

Somin Lee

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2006903/somin-lee-publications-by-citations.pdf>

Version: 2024-04-24

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.

110
papers

3,508
citations

32
h-index

57
g-index

115
ext. papers

4,583
ext. citations

8.4
avg, IF

5.71
L-index

#	Paper	IF	Citations
110	Engineering of functional, perfusable 3D microvascular networks on a chip. <i>Lab on A Chip</i> , 2013 , 13, 1489-1500	7.2	540
109	Human eye-inspired soft optoelectronic device using high-density MoS-graphene curved image sensor array. <i>Nature Communications</i> , 2017 , 8, 1664	17.4	241
108	A Low Permeability Microfluidic Blood-Brain Barrier Platform with Direct Contact between Perfusable Vascular Network and Astrocytes. <i>Scientific Reports</i> , 2017 , 7, 8083	4.9	137
107	Frequency modulation of ERK activation dynamics rewires cell fate. <i>Molecular Systems Biology</i> , 2015 , 11, 838	12.2	122
106	Interstitial flow regulates the angiogenic response and phenotype of endothelial cells in a 3D culture model. <i>Lab on A Chip</i> , 2016 , 16, 4189-4199	7.2	109
105	Microfluidics in nanoparticle drug delivery; From synthesis to pre-clinical screening. <i>Advanced Drug Delivery Reviews</i> , 2018 , 128, 29-53	18.5	100
104	Three-dimensional biomimetic model to reconstitute sprouting lymphangiogenesis in vitro. <i>Biomaterials</i> , 2016 , 78, 115-28	15.6	98
103	A microfluidic platform for quantitative analysis of cancer angiogenesis and intravasation. <i>Biomicrofluidics</i> , 2014 , 8, 054102	3.2	85
102	Engineering of a Biomimetic Pericyte-Covered 3D Microvascular Network. <i>PLoS ONE</i> , 2015 , 10, e0133880	3.7	83
101	Microfluidic vascularized bone tissue model with hydroxyapatite-incorporated extracellular matrix. <i>Lab on A Chip</i> , 2015 , 15, 3984-8	7.2	81
100	Biomimetic Model of Tumor Microenvironment on Microfluidic Platform. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700196	10.1	79
99	Tumor spheroid-on-a-chip: a standardized microfluidic culture platform for investigating tumor angiogenesis. <i>Lab on A Chip</i> , 2019 , 19, 2822-2833	7.2	68
98	Multiscale patterned transplantable stem cell patches for bone tissue regeneration. <i>Biomaterials</i> , 2014 , 35, 9058-67	15.6	64
97	A bioengineered array of 3D microvessels for vascular permeability assay. <i>Microvascular Research</i> , 2014 , 91, 90-8	3.7	62
96	Spatio-temporal co-ordination of RhoA, Rac1 and Cdc42 activation during prototypical edge protrusion and retraction dynamics. <i>Scientific Reports</i> , 2016 , 6, 21901	4.9	58
95	Microfluidic-based vascularized microphysiological systems. <i>Lab on A Chip</i> , 2018 , 18, 2686-2709	7.2	55
94	Piezo1 incorporates mechanical force signals into the genetic program that governs lymphatic valve development and maintenance. <i>JCI Insight</i> , 2019 , 4,	9.9	54

