Peter M Loskill

List of Publications by Year
in descending order

62 papers	3,542 citations	147726 31 h-index	143943 57 g-index
71 all docs	71 docs citations	71 times ranked	4958 citing authors

#	Article	IF	Citations
1	Human iPSC-based Cardiac Microphysiological System For Drug Screening Applications. Scientific Reports, 2015, 5, 8883.	1.6	411
2	Merging organoid and organ-on-a-chip technology to generate complex multi-layer tissue models in a human retina-on-a-chip platform. ELife, 2019, 8, .	2.8	256
3	Automated Video-Based Analysis of Contractility and Calcium Flux in Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes Cultured over Different Spatial Scales. Tissue Engineering - Part C: Methods, 2015, 21, 467-479.	1.1	232
4	Miniaturized iPS-Cell-Derived Cardiac Muscles for Physiologically Relevant Drug Response Analyses. Scientific Reports, 2016, 6, 24726.	1.6	191
5	Self-organizing human cardiac microchambers mediated by geometric confinement. Nature Communications, 2015, 6, 7413.	5.8	167
6	Directing cell migration and organization via nanocrater-patterned cell-repellent interfaces. Nature Materials, 2015, 14, 918-923.	13.3	159
7	In vitro cardiac tissue models: Current status and future prospects. Advanced Drug Delivery Reviews, 2016, 96, 203-213.	6.6	150
8	Biology-inspired microphysiological systems to advance medicines for patient benefit and animal welfare. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 365-394.	0.9	123
9	High-throughput organ-on-a-chip systems: Current status and remaining challenges. Current Opinion in Biomedical Engineering, 2018, 6, 33-41.	1.8	113
10	Impact of organ-on-a-chip technology on pharmaceutical R&D costs. Drug Discovery Today, 2019, 24, 1720-1724.	3.2	105
11	Three-dimensional filamentous human diseased cardiac tissue model. Biomaterials, 2014, 35, 1367-1377.	5.7	102
12	Î¼Organo: A LegoÂ®-Like Plug & Play System for Modular Multi-Organ-Chips. PLoS ONE, 2015, 10, e0139587.	1.1	94
13	WAT-on-a-chip: a physiologically relevant microfluidic system incorporating white adipose tissue. Lab on A Chip, 2017, 17, 1645-1654.	3.1	93
14	Reduction of the Peptidoglycan Crosslinking Causes a Decrease in Stiffness of the Staphylococcus aureus Cell Envelope. Biophysical Journal, 2014, 107, 1082-1089.	0.2	83
15	Non-invasive marker-independent high content analysis of a microphysiological human pancreas-on-a-chip model. Matrix Biology, 2020, 85-86, 205-220.	1.5	72
16	Integration concepts for multi-organ chips: how to maintain flexibility?!. Future Science OA, 2017, 3, FSO180.	0.9	60
17	WAT-on-a-chip integrating human mature white adipocytes for mechanistic research and pharmaceutical applications. Scientific Reports, 2020, 10, 6666.	1.6	58
18	Stem-cell based organ-on-a-chip models for diabetes research. Advanced Drug Delivery Reviews, 2019, 140, 101-128.	6.6	55

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19	User-Friendly and Parallelized Generation of Human Induced Pluripotent Stem Cell-Derived Microtissues in a Centrifugal Heart-on-a-Chip. Tissue Engineering - Part A, 2019, 25, 786-798.	1.6	53
20	Impact of van der Waals Interactions on Single Asperity Friction. Physical Review Letters, 2013, 111, 035502.	2.9	50
21	Human induced pluripotent stem cell-based microphysiological tissue models of myocardium and liver for drug development. Stem Cell Research and Therapy, 2013, 4, S14.	2.4	48
22	Hydrophobic interaction governs unspecific adhesion of staphylococci: a single cell force spectroscopy study. Beilstein Journal of Nanotechnology, 2014, 5, 1501-1512.	1.5	47
23	Subsurface Influence on the Structure of Protein Adsorbates as Revealed by in Situ X-ray Reflectivity. Langmuir, 2012, 28, 7747-7756.	1.6	45
24	Macroscale adhesion of gecko setae reflects nanoscale differences in subsurface composition. Journal of the Royal Society Interface, 2013, 10, 20120587.	1.5	42
25	Building blocks for a European Organ-on-Chip roadmap. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 481-492.	0.9	41
26	Organ-on-a-chip technologies that can transform ophthalmic drug discovery and disease modeling. Expert Opinion on Drug Discovery, 2019, 14, 47-57.	2.5	40
27	Membrane integration into PDMS-free microfluidic platforms for organ-on-chip and analytical chemistry applications. Lab on A Chip, 2021, 21, 1866-1885.	3.1	39
28	Reduced Adhesion of Oral Bacteria on Hydroxyapatite by Fluoride Treatment. Langmuir, 2013, 29, 5528-5533.	1.6	38
29	Immunocompetent cancer-on-chip models to assess immuno-oncology therapy. Advanced Drug Delivery Reviews, 2021, 173, 281-305.	6.6	38
30	Is adhesion superficial? Silicon wafers as a model system to study van der Waals interactions. Advances in Colloid and Interface Science, 2012, 179-182, 107-113.	7.0	36
31	Dose-Dependent Tissue-Level Characterization of a Medical Atmospheric Pressure Argon Plasma Jet. ACS Applied Materials & Interfaces, 2019, 11, 19841-19853.	4.0	36
32	Stochastic binding of Staphylococcus aureus to hydrophobic surfaces. Soft Matter, 2015, 11, 8913-8919.	1.2	35
33	Influence of the Subsurface Composition of a Material on the Adhesion of Staphylococci. Langmuir, 2012, 28, 7242-7248.	1.6	32
34	Organâ€onâ€aâ€Chip Systems for Women's Health Applications. Advanced Healthcare Materials, 2018, 7, 1700550.	3.9	31
35	A detailed guideline for the fabrication of single bacterial probes used for atomic force spectroscopy. European Physical Journal E, 2015, 38, 140.	0.7	27
36	Human stem cell-based retina on chip as new translational model for validation of AAV retinal gene therapy vectors. Stem Cell Reports, 2021, 16, 2242-2256.	2.3	27

