Yuya Morimoto

List of Publications by Year
in descending order

83	2,468	23	45
papers	citations	h-index	g-index
		279487	233125

85	85	85	3527
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biofabrication strategies for 3D in vitro models and regenerative medicine. Nature Reviews Materials, 2018, 3, 21-37.	23.3	502
2	Molding Cell Beads for Rapid Construction of Macroscopic 3D Tissue Architecture. Advanced Materials, 2011, 23, H90-4.	11.1	275
3	Skin integrated with perfusable vascular channels on a chip. Biomaterials, 2017, 116, 48-56.	5.7	203
4	Biohybrid robot powered by an antagonistic pair of skeletal muscle tissues. Science Robotics, 2018, 3, .	9.9	170
5	Three-dimensional neuronâ€“muscle constructs with neuromuscular junctions. Biomaterials, 2013, 34, 9413-9419.	5.7	162
6	Monodisperse Cell-Encapsulating Peptide Microgel Beads for 3D Cell Culture. Langmuir, 2010, 26, 2645-2649.	1.6	92
7	Three-dimensional axisymmetric flow-focusing device using stereolithography. Biomedical Microdevices, 2009, 11, 369-377.	1.4	83
8	Formation of contractile 3D bovine muscle tissue for construction of millimetre-thick cultured steak. Npj Science of Food, 2021, 5, 6.	2.5	81
9	Millimeterâ€Sized Neural Building Blocks for 3D Heterogeneous Neural Network Assembly. Advanced Healthcare Materials, 2013, 2, 1564-1570.	3.9	76
10	Monodisperse semi-permeable microcapsules for continuous observation of cells. Lab on A Chip, 2009, 9, 2217.	3.1	73
11	Point-, line-, and plane-shaped cellular constructs for 3D tissue assembly. Advanced Drug Delivery Reviews, 2015, 95, 29-39.	6.6	63
12	Human induced pluripotent stem cell-derived fiber-shaped cardiac tissue on a chip. Lab on A Chip, 2016, 16, 2295-2301.	3.1	52
13	Biohybrid robot with skeletal muscle tissue covered with a collagen structure for moving in air. APL Bioengineering, 2020, 4, 026101.	3.3	51
14	Three-dimensional cell culture based on microfluidic techniques to mimic living tissues. Biomaterials Science, 2013, 1, 257-264.	2.6	47
15	Pesticide vapor sensing using an aptamer, nanopore, and agarose gel on a chip. Lab on A Chip, 2017, 17, 2421-2425.	3.1	46
16	Perfusable and stretchable 3D culture system for skin-equivalent. Biofabrication, 2019, 11, 011001.	3.7	42
17	Multipoint Bending and Shape Retention of a Pneumatic Bending Actuator by a Variable Stiffness Endoskeleton. Soft Robotics, 2018, 5, 718-725.	4.6	37
18	Three-dimensional printed microfluidic modules for design changeable coaxial microfluidic devices. Sensors and Actuators B: Chemical, 2018, 274, 491-500.	4.0	37

