozone, and HMDS for MEMS Devices. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2007 , 127, 221-227	0.2	3
12	Transcriptome analysis device based on liquid phase detection by fluorescently labeled nucleic acid probes. <i>Biomedical Microdevices</i> , 2007 , 9, 869-75	3.7	4
11	Design, simulation and fabrication of a total internal reflection (TIR)-based chip for highly sensitive fluorescent imaging. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, 1139-1146	2	14
10	Biomolecular linear motors confined to move upon micro-patterns on glass. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1550-1554	2	21
9	Unidirectional transport of a bead on a single microtubule immobilized in a submicrometre channel. <i>Nanotechnology</i> , 2006 , 17, 289-294	3.4	38
8	On-chip syringe pumps for picoliter-scale liquid manipulation. <i>Lab on A Chip</i> , 2006 , 6, 1062-6	7.2	19

7	. <i>IEEE Transactions on Advanced Packaging</i> , 2005 , 28, 577-583		9
6	Mechanical properties of aerogel-like thin films used for MEMS. <i>Journal of Micromechanics and Microengineering</i> , 2004 , 14, 681-686	2	17
5	Ultra-smooth glass channels for bioassay with motor proteins. <i>Analyst, The</i> , 2004 , 129, 850-4	5	6
4	Hybrid nanotransport system by biomolecular linear motors. <i>Journal of Microelectromechanical Systems</i> , 2004 , 13, 612-619	2.5	47
3	Unidirectional Transport of Kinesin-Coated Beads on Microtubules Oriented in a Microfluidic Device. <i>Nano Letters</i> , 2004 , 4, 2265-2270	11.5	73
2	On/off control of biomolecular motors in a microfluidic device		1
1	Sorting of molecular shuttles by designing electrical and mechanical properties of microtubules		1