

Yi-Chung Tung

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5348814/yi-chung-tung-publications-by-year.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.

85
papers

4,247
citations

30
h-index

64
g-index

101
ext. papers

4,849
ext. citations

6.1
avg, IF

5.25
L-index

#	Paper	IF	Citations
85	Identifying distinct oxygen diffusivity through type I pneumocyte-like cell layers using microfluidic device. <i>Talanta</i> , 2022 , 236, 122882	6.2	0
84	Comparison of Hydrogen Peroxide Secretion From Living Cells Cultured in Different Formats Using Hydrogel-Based LSPR Substrates.. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022 , 10, 869184	5.8	0
83	Microfluidic Devices: Study 3D Endothelial Cell Network Formation under Various Oxygen Microenvironment and Hydrogel Composition Combinations Using Upside-Down Microfluidic Devices (Small 15/2021). <i>Small</i> , 2021 , 17, 2170069	11	
82	Plasmonic gel films for time-lapse LSPR detection of hydrogen peroxide secreted from living cells. <i>Sensors and Actuators B: Chemical</i> , 2021 , 336, 129725	8.5	4
81	Study 3D Endothelial Cell Network Formation under Various Oxygen Microenvironment and Hydrogel Composition Combinations Using Upside-Down Microfluidic Devices. <i>Small</i> , 2021 , 17, e200609 ^{†1}		2
80	Comparison of VEGF-A secretion from tumor cells under cellular stresses in conventional monolayer culture and microfluidic three-dimensional spheroid models. <i>PLoS ONE</i> , 2020 , 15, e0240833	3.7	6
79	Evaluation of Nanoparticle Penetration in the Tumor Spheroid Using Two-Photon Microscopy. <i>Biomedicines</i> , 2020 , 9,	4.8	5
78	Increased vasculogenesis of endothelial cells in hyaluronic acid augmented fibrin-based natural hydrogels - from in vitro to in vivo models. <i>European Cells and Materials</i> , 2020 , 40, 133-145	4.3	4
77	Epidermal growth factor-like repeats of SCUBE1 derived from platelets are critical for thrombus formation. <i>Cardiovascular Research</i> , 2020 , 116, 193-201	9.9	1
76	Study Effects of Drug Treatment and Physiological Physical Stimulation on Surfactant Protein Expression of Lung Epithelial Cells Using a Biomimetic Microfluidic Cell Culture Device. <i>Micromachines</i> , 2019 , 10,	3.3	1
75	Microfluidic Collective Cell Migration Assay for Study of Endothelial Cell Proliferation and Migration under Combinations of Oxygen Gradients, Tensions, and Drug Treatments. <i>Scientific Reports</i> , 2019 , 9, 8234	4.9	18
74	Widefield frequency domain fluorescence lifetime imaging microscopy (FD-FLIM) for accurate measurement of oxygen gradients within microfluidic devices. <i>Analyst, The</i> , 2019 , 144, 3494-3504	5	6
73	MCT-1/miR-34a/IL-6/IL-6R signaling axis promotes EMT progression, cancer stemness and M2 macrophage polarization in triple-negative breast cancer. <i>Molecular Cancer</i> , 2019 , 18, 42	42.1	124
72	A sheathless inertial focusing technique for optofluidic devices. <i>Microfluidics and Nanofluidics</i> , 2019 , 23, 1	2.8	4
71	A Low-Power CMOS Microfluidic Pump Based on Travelling-Wave Electroosmosis for Diluted Serum Pumping. <i>Scientific Reports</i> , 2019 , 9, 14794	4.9	7
70	Review of microfluidic cell culture devices for the control of gaseous microenvironments in vitro. <i>Journal of Micromechanics and Microengineering</i> , 2018 , 28, 043001	2	13
69	Electrofluidic Circuit-Based Microfluidic Viscometer for Analysis of Newtonian and Non-Newtonian Liquids under Different Temperatures. <i>Analytical Chemistry</i> , 2018 , 90, 2317-2325	7.8	14