93	IFN- α drives inflammatory bowel disease pathogenesis through VE-cadherin-directed vascular barrier disruption. <i>Journal of Clinical Investigation</i> , 2019 , 129, 4691-4707	15.9	54
92	Snake fang-inspired stamping patch for transdermal delivery of liquid formulations. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	51
91	Involvement of 14-3-3 in tubulin instability and impaired axon development is mediated by Tau. <i>FASEB Journal</i> , 2015 , 29, 4133-44	0.9	50
90	Nanogrooved substrate promotes direct lineage reprogramming of fibroblasts to functional induced dopaminergic neurons. <i>Biomaterials</i> , 2015 , 45, 36-45	15.6	50
89	Engineering-Aligned 3D Neural Circuit in Microfluidic Device. <i>Advanced Healthcare Materials</i> , 2016 , 5, 159-66	10.1	50
88	3D brain angiogenesis model to reconstitute functional human blood-brain barrier in vitro. <i>Biotechnology and Bioengineering</i> , 2020 , 117, 748-762	4.9	49
87	Multiple roles of lymphatic vessels in peripheral lymph node development. <i>Journal of Experimental Medicine</i> , 2018 , 215, 2760-2777	16.6	48
86	"Open-top" microfluidic device for in vitro three-dimensional capillary beds. <i>Lab on A Chip</i> , 2017 , 17, 3405-3414	14.6	46
85	Creation of a Hybrid Scaffold with Dual Configuration of Aligned and Random Electrospun Fibers. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2826-32	9.5	41
84	Tumor Microenvironment on a Chip: The Progress and Future Perspective. <i>Bioengineering</i> , 2017 , 4,	5.3	40
83	Microfluidics within a well: an injection-molded plastic array 3D culture platform. <i>Lab on A Chip</i> , 2018 , 18, 2433-2440	7.2	39
82	High-Throughput Microfluidic 3D Cytotoxicity Assay for Cancer Immunotherapy (CACI-IMPACT Platform). <i>Frontiers in Immunology</i> , 2019 , 10, 1133	8.4	36
81	Wet-AMD on a Chip: Modeling Outer Blood-Retinal Barrier In Vitro. <i>Advanced Healthcare Materials</i> , 2018 , 7, 1700028	10.1	36
80	Protein kinase C and calcineurin cooperatively mediate cell survival under compressive mechanical stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 13471-13476	11.5	34
79	Reconstituting ring-rafts in bud-mimicking topography of model membranes. <i>Nature Communications</i> , 2014 , 5, 4507	17.4	32
78	The proteasome controls presynaptic differentiation through modulation of an on-site pool of polyubiquitinated conjugates. <i>Journal of Cell Biology</i> , 2016 , 212, 789-801	7.3	30
77	Modeling neural circuit, blood-brain barrier, and myelination on a microfluidic 96 well plate. <i>Biofabrication</i> , 2019 , 11, 035013	10.5	29
76	3D Microfluidic Bone Tumor Microenvironment Comprised of Hydroxyapatite/Fibrin Composite. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019 , 7, 168	5.8	28

75	Monolithic digital patterning of polydimethylsiloxane with successive laser pyrolysis. <i>Nature Materials</i> , 2021 , 20, 100-107	27	28
74	A microfluidic based in vitro model of synaptic competition. <i>Molecular and Cellular Neurosciences</i> , 2014 , 60, 43-52	4.8	27
73	Microfluidics-based skin irritation test using 3D angiogenesis platform. <i>APL Bioengineering</i> , 2019 , 3, 0361001	10.1	26
72	Engineering tumor vasculature on an injection-molded plastic array 3D culture (IMPACT) platform. <i>Lab on A Chip</i> , 2019 , 19, 2071-2080	7.2	26
71	Injured Axons Instruct Schwann Cells to Build Constricting Actin Spheres to Accelerate Axonal Disintegration. <i>Cell Reports</i> , 2019 , 27, 3152-3166.e7	10.6	25
70	Enhanced Bone Repair by Guided Osteoblast Recruitment Using Topographically Defined Implant. <i>Tissue Engineering - Part A</i> , 2016 , 22, 654-64	3.9	25
69	Microfluidic platform for single cell analysis under dynamic spatial and temporal stimulation. <i>Biosensors and Bioelectronics</i> , 2018 , 104, 58-64	11.8	24
68	Dickkopf-3 in aberrant endothelial secretome triggers renal fibroblast activation and endothelial-mesenchymal transition. <i>Nephrology Dialysis Transplantation</i> , 2019 , 34, 49-62	4.3	23
67	Artificial Slanted Nanocilia Array as a Mechanotransducer for Controlling Cell Polarity. <i>ACS Nano</i> , 2017 , 11, 730-741	16.7	21
66	A guide to the organ-on-a-chip. <i>Nature Reviews Methods Primers</i> , 2022 , 2,		21
65	Liposomal co-delivery-based quantitative evaluation of chemosensitivity enhancement in breast cancer stem cells by knockdown of GRP78/CLU. <i>Journal of Liposome Research</i> , 2019 , 29, 44-52	6.1	20
64	Design rules for a tunable merged-tip microneedle. <i>Microsystems and Nanoengineering</i> , 2018 , 4, 29	7.7	20
63	Optogenetic neuronal stimulation promotes axon outgrowth and myelination of motor neurons in a three-dimensional motor neuron-Schwann cell coculture model on a microfluidic biochip. <i>Biotechnology and Bioengineering</i> , 2019 , 116, 2425-2438	4.9	19
62	Investigation on vascular cytotoxicity and extravascular transport of cationic polymer nanoparticles using perfusable 3D microvessel model. <i>Acta Biomaterialia</i> , 2018 , 76, 154-163	10.8	19
61	One-photon and two-photon stimulation of neurons in a microfluidic culture system. <i>Lab on A Chip</i> , 2016 , 16, 1684-90	7.2	18
60	A growth factor-induced, spatially organizing cytoskeletal module enables rapid and persistent fibroblast migration. <i>Developmental Cell</i> , 2014 , 30, 701-16	10.2	18
59	Microvascularized tumor organoids-on-chips: advancing preclinical drug screening with pathophysiological relevance. <i>Nano Convergence</i> , 2021 , 8, 12	9.2	18
58	Microvessels-on-a-Chip to Assess Targeted Ultrasound-Assisted Drug Delivery. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 31541-31549	9.5	17