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37	Multivalent hyaluronic acid bioconjugates improve sFlt-1 activity inÂvitro. Biomaterials, 2016, 93, 95-105.	5.7	25
38	The Inflammatory Profile of Obesity and the Role on Pulmonary Bacterial and Viral Infections. International Journal of Molecular Sciences, 2021, 22, 3456.	1.8	24
39	Beyond PDMS and Membranes: New Materials for Organ-on-a-Chip Devices. ACS Biomaterials Science and Engineering, 2021, 7, 2861-2863.	2.6	23
40	Facile Patterning of Thermoplastic Elastomers and Robust Bonding to Glass and Thermoplastics for Microfluidic Cell Culture and Organ-on-Chip. Micromachines, 2021, 12, 575.	1.4	21
41	Noninvasive Physical Plasma as Innovative and Tissue-Preserving Therapy for Women Positive for Cervical Intraepithelial Neoplasia. Cancers, 2022, 14, 1933.	1.7	20
42	Autologous Human Immunocompetent White Adipose Tissueâ€onâ€Chip. Advanced Science, 2022, 9, e2104451.	5.6	18
43	Peristaltic on-chip pump for tunable media circulation and whole blood perfusion in PDMS-free organ-on-chip and Organ-Disc systems. Lab on A Chip, 2021, 21, 3963-3978.	3.1	17
44	Collagen and Endothelial Cell Coculture Improves Î²-Cell Functionality and Rescues Pancreatic Extracellular Matrix. Tissue Engineering - Part A, 2021, 27, 977-991.	1.6	15
45	Integration of Electrospun Membranes into Low-Absorption Thermoplastic Organ-on-Chip. ACS Biomaterials Science and Engineering, 2021, 7, 3006-3017.	2.6	15
46	Fusing spheroids to aligned Î¼-tissues in a heart-on-chip featuring oxygen sensing and electrical pacing capabilities. Materials Today Bio, 2022, 15, 100280.	2.6	15
47	Human immunocompetent choroid-on-chip: a novel tool for studying ocular effects of biological drugs. Communications Biology, 2022, 5, 52.	2.0	14
48	Organ-on-a-disc: A platform technology for the centrifugal generation and culture of microphysiological 3D cell constructs amenable for automation and parallelization. APL Bioengineering, 2020, 4, 046101.	3.3	12
49	Facile Macrocyclic Polyphenol Barrier Coatings for PDMS Microfluidic Devices. Advanced Functional Materials, 2020, 30, 2001274.	7.8	12
50	Studying metabolism with multi-organ chips: new tools for disease modelling, pharmacokinetics and pharmacodynamics. Open Biology, 2022, 12, 210333.	1.5	12
51	Developerâ€™s Guide to an Organ-on-Chip Model. ACS Biomaterials Science and Engineering, 2022, 8, 4643-4647.	2.6	12
52	Engineering Tissues from Induced Pluripotent Stem Cells. Tissue Engineering - Part A, 2019, 25, 707-710.	1.6	11
53	How Can Microfluidic and Microfabrication Approaches Make Experiments More Physiologically Relevant?. Cell Systems, 2020, 11, 209-211.	2.9	11
54	Fluorescence lifetime metabolic mapping of hypoxiaâ€induced damage in pancreatic pseudoâ€islets. Journal of Biophotonics, 2020, 13, e202000375.	1.1	8

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55	Challenging the pipeline. Stem Cell Reports, 2021, 16, 2033-2037.	2.3	8
56	Development of a bi-layered cryogenic electrospun polylactic acid scaffold to study calcific aortic valve disease in a 3D co-culture model. Acta Biomaterialia, 2022, 140, 364-378.	4.1	7
57	Microphysiological stem cell models of the human heart. Materials Today Bio, 2022, 14, 100259.	2.6	4
58	Stem cell based human organ-on-a-chip models for drug discovery and development. Advanced Drug Delivery Reviews, 2019, 140, 1-2.	6.6	3
59	Isolation, Integration, and Culture of Human Mature Adipocytes Leveraging Organ-on-Chip Technology. Methods in Molecular Biology, 2022, 2373, 297-313.	0.4	0
60	Technische Heimaten fÃ¼r menschliche Zellen. , 2019, , 67-94.		0
61	Organ-on-Chip: Playing LEGOÂ® With Mini-Organs to Reduce Animal Testing and Make Medicines Safer. Frontiers for Young Minds, 0, 8, .	0.8	0
62	Organ-on-Chip. , 2022, , 1127-1144.		0