68	Flexible Localized Surface Plasmon Resonance Sensor with Metal-Insulator-Metal Nanodisks on PDMS Substrate. <i>Scientific Reports</i> , 2018 , 8, 11812	4.9	44
67	Study of oxygen tension variation within live tumor spheroids using microfluidic devices and multi-photon laser scanning microscopy.. <i>RSC Advances</i> , 2018 , 8, 30320-30329	3.7	12
66	Single step sequential polydimethylsiloxane wet etching to fabricate a microfluidic channel with various cross-sectional geometries. <i>Journal of Micromechanics and Microengineering</i> , 2017 , 27, 115003	2	1
65	Polydimethylsiloxane-polycarbonate Microfluidic Devices for Cell Migration Studies Under Perpendicular Chemical and Oxygen Gradients. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	5
64	Fully disposable and optically transparent microfluidic viscometer based on electrofluidic pressure sensor 2017 ,		2
63	A microfluidic device to study effects of physical stimulation and steroid treatment on lung epithelial cell surfactant protein expression 2017 ,		1
62	An in-situ filtering pump for particle-sample filtration based on low-voltage electrokinetic mechanism. <i>Sensors and Actuators B: Chemical</i> , 2017 , 238, 809-816	8.5	3
61	Drug testing and flow cytometry analysis on a large number of uniform sized tumor spheroids using a microfluidic device. <i>Scientific Reports</i> , 2016 , 6, 21061	4.9	122
60	Measurement of in-plane elasticity of live cell layers using a pressure sensor embedded microfluidic device. <i>Scientific Reports</i> , 2016 , 6, 36425	4.9	7
59	A frequency-control particle separation device based on resultant effects of electroosmosis and dielectrophoresis. <i>Applied Physics Letters</i> , 2016 , 109, 053701	3.4	7
58	Polydimethylsiloxane SlipChip for mammalian cell culture applications. <i>Analyst, The</i> , 2015 , 140, 7355-65	5	11
57	Flip channel: A microfluidic device for uniform-sized embryoid body formation and differentiation. <i>Biomicrofluidics</i> , 2015 , 9, 054111	3.2	4
56	Effects of hydraulic pressure on cardiomyoblasts in a microfluidic device. <i>Biomicrofluidics</i> , 2015 , 9, 024113	3.2	4
55	A polydimethylsiloxane-polycarbonate hybrid microfluidic device capable of generating perpendicular chemical and oxygen gradients for cell culture studies. <i>Lab on A Chip</i> , 2014 , 14, 3762-72	7.2	92
54	Dynamically programmable surface micro-wrinkles on PDMS-SMA composite. <i>Smart Materials and Structures</i> , 2014 , 23, 115007	3.4	6
53	Differentiation of lung stem/progenitor cells into alveolar pneumocytes and induction of angiogenesis within a 3D gelatin--microbubble scaffold. <i>Biomaterials</i> , 2014 , 35, 5660-9	15.6	41
52	Migration and vascular lumen formation of endothelial cells in cancer cell spheroids of various sizes. <i>Biomicrofluidics</i> , 2014 , 8, 052109	3.2	29
51	A low sample volume particle separation device with electrokinetic pumping based on circular travelling-wave electroosmosis. <i>Lab on A Chip</i> , 2013 , 13, 3082-9	7.2	15