57	Magnetic Nanoparticle-Embedded Hydrogel Sheet with a Groove Pattern for Wound Healing Application. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 3909-3921	5.5	16
56	Human Ocular Angiogenesis-Inspired Vascular Models on an Injection-Molded Microfluidic Chip. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1900328	10.1	16
55	Snail1 induced in breast cancer cells in 3D collagen I gel environment suppresses cortactin and impairs effective invadopodia formation. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2014 , 1843, 2037-54	4.9	15
54	Engineering a Blood Vessel Network Module for Body-on-a-Chip Applications. <i>Journal of the Association for Laboratory Automation</i> , 2015 , 20, 296-301		13
53	Multiplex microfluidic system integrating sequential operations of microalgal lipid production. <i>Analyst, The</i> , 2016 , 141, 1218-25	5	13
52	Synaptogenesis Stimulates a Proteasome-Mediated Ribosome Reduction in Axons. <i>Cell Reports</i> , 2019 , 28, 864-876.e6	10.6	13
51	Highly Efficient and Rapid Neural Differentiation of Mouse Embryonic Stem Cells Based on Retinoic Acid Encapsulated Porous Nanoparticle. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34634-34640	9.5	13
50	Microfluidic perfusion bioreactor for optimization of microalgal lipid productivity. <i>Bioresource Technology</i> , 2017 , 233, 433-437	11	12
49	Detecting the functional complexities between high-density lipoprotein mimetics. <i>Biomaterials</i> , 2018 , 170, 58-69	15.6	12
48	UPF2 leads to degradation of dendritically targeted mRNAs to regulate synaptic plasticity and cognitive function. <i>Molecular Psychiatry</i> , 2020 , 25, 3360-3379	15.1	12
47	Development of highly functional bioengineered human liver with perfusable vasculature. <i>Biomaterials</i> , 2021 , 265, 120417	15.6	12
46	A 3D disease and regeneration model of peripheral nervous system-on-a-chip. <i>Science Advances</i> , 2021 , 7,	14.3	12
45	Optogenetic stimulation promotes Schwann cell proliferation, differentiation, and myelination in vitro. <i>Scientific Reports</i> , 2019 , 9, 3487	4.9	11
44	High-throughput chemical screening to discover new modulators of microRNA expression in living cells by using graphene-based biosensor. <i>Scientific Reports</i> , 2018 , 8, 11413	4.9	11
43	3D Microfluidic Platform and Tumor Vascular Mapping for Evaluating Anti-Angiogenic RNAi-Based Nanomedicine. <i>ACS Nano</i> , 2021 , 15, 338-350	16.7	11
42	PDMS microchannel surface modification with teflon for algal lipid research. <i>Biochip Journal</i> , 2017 , 11, 180-186	4	9
41	Pneumatically Actuated Microfluidic Platform for Reconstituting 3D Vascular Tissue Compression. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 2027	2.6	9
40	Biocompatible Cost-Effective Electrophysiological Monitoring with Oxidation-Free Cu ₂ S CoreShell Nanowire. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000661	6.8	9

