Yi-Chin Toh

List of Publications by Year
in descending order

59 papers	3,056 citations	236925 25 h-index	161849 54 g-index
66 all docs	66 docs citations	66 times ranked	4012 citing authors

#	Article	IF	Citations
1	Induced pluripotent stem cells-derived craniofacial mesenchymal progenitor cells. , 2022, , 19-43.		0
2	Design and fabrication of micro/nanofluidics devices and systems. Progress in Molecular Biology and Translational Science, 2022, 186, 15-58.	1.7	1
3	Integration of a microfluidic multicellular coculture array with machine learning analysis to predict adverse cutaneous drug reactions. Lab on A Chip, 2022, 22, 1890-1904.	6.0	7
4	A physiological adipose-on-chip disease model to mimic adipocyte hypertrophy and inflammation in obesity. Organs-on-a-Chip, 2022, 4, 100021.	3.2	3
5	A guide to the organ-on-a-chip. Nature Reviews Methods Primers, 2022, 2, .	21.2	247
6	Fluid Flow Induces Differential Detachment of Live and Dead Bacterial Cells from Nanostructured Surfaces. ACS Omega, 2022, 7, 23201-23212.	3.5	6
7	Acrylated epoxidized soybean oil/hydroxyapatite-based nanocomposite scaffolds prepared by additive manufacturing for bone tissue engineering. Materials Science and Engineering C, 2021, 118, 111400.	7.3	28
8	A Micropatterned Humanâ€Specific Neuroepithelial Tissue for Modeling Gene and Drugâ€Induced Neurodevelopmental Defects. Advanced Science, 2021, 8, 2001100.	11.2	13
9	Enhancement of Endothelialization by Topographical Features Is Mediated by PTP1B-Dependent Endothelial Adherens Junctions Remodeling. ACS Biomaterials Science and Engineering, 2021, 7, 2661-2675.	5.2	8
10	Bridging the academia-to-industry gap: organ-on-a-chip platforms for safety and toxicology assessment. Trends in Pharmacological Sciences, 2021, 42, 715-728.	8.7	26
11	Highly-customizable 3D-printed peristaltic pump kit. HardwareX, 2021, 10, e00202.	2.2	16
12	Comparative Craniofacial Bone Regeneration Capacities of Mesenchymal Stem Cells Derived from Human Neural Crest Stem Cells and Bone Marrow. ACS Biomaterials Science and Engineering, 2021, 7, 207-221.	5.2	10
13	Topography elicits distinct phenotypes and functions in human primary and stem cell derived endothelial cells. Biomaterials, 2020, 234, 119747.	11.4	16
14	Fabrication of Complex 3D Fluidic Networks via Modularized Stereolithography. Advanced Engineering Materials, 2020, 22, 1901109.	3.5	24
15	Quantitative Image-Based Cell Viability (QuantICV) Assay for Microfluidic 3D Tissue Culture Applications. Micromachines, 2020, 11, 669.	2.9	7
16	What can microfluidics do for human microbiome research?. Biomicrofluidics, 2020, 14, 051303.	2.4	18
17	Wound healing properties of magnesium mineralized antimicrobial nanofibre dressings containing chondroitin sulphate â€“ a comparison between blend and coreâ€“shell nanofibres. Biomaterials Science, 2020, 8, 3454-3471.	5.4	22
18	A vascular-liver chip for sensitive detection of nutraceutical metabolites from human pluripotent stem cell derivatives. Biomicrofluidics, 2020, 14, 034108.	2.4	12

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19	Fabrication of Complex 3D Fluidic Networks via Modularized Stereolithography. Advanced Engineering Materials, 2020, 22, 2070012.	3.5	2
20	Bio-mimicking Shear Stress Environments for Enhancing Mesenchymal Stem Cell Differentiation. Current Stem Cell Research and Therapy, 2020, 15, 414-427.	1.3	19
21	Fabrication of integrated microfluidic devices by direct ink writing (DIW) 3D printing. Sensors and Actuators B: Chemical, 2019, 297, 126609.	7.8	71
22	Environmental Specification of Pluripotent Stem Cell Derived Endothelial Cells Toward Arterial and Venous Subtypes. Frontiers in Bioengineering and Biotechnology, 2019, 7, 143.	4.1	13
23	Hepatic Bioactivation of Skin-Sensitizing Drugs to Immunogenic Reactive Metabolites. ACS Omega, 2019, 4, 13902-13912.	3.5	1
24	Self-aligning Tetris-Like (TILE) modular microfluidic platform for mimicking multi-organ interactions. Lab on A Chip, 2019, 19, 2178-2191.	6.0	64
25	Human Pluripotent Stem Cell-Derived Neural Crest Cells for Tissue Regeneration and Disease Modeling. Frontiers in Molecular Neuroscience, 2019, 12, 39.	2.9	27
26	Determination of critical shear stress for maturation of human pluripotent stem cellâ€derived endothelial cells towards an arterial subtype. Biotechnology and Bioengineering, 2019, 116, 1164-1175.	3.3	27
27	Substrate stiffness modulates the multipotency of human neural crest derived ectomesenchymal stem cells via CD44 mediated PDGFR signaling. Biomaterials, 2018, 167, 153-167.	11.4	28
28	A liver-immune coculture array for predicting systemic drug-induced skin sensitization. Lab on A Chip, 2018, 18, 3239-3250.	6.0	19
29	A 3D Microfluidic Model to Recapitulate Cancer Cell Migration and Invasion. Bioengineering, 2018, 5, 29.	3.5	39
30	Patient-specific hepatocyte-like cells derived from induced pluripotent stem cells model pazopanib-mediated hepatotoxicity. Scientific Reports, 2017, 7, 41238.	3.3	47
31	A pumpâ€free microfluidic 3D perfusion platform for the efficient differentiation of human hepatocyteâ€like cells. Biotechnology and Bioengineering, 2017, 114, 2360-2370.	3.3	60
32	A 3D printed microfluidic perfusion device for multicellular spheroid cultures. Biofabrication, 2017, 9, 045005.	7.1	85
33	Stencil Micropatterning for Spatial Control of Human Pluripotent Stem Cell Fate Heterogeneity. Methods in Molecular Biology, 2016, 1516, 171-181.	0.9	3
34	Functionally Enhanced Human Stem Cell Derived Hepatocytes in Galactosylated Cellulosic Sponges for Hepatotoxicity Testing. Molecular Pharmaceutics, 2016, 13, 1947-1957.	4.6	36
35	Stencil Micropatterning of Human Pluripotent Stem Cells for Probing Spatial Organization of Differentiation Fates. Journal of Visualized Experiments, 2016, , .	0.3	4
36	A method for human teratogen detection by geometrically confined cell differentiation and migration. Scientific Reports, 2015, 5, 10038.	3.3	29