50	A microfluidic cell culture array with various oxygen tensions. <i>Lab on A Chip</i> , 2013 , 13, 3239-45	7.2	68
49	Interaction between lung cancer cell and myofibroblast influenced by cyclic tensile strain. <i>Lab on A Chip</i> , 2013 , 13, 1114-20	7.2	18
48	Electrofluidic pressure sensor embedded microfluidic device: a study of endothelial cells under hydrostatic pressure and shear stress combinations. <i>Lab on A Chip</i> , 2013 , 13, 1743-53	7.2	67
47	A microfluidic device for uniform-sized cell spheroids formation, culture, harvesting and flow cytometry analysis. <i>Biomicrofluidics</i> , 2013 , 7, 54114	3.2	74
46	Generation of nitric oxide gradients in microfluidic devices for cell culture using spatially controlled chemical reactions. <i>Biomicrofluidics</i> , 2013 , 7, 64104	3.2	6
45	Single channel layer, single sheath-flow inlet microfluidic flow cytometer with three-dimensional hydrodynamic focusing. <i>Lab on A Chip</i> , 2012 , 12, 3135-41	7.2	36
44	Two dimensional thermoelectric platforms for thermocapillary droplet actuation. <i>RSC Advances</i> , 2012 , 2, 1639-1642	3.7	8
43	Integrated electrofluidic circuits: pressure sensing with analog and digital operation functionalities for microfluidics. <i>Lab on A Chip</i> , 2012 , 12, 3943-51	7.2	9
42	Interfacial adhesion and superhydrophobicity modulated with polymeric nanopillars using integrated nanolithography. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 125026	2	1
41	Optofluidic detection for cellular phenotyping. <i>Lab on A Chip</i> , 2012 , 12, 3552-65	7.2	30
40	384 hanging drop arrays give excellent Z-factors and allow versatile formation of co-culture spheroids. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 1293-304	4.9	102
39	Micro-ring structures stabilize microdroplets to enable long term spheroid culture in 384 hanging drop array plates. <i>Biomedical Microdevices</i> , 2012 , 14, 313-23	3.7	82
38	Magnet-assisted device-level alignment for the fabrication of membrane-sandwiched polydimethylsiloxane microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 075006	2	16
37	Multiscale, Hierarchical Integration of Soft Polymer Micro- and Nanostructures into Optical MEMS 2012 , 491-518		
36	Integrated ionic liquid-based electrofluidic circuits for pressure sensing within polydimethylsiloxane microfluidic systems. <i>Lab on A Chip</i> , 2011 , 11, 1740-6	7.2	89
35	High-throughput 3D spheroid culture and drug testing using a 384 hanging drop array. <i>Analyst, The</i> , 2011 , 136, 473-8	5	658
34	Combination of fluid and solid mechanical stresses contribute to cell death and detachment in a microfluidic alveolar model. <i>Lab on A Chip</i> , 2011 , 11, 609-19	7.2	170
33	A seamlessly integrated microfluidic pressure sensor based on an ionic liquid electrofluidic circuit 2011 ,		1

32	Generation of oxygen gradients in microfluidic devices for cell culture using spatially confined chemical reactions. <i>Lab on A Chip</i> , 2011 , 11, 3626-33	7.2	129
31	Integrated Elastomeric Components for Autonomous Regulation of Sequential and Oscillatory Flow Switching in Microfluidic Devices. <i>Nature Physics</i> , 2010 , 6, 433-437	16.2	195
30	Fabrication of two-layered channel system with embedded electrodes to measure resistance across epithelial and endothelial barriers. <i>Analytical Chemistry</i> , 2010 , 82, 2505-11	7.8	101
29	Ionic Liquids for Microfluidic Actuation. <i>ACS Symposium Series</i> , 2010 , 157-173	0.4	
28	Patterned electrode-based amperometric gas sensor for direct nitric oxide detection within microfluidic devices. <i>Analytical Chemistry</i> , 2010 , 82, 3300-5	7.8	35
27	Multiplexed spectral signature detection for microfluidic color-coded bioparticle flow. <i>Analytical Chemistry</i> , 2010 , 82, 9506-12	7.8	12
26	High-speed tuning of visible laser wavelength using a nanoimprinted grating optical tunable filter. <i>Applied Physics Letters</i> , 2009 , 95, 211106	3.4	8
25	Microfluidic endothelium for studying the intravascular adhesion of metastatic breast cancer cells. <i>PLoS ONE</i> , 2009 , 4, e5756	3.7	252
24	Microfluidic system for formation of PC-3 prostate cancer co-culture spheroids. <i>Biomaterials</i> , 2009 , 30, 3020-7	15.6	238
23	External compression-induced fracture patterning on the surface of poly(dimethylsiloxane) cubes and microspheres. <i>Langmuir</i> , 2009 , 25, 3102-7	4	7
22	Hard top soft bottom microfluidic devices for cell culture and chemical analysis. <i>Analytical Chemistry</i> , 2009 , 81, 3714-22	7.8	92
21	A Flexible Nanograting Integrated Onto Silicon Micromachines by Soft Lithographic Replica Molding and Assembly. <i>Journal of Microelectromechanical Systems</i> , 2008 , 17, 393-401	2.5	9
20	High-speed deformation of soft lithographic nanograting patterns for ultrasensitive optical spectroscopy. <i>Applied Physics Letters</i> , 2008 , 92, 051116	3.4	8
19	Design of a MEMS Tunable Polymer Grating for Single Detector Spectroscopy. <i>International Journal of Optomechatronics</i> , 2008 , 2, 75-87	3.5	21
18	Electrically Programmable Surfaces for Configurable Patterning of Cells. <i>Advanced Materials</i> , 2008 , 20, 1418-1423	24	28
17	Individually programmable cell stretching microwell arrays actuated by a Braille display. <i>Biomaterials</i> , 2008 , 29, 2646-55	15.6	99
16	Characterization and resolution of evaporation-mediated osmolality shifts that constrain microfluidic cell culture in poly(dimethylsiloxane) devices. <i>Analytical Chemistry</i> , 2007 , 79, 1126-34	7.8	181
15	Acoustically detectable cellular-level lung injury induced by fluid mechanical stresses in microfluidic airway systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 18886-91	11.5	365