39	Integrated Platform for Monitoring Single-cell MAPK Kinetics in Computer-controlled Temporal Stimulations. <i>Scientific Reports</i> , 2018 , 8, 11126	4.9	8
38	High-throughput injection molded microfluidic device for single-cell analysis of spatiotemporal dynamics. <i>Lab on A Chip</i> , 2021 , 21, 3150-3158	7.2	7
37	A FRET assay for the quantitation of inhibitors of exonuclease EcoRV by using parchment paper inkjet-printed with graphene oxide and FAM-labelled DNA. <i>Mikrochimica Acta</i> , 2019 , 186, 211	5.8	6
36	Probing the Effect of Bioinspired Nanomaterials on Angiogenic Sprouting With a Microengineered Vascular System. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 393-397	2.6	6
35	From microchannels to microphysiological systems: Development of application specific devices. <i>Microelectronic Engineering</i> , 2018 , 202, 9-18	2.5	6
34	The Schwann Cell as an Active Synaptic Partner. <i>ChemPhysChem</i> , 2018 , 19, 1123-1127	3.2	5
33	Measurement of Lipid Droplet Accumulation Kinetics in <i>Chlamydomonas reinhardtii</i> Using Seoul-Fluor. <i>Energies</i> , 2013 , 6, 5703-5716	3.1	5
32	Modeling 3D Human Tumor Lymphatic Vessel Network Using High-Throughput Platform. <i>Advanced Biology</i> , 2021 , 5, 2000195		5
31	Relationship between Pericytes and Endothelial Cells in Retinal Neovascularization: A Histological and Immunofluorescent Study of Retinal Angiogenesis. <i>Korean Journal of Ophthalmology: KJO</i> , 2018 , 32, 70-76	1.2	5
30	High-Throughput 3D Tumor Vasculature Model for Real-Time Monitoring of Immune Cell Infiltration and Cytotoxicity. <i>Frontiers in Immunology</i> , 2021 , 12, 733317	8.4	5
29	Perfusable micro-vascularized 3D tissue array for high-throughput vascular phenotypic screening.. <i>Nano Convergence</i> , 2022 , 9, 16	9.2	5
28	Kinase pathway inhibition restores PSD95 induction in neurons lacking fragile X mental retardation protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 12007-12012	11.5	4
27	Human bone marrow-derived mesenchymal stem cells play a role as a vascular pericyte in the reconstruction of human BBB on the angiogenesis microfluidic chip. <i>Biomaterials</i> , 2021 , 279, 121210	15.6	4
26	Self-detachable UV-curable polymers for open-access microfluidic platforms. <i>Lab on A Chip</i> , 2020 , 20, 4215-4224	7.2	4
25	Identification of the First Selective Activin Receptor-Like Kinase 1 Inhibitor, a Reversible Version of L-783277. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 1495-1508	8.3	3
24	Topography-Guided Control of Local Migratory Behaviors and Protein Expression of Cancer Cells. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700155	10.1	3
23	Vibration-induced stress priming during seed culture increases microalgal biomass in high shear field-cultivation. <i>Bioresource Technology</i> , 2018 , 254, 340-346	11	3
22	Free-Standing Gold-Nanoparticle Monolayer Film Fabricated by Protein Self-Assembly of β Synuclein. <i>Angewandte Chemie</i> , 2015 , 127, 4654-4659	3.6	3