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37	Modulation of integrin and E-cadherin-mediated adhesions to spatially control heterogeneity in human pluripotent stem cell differentiation. Biomaterials, 2015, 50, 87-97.	11.4	44
38	Cost-effective differentiation of hepatocyte-like cells from human pluripotent stem cells using small molecules. Biomaterials, 2015, 70, 115-125.	11.4	62
39	Scalable alignment of three-dimensional cellular constructs in a microfluidic chip. Lab on A Chip, 2013, 13, 4124.	6.0	55
40	Mechanical compaction directly modulates the dynamics of bile canaliculi formation. Integrative Biology (United Kingdom), 2013, 5, 390-401.	1.3	23
41	Scalable cell alignment on optical media substrates. Biomaterials, 2013, 34, 5078-5087.	11.4	25
42	Gratings on a Dish: A Scalable Cell Alignment Substrate on Optical Media. , 2013, , .		0
43	Leveraging on being smallâ€"Singapore's strategy to catalyze integrative innovations. Lab on A Chip, 2011, 11, 1853.	6.0	0
44	Spatially organized in vitro models instruct asymmetric stem cell differentiation. Integrative Biology (United Kingdom), 2011, 3, 1179.	1.3	12
45	Fluid shear stress primes mouse embryonic stem cells for differentiation in a selfâ€renewing environment via heparan sulfate proteoglycans transduction. FASEB Journal, 2011, 25, 1208-1217.	0.5	113
46	Advancing stem cell research with microtechnologies: opportunities and challenges. Integrative Biology (United Kingdom), 2010, 2, 305.	1.3	36
47	The controlled presentation of TGF-Î²1 to hepatocytes in a 3D-microfluidic cell culture system. Biomaterials, 2009, 30, 3847-3853.	11.4	33
48	A microfluidic 3D hepatocyte chip for drug toxicity testing. Lab on A Chip, 2009, 9, 2026.	6.0	378
49	A gel-free 3D microfluidic cell culture system. Biomaterials, 2008, 29, 3237-3244.	11.4	157
50	Dendrimer hydrazides as multivalent transient inter-cellular linkers. Biomaterials, 2008, 29, 3693-3702.	11.4	23
51	Microfabricated silicon nitride membranes for hepatocyte sandwich culture. Biomaterials, 2008, 29, 3993-4002.	11.4	22
52	Integrating sensitive quantification of hepatic metabolic functions by capillary electrophoresis with laser-induced fluorescence detection. Analyst, The, 2008, 133, 326.	3.5	4
53	A novel 3D mammalian cell perfusion-culture system in microfluidic channels. Lab on A Chip, 2007, 7, 302.	6.0	392
54	A practical guide to microfluidic perfusion culture of adherent mammalian cells. Lab on A Chip, 2007, 7, 681.	6.0	409

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55	Cellular responses to a nanofibrous environment. Nano Today, 2006, 1, 34-43.	11.9	58
56	Application of a polyelectrolyte complex coacervation method to improve seeding efficiency of bone marrow stromal cells in a 3D culture system. Biomaterials, 2005, 26, 4149-4160.	11.4	44
57	A Configurable Three-Dimensional Microenvironment in a Microfluidic Channel for Primary Hepatocyte Culture. Assay and Drug Development Technologies, 2005, 3, 169-176.	1.2	27
58	Decolourisation of azo dyes by white-rot fungi (WRF) isolated in Singapore. Enzyme and Microbial Technology, 2003, 33, 569-575.	3.2	94
59	Spatio-Temporally Patterned Neuroectoderm Tissue Recapitulates Early Neural Tube Morphogenesis and Pathogenesis. SSRN Electronic Journal, 0, , .	0.4	0