

Boyang Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

41
papers

4,204
citations

236833

25
h-index

276775

41
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42
all docs

42
docs citations

42
times ranked

5644
citing authors

#	ARTICLE	IF	CITATIONS
1	Biowire: a platform for maturation of human pluripotent stem cell-derived cardiomyocytes. <i>Nature Methods</i> , 2013, 10, 781-787.	9.0	784
2	Advances in organ-on-a-chip engineering. <i>Nature Reviews Materials</i> , 2018, 3, 257-278.	23.3	690
3	Biodegradable scaffold with built-in vasculature for organ-on-a-chip engineering and direct surgical anastomosis. <i>Nature Materials</i> , 2016, 15, 669-678.	13.3	471
4	A Platform for Generation of Chamber-Specific Cardiac Tissues and Disease Modeling. <i>Cell</i> , 2019, 176, 913-927.e18.	13.5	398
5	Organ-on-a-chip devices advance to market. <i>Lab on A Chip</i> , 2017, 17, 2395-2420.	3.1	307
6	Organ-on-a-Chip Platforms: A Convergence of Advanced Materials, Cells, and Microscale Technologies. <i>Advanced Healthcare Materials</i> , 2018, 7, 1700506.	3.9	227
7	Synergistic Engineering: Organoids Meet Organs-on-a-Chip. <i>Cell Stem Cell</i> , 2017, 21, 297-300.	5.2	200
8	Microfabricated perfusable cardiac biowire: a platform that mimics native cardiac bundle. <i>Lab on A Chip</i> , 2014, 14, 869-882.	3.1	121
9	Mosaic Hydrogels: One-Step Formation of Multiscale Soft Materials. <i>Advanced Materials</i> , 2012, 24, 3650-3658.	11.1	113
10	Highly Elastic and Moldable Polyester Biomaterial for Cardiac Tissue Engineering Applications. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 780-788.	2.6	79
11	IFlowPlate™ A Customized 384-Well Plate for the Culture of Perfusable Vascularized Colon Organoids. <i>Advanced Materials</i> , 2020, 32, e2002974.	11.1	66
12	InVADE: Integrated Vasculature for Assessing Dynamic Events. <i>Advanced Functional Materials</i> , 2017, 27, 1703524.	7.8	62
13	h-FIBER: Microfluidic Topographical Hollow Fiber for Studies of Glomerular Filtration Barrier. <i>ACS Central Science</i> , 2020, 6, 903-912.	5.3	59
14	Microfabrication of AngioChip, a biodegradable polymer scaffold with microfluidic vasculature. <i>Nature Protocols</i> , 2018, 13, 1793-1813.	5.5	58
15	Micro- and nanotechnology in cardiovascular tissue engineering. <i>Nanotechnology</i> , 2011, 22, 494003.	1.3	55
16	Resolving Myocardial Activation With Novel Omnipolar Electrograms. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, e004107.	2.1	54
17	A well plate-based multiplexed platform for incorporation of organoids into an organ-on-a-chip system with a perfusable vasculature. <i>Nature Protocols</i> , 2021, 16, 2158-2189.	5.5	51
18	Platform technology for scalable assembly of instantaneously functional mosaic tissues. <i>Science Advances</i> , 2015, 1, e1500423.	4.7	42

#	ARTICLE	IF	CITATIONS
19	Label-Free Enrichment of Functional Cardiomyocytes Using Microfluidic Deterministic Lateral Flow Displacement. <i>PLoS ONE</i> , 2012, 7, e37619.	1.1	39
20	Modeling organ-specific vasculature with organ-on-a-chip devices. <i>Nanotechnology</i> , 2019, 30, 024002.	1.3	35
21	Cardiac Tissue Vascularization. <i>Journal of Cardiovascular Pharmacology and Therapeutics</i> , 2014, 19, 382-393.	1.0	34
22	A standalone perfusion platform for drug testing and target validation in micro-vessel networks. <i>Biomicrofluidics</i> , 2013, 7, 44125.	1.2	31
23	Inhibition of apoptosis in human induced pluripotent stem cells during expansion in a defined culture using angiotensin-1 derived peptide QHREDGS. <i>Biomaterials</i> , 2014, 35, 7786-7799.	5.7	31
24	New Frontiers for Biofabrication and Bioreactor Design in Microphysiological System Development. <i>Trends in Biotechnology</i> , 2019, 37, 1327-1343.	4.9	30
25	A Multimaterial Microphysiological Platform Enabled by Rapid Casting of Elastic Microwires. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801187.	3.9	26
26	Curvature facilitates podocyte culture in a biomimetic platform. <i>Lab on A Chip</i> , 2018, 18, 3112-3128.	3.1	22
27	A Robust Protocol for Decellularized Human Lung Bioink Generation Amenable to 2D and 3D Lung Cell Culture. <i>Cells</i> , 2021, 10, 1538.	1.8	22
28	Organ-level vascularization: The Mars mission of bioengineering. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2020, 159, 2003-2007.	0.4	15
29	From Model System to Therapy: Scalable Production of Perfusable Vascularized Liver Spheroids in "Open-Top" 384-Well Plate. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 2964-2972.	2.6	15
30	Organ-on-a-Chip Systems for Modeling Pathological Tissue Morphogenesis Associated with Fibrosis and Cancer. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 2900-2925.	2.6	15
31	Deep-LUMEN assay " human lung epithelial spheroid classification from brightfield images using deep learning. <i>Lab on A Chip</i> , 2020, 20, 4623-4631.	3.1	14
32	Application of Cell, Tissue, and Biomaterial Delivery in Cardiac Regenerative Therapy. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 1000-1021.	2.6	11
33	Subtractive manufacturing with swelling induced stochastic folding of sacrificial materials for fabricating complex perfusable tissues in multi-well plates. <i>Lab on A Chip</i> , 2022, 22, 1929-1942.	3.1	9
34	zêWire: A Microscaffold That Supports Guided Tissue Assembly and Intramyocardium Delivery for Cardiac Repair. <i>Advanced Healthcare Materials</i> , 2020, 9, 2000358.	3.9	4
35	Functional biomaterials. <i>APL Bioengineering</i> , 2022, 6, 010401.	3.3	4
36	Seeding A Growing Organ. <i>Trends in Biotechnology</i> , 2021, 39, 753-754.	4.9	3

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37	Microfluidics: IFlowPlate™ A Customized 384-Well Plate for the Culture of Perfusable Vascularized Colon Organoids (Adv. Mater. 46/2020). Advanced Materials, 2020, 32, 2070345.	11.1	2
38	Sex matters: the importance of incorporating sex in microphysiological models. Trends in Biotechnology, 2022, 40, 1284-1298.	4.9	2
39	Hydrogels: Mosaic Hydrogels: One-Step Formation of Multiscale Soft Materials (Adv. Mater. 27/2012). Advanced Materials, 2012, 24, 3582-3582.	11.1	1
40	Organ-on-a-Chip: InVADE: Integrated Vasculature for Assessing Dynamic Events (Adv. Funct. Mater.) Tj ETQq0.0 0 rgBT ₁ /Overlock	7.8	1
41	Rapid Wire Casting: A Multimaterial Microphysiological Platform Enabled by Rapid Casting of Elastic Microwires (Adv. Healthcare Mater. 5/2019). Advanced Healthcare Materials, 2019, 8, 1970019.	3.9	1