21	Overproduction of recombinant E. coli malate synthase enhances Chlamydomonas reinhardtii biomass by upregulating heterotrophic metabolism. <i>Bioresource Technology</i> , 2019 , 272, 594-598	11	3
20	PDMS Sylgard 527-Based Freely Suspended Ultrathin Membranes Exhibiting Mechanistic Characteristics of Vascular Basement Membranes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 40388-40400	8.5	0
19	Wearable Electronics: Biocompatible Cost-Effective Electrophysiological Monitoring with Oxidation-Free Cu/Au Core/Shell Nanowire (Adv. Mater. Technol. 12/2020). <i>Advanced Materials Technologies</i> , 2020 , 5, 2070073	6.8	2
18	Quantum-dot nanoprobe and AOTF based cross talk eliminated six color imaging of biomolecules in cellular system. <i>Analytica Chimica Acta</i> , 2017 , 985, 166-174	6.6	2
17	Wearable skin sensor using programmable interlocking of nanofibers 2013 ,		2
16	3D micromesh-based hybrid bioprinting: multidimensional liquid patterning for 3D microtissue engineering. <i>NPG Asia Materials</i> , 2022 , 14,	10.3	2
15	Comparison of the Efficacy of Optogenetic Stimulation of Glia versus Neurons in Myelination. <i>ACS Chemical Neuroscience</i> , 2020 , 11, 4280-4288	5.7	2
14	Three-dimensional microengineered vascularised endometrium-on-a-chip. <i>Human Reproduction</i> , 2021 , 36, 2720-2731	5.7	2
13	Nanoelectrokinetic radial preconcentrator/extractor based on ion concentration polarization 2017 ,		1
12	Angiogenesis: Human Ocular Angiogenesis-Inspired Vascular Models on an Injection-Molded Microfluidic Chip (Adv. Healthcare Mater. 15/2019). <i>Advanced Healthcare Materials</i> , 2019 , 8, 1970063	10.1	1
11	Optimal diameter reduction ratio of acinar airways in human lungs. <i>PLoS ONE</i> , 2019 , 14, e0204191	3.7	1
10	Vascularization of iNSC spheroid in a 3D spheroid-on-a-chip platform enhances neural maturation. <i>Biotechnology and Bioengineering</i> , 2021 ,	4.9	1
9	Anchor-IMPACT: A standardized microfluidic platform for high-throughput antiangiogenic drug screening. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 2524-2535	4.9	1
8	Use of Microfluidic Technology to Monitor the Differentiation and Migration of Human ESC-Derived Neural Cells. <i>Methods in Molecular Biology</i> , 2016 , 1502, 223-35	1.4	1
7	3D Microphysiological System-Inspired Scalable Vascularized Tissue Constructs for Regenerative Medicine. <i>Advanced Functional Materials</i> , 2105475	15.6	1
6	3D High-Content Culturing and Drug Screening Platform to Study Vascularized Hepatocellular Carcinoma in Hypoxic Condition. <i>Advanced NanoBiomed Research</i> , 2100078	0	1
5	Reducing tumor invasiveness by ramucirumab and TGF- β receptor kinase inhibitor in a diffuse-type gastric cancer patient-derived cell model. <i>Cancer Medicine</i> , 2021 , 10, 7253-7262	4.8	1
4	Aspiration-mediated hydrogel micropatterning using rail-based open microfluidic devices for high-throughput 3D cell culture. <i>Scientific Reports</i> , 2021 , 11, 19986	4.9	0

3	A Petri-Dish with Micromolded Pattern as a Coordinate Indicator for Live-Cell Time Lapse Microscopy. <i>Biochip Journal</i> , 2022 , 16, 27-32	4	○
2	Advances in 3D Vascularized Tumor-on-a-Chip Technology. <i>Advances in Experimental Medicine and Biology</i> , 2022 , 231-256	3.6	○
1	Macular Degeneration: Wet-AMD on a Chip: Modeling Outer Blood-Retinal Barrier In Vitro (Adv. Healthcare Mater. 2/2018). <i>Advanced Healthcare Materials</i> , 2018 , 7, 1870011	10.1	