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19	Construction of 3D, Layered Skin, Microsized Tissues by Using Cell Beads for Cellular Function Analysis. Advanced Healthcare Materials, 2013, 2, 261-265.	3.9	34
20	Mass Production of Cellâ€Laden Calcium Alginate Particles with Centrifugal Force. Advanced Healthcare Materials, 2017, 6, 1601375.	3.9	33
21	Three-dimensional contractile muscle tissue consisting of human skeletal myocyte cell line. Experimental Cell Research, 2018, 370, 168-173.	1.2	25
22	Self-Propelled Motion of Monodisperse Underwater Oil Droplets Formed by a Microfluidic Device. Langmuir, 2017, 33, 5393-5397.	1.6	24
23	Centrifuge-based step emulsification device for simple and fast generation of monodisperse picoliter droplets. Sensors and Actuators B: Chemical, 2019, 301, 127164.	4.0	24
24	A hybrid axisymmetric flow-focusing device for monodisperse picoliter droplets. Journal of Micromechanics and Microengineering, 2011, 21, 054031.	1.5	20
25	Biohybrid device with antagonistic skeletal muscle tissue for measurement of contractile force. Advanced Robotics, 2019, 33, 208-218.	1.1	19
26	Liquid-filled tunable lenticular lens. Journal of Micromechanics and Microengineering, 2015, 25, 035030.	1.5	16
27	Cell-Based Biohybrid Sensor Device for Chemical Source Direction Estimation. Cyborg and Bionic Systems, 2021, 2021, .	3.7	16
28	Portable biohybrid odorant sensors using cell-laden collagen micropillars. Lab on A Chip, 2019, 19, 1971-1976.	3.1	15
29	Living skin on a robot. Matter, 2022, 5, 2190-2208.	5.0	15
30	3D printed microfluidic devices for lipid bilayer recordings. Lab on A Chip, 2022, 22, 890-898.	3.1	14
31	Formation of Branched and Chained Alginate Microfibers Using Theta-Glass Capillaries. Micromachines, 2018, 9, 303.	1.4	13
32	Vessel-like channels supported by poly-l-lysine tubes. Journal of Bioscience and Bioengineering, 2016, 122, 753-757.	1.1	9
33	A dynamic microarray device for pairing and electrofusion of giant unilamellar vesicles. Sensors and Actuators B: Chemical, 2020, 311, 127922.	4.0	7
34	Microfluidic system for applying shear flow to endothelial cells on culture insert with collagen vitrigel membrane. Sensors and Actuators B: Chemical, 2021, 348, 130675.	4.0	7
35	Skeletal muscleâ€adipose cocultured tissue fabricated using cellâ€laden microfibers and a hydrogel sheet. Biotechnology and Bioengineering, 2022, 119, 636-643.	1.7	7
36	A Cylindrical Molding Method for the Biofabrication of Plane-Shaped Skeletal Muscle Tissue. Micromachines, 2021, 12, 1411.	1.4	7

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37	Pneumatic balloon actuator with tunable bending points. , 2015, , .		6
38	Balloon Pump with Floating Valves for Portable Liquid Delivery. Micromachines, 2016, 7, 39.	1.4	6
39	Temporal Observation of Adipocyte Microfiber Using Anchoring Device. Micromachines, 2019, 10, 358.	1.4	6
40	Functional analysis of human brain endothelium using a microfluidic device integrating a cell culture insert. APL Bioengineering, 2022, 6, 016103.	3.3	6
41	Transendothelial electrical resistance (TEER) measurement system of 3D tubular vascular channel. , 2018, , .		4
42	3Dâ€Printed Centrifugal Pump Driven by Magnetic Force in Applications for Microfluidics in Biological Analysis. Advanced Healthcare Materials, 2022, 11, .	3.9	4
43	Microfluidically tunable lenticular lens. , 2013, , .		3
44	Electrical detection of pesticide vapors by biological nanopores with DNA aptamers. , 2015, , .		3
45	Skin-equivalent integrated with perfusable channels on curved surface. , 2015, , .		3
46	An inhalation anesthetic device for stereotaxic operation on mouse pups. Journal of Neuroscience Methods, 2015, 243, 63-67.	1.3	3
47	A swimming robot actuated by cultured skeletal muscle tissue. Transactions of the JSME (in Japanese), 2020, 86, 20-00180-20-00180.	0.1	3
48	Reconstruction of 3D Hierarchic Micro-Tissues using Monodisperse Collagen Microbeads. , 2009, , .		2
49	3D human cardiac muscle on a chip: Quantification of contractile force of human iPS-derived cardiomyocytes. , 2015, , .		2
50	Cells smell on a CMOS: A portable odorant detection system using cell-laden collagen pillars. , 2017, , .		2
51	Formation of vessel-like channel using alginate fiber as a sacrificial structure. , 2017, , .		2
52	Centrifuge-based membrane emulsification toward high-throughput generation of monodisperse liposomes. , 2017, , .		2
53	Biohybrid Soft Robots Driven by Contractions of Skeletal Muscle Tissue. Journal of Robotics and Mechatronics, 2022, 34, 260-262.	0.5	2
54	“Housing” for cells in monodisperse microcages. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	1