14	A PDMS-on-Silicon Deformable Grating for Spectral Differentiation of Mixed Wavelength Signals 2007 ,		5
13	Multiplexed hydraulic valve actuation using ionic liquid filled soft channels and Braille displays. <i>Applied Physics Letters</i> , 2007 , 90, 033505	3-4	39
12	MEMS tunable polymer grating for advantageous spectroscopic measurements 2007 ,		3
11	Small volume low mechanical stress cytometry using computer-controlled Braille display microfluidics. <i>Lab on A Chip</i> , 2007 , 7, 1497-503	7-2	30
10	Nanoimprinted strain-controlled elastomeric gratings for optical wavelength tuning. <i>Applied Physics Letters</i> , 2005 , 86, 161113	3-4	33
9	A single-layer PDMS-on-silicon hybrid microactuator with multi-axis out-of-plane motion capabilities-part II: fabrication and characterization. <i>Journal of Microelectromechanical Systems</i> , 2005 , 14, 558-566	2-5	21
8	A single-layer PDMS-on-silicon hybrid microactuator with multi-axis out-of-plane motion capabilities-Part i: design and analysis. <i>Journal of Microelectromechanical Systems</i> , 2005 , 14, 548-557	2-5	21
7	A metal-coated polymer micromirror for strain-driven high-speed multiaxis optical scanning. <i>IEEE Photonics Technology Letters</i> , 2005 , 17, 1193-1195	2-2	1
6	PDMS-based opto-fluidic micro flow cytometer with two-color, multi-angle fluorescence detection capability using PIN photodiodes. <i>Sensors and Actuators B: Chemical</i> , 2004 , 98, 356-367	8-5	153
5	Multi-axis single-layer PDMS-on-silicon micro optical reflector 2004 ,		2
4	Design Optimization of a Novel, Large-Displacement, Multi-Axis, Silicon/Polymer Hybrid Actuator for Micro Optics 2003 , 197		
3	Use of Air-Liquid Two-Phase Flow in Hydrophobic Microfluidic Channels for Disposable Flow Cytometers. <i>Biomedical Microdevices</i> , 2002 , 4, 141-149	3-7	79
2	Electro-elastic characteristics of asymmetric rectangular piezoelectric laminae. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1999 , 46, 950-60	3-2	19
1	A novel design of piezo-driven dual-dimension optical scanning mechanism. <i>Review of Scientific Instruments</i> , 1998 , 69, 3277-3282	1-7	3