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55	Muscle fibers actuated by neural signals. , 2012, , .		1
56	Muscle based bioactuator driven in air. , 2013, , .		1
57	Multi-layered placental barrier structure integrated with microfluidic channels. , 2013, , .		1
58	PDMS balloon pump with a microfluidic regulator for the continuous drug supply in low flow rate. , 2015, , .		1
59	Stretchable culture device of skin-equivalent with improved epidermis thickness. , 2016, , .		1
60	Parylene based flexible glucose sensor using glucose-responsive fluorescent hydrogel. , 2017, , .		1
61	In Situ Glugose Monitoring in 3D-Cultured Skeletal Muscle Tissues. , 2019, , .		1
62	Editorial for the Special Issue of Selected Papers from the 9th Symposium on Micro-Nano Science and Technology on Micromachines. Micromachines, 2019, 10, 618.	1.4	1
63	Cell-laden hinged microplates for measuring the contractile forces of cardiomyocytes. , 2015, , .		0
64	Quantification of contractile property for functional drug testing with human iPS-derived cardiomyocytes. , 2016, , .		0
65	Catch a cell on a CMOS: Selective retrieval of single cell using a microplate technology performed on a CMOS imaging sensor. , 2016, , .		0
66	Pneumatically driven PDMS micropillars for the investigation of cell-cell interaction. , 2018, , .		0
67	Editorial for the Special Issue of Selected Papers from the 8th Symposium on Microâ€“Nano Science and Technology on Micromachines. Micromachines, 2018, 9, 627.	1.4	0
68	Cell-laden micropillars detect gaseous odorants on a liquid-air interface. , 2018, , .		0
69	In Vitro Tissue Construction for Organ-on-a-Chip Applications. Bioanalysis, 2019, , 247-274.	0.1	0
70	Stretchable and Perfusable Microfluidic Device for Cell Barrier Model. , 2020, , .		0
71	3D Pocket-Shape Dermis-Equivalent as a Skin Material for a Robotic Finger. , 2020, , .		0
72	Formation of Micro-Size Perfusable Channels in mm-Thick Muscle Tissue. , 2020, , .		0

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73	Locally-Patterned Parylene Membrane Enables Electrical Resistance Measurement for a Cellular Barrier Consisting of < 100 Cells. , 2020, , .		0
74	Micro Tissue Assembly for Co-Culturing 3D Skeletal Muscle and Adipose Tissues. , 2020, , .		0
75	Biohybrid Robot. Journal of the Robotics Society of Japan, 2021, 39, 310-313.	0.0	0
76	Biohybrid Micro Pinwheel Powered by Trapped Microalgae. , 2021, , .		0
77	Monolithic Fabrication of a Lipid Bilayer Device Using Stereolithography. , 2021, , .		0
78	Living Skin as a Self-Repairable Covering Material for Robots. , 2021, , .		0
79	Construction and Application of Three-Dimensional Cellular Tissues Assembled by Point-, Line-, and Plane-Shaped Cellular Building Blocks. IEEJ Transactions on Sensors and Micromachines, 2017, 137, 322-327.	0.0	0
80	Application of fluid shear stress to engineered vascular wall using microchannel. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2019, 2019.10, 20am2PN307.	0.0	0
81	Living dermis as a self-repairable coverage material for robots. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2020, 2020.11, 28A3-MN311.	0.0	0
82	In Vitro Skeletal Muscle Tissue with Edible Hydrogel Toward Fabrication of Cultured Meat in Macroscopic Size. , 2022, , .		0
83	On-Site Formation of Lipid Bilayer Arrays with An Air/Liquid Interface. , 2022, , .		0