

David T Eddington

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10378422/publications.pdf>

Version: 2024-02-01

50
papers

2,433
citations

218677

26
h-index

206112

48
g-index

53
all docs

53
docs citations

53
times ranked

3465
citing authors

#	ARTICLE	IF	CITATIONS
1	Competence pili in <i>Streptococcus pneumoniae</i> are highly dynamic structures that retract to promote DNA uptake. <i>Molecular Microbiology</i> , 2021, 116, 381-396.	2.5	28
2	96-Well Oxygen Control Using a 3D-Printed Device. <i>Analytical Chemistry</i> , 2021, 93, 2570-2577.	6.5	8
3	Femtoliter droplet confinement of <i>Streptococcus pneumoniae</i> : bacterial genetic transformation by cell-cell interaction in droplets. <i>Lab on A Chip</i> , 2019, 19, 682-692.	6.0	9
4	Multiplex gene transfer by genetic transformation between isolated <i>S. pneumoniae</i> cells confined in microfluidic droplets. <i>Integrative Biology (United Kingdom)</i> , 2019, 11, 415-424.	1.3	6
5	Generation of controllable gaseous H ₂ S concentrations using microfluidics. <i>RSC Advances</i> , 2018, 8, 4078-4083.	3.6	4
6	Proatherogenic Flow Increases Endothelial Stiffness via Enhanced CD36-Mediated Uptake of Oxidized Low-Density Lipoproteins. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2018, 38, 64-75.	2.4	37
7	Open Design 3D-Printable Adjustable Micropipette that Meets the ISO Standard for Accuracy. <i>Micromachines</i> , 2018, 9, 191.	2.9	15
8	Bubble removal with the use of a vacuum pressure generated by a converging-diverging nozzle. <i>Biomedical Microdevices</i> , 2017, 19, 58.	2.8	4
9	A microfluidic oxygen gradient demonstrates differential activation of the hypoxia-regulated transcription factors HIF-1 α and HIF-2 α . <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 742-750.	1.3	25
10	Effect of localized hypoxia on <i>Drosophila</i> embryo development. <i>PLoS ONE</i> , 2017, 12, e0185267.	2.5	6
11	Controlling Hydrogen Sulfide concentrations via PDMS microfluidics for endothelial cell culture. <i>FASEB Journal</i> , 2017, 31, 689.6.	0.5	2
12	Vacuum pressure generation via microfabricated converging-diverging nozzles for operation of automated pneumatic logic. <i>Biomedical Microdevices</i> , 2016, 18, 74.	2.8	3
13	A microfluidic array for real-time live-cell imaging of human and rodent pancreatic islets. <i>Lab on A Chip</i> , 2016, 16, 1466-1472.	6.0	44
14	A 3D-Printed Oxygen Control Insert for a 24-Well Plate. <i>PLoS ONE</i> , 2015, 10, e0137631.	2.5	40
15	Microfluidic platform generates oxygen landscapes for localized hypoxic activation. <i>Lab on A Chip</i> , 2014, 14, 4688-4695.	6.0	29
16	Oxygen control with microfluidics. <i>Lab on A Chip</i> , 2014, 14, 4305-4318.	6.0	157
17	Enhanced loading of Fura-2/AM calcium indicator dye in adult rodent brain slices via a microfluidic oxygenator. <i>Journal of Neuroscience Methods</i> , 2013, 216, 110-117.	2.5	9
18	A microfabricated platform for establishing oxygen gradients in 3-D constructs. <i>Biomedical Microdevices</i> , 2013, 15, 407-414.	2.8	28

#	ARTICLE	IF	CITATIONS
19	Microfluidic Array with Integrated Oxygenation Control for Real-Time Live-Cell Imaging: Effect of Hypoxia on Physiology of Microencapsulated Pancreatic Islets. <i>Analytical Chemistry</i> , 2013, 85, 11240-11249.	6.5	53
20	Microfluidic wound bandage: Localized oxygen modulation of collagen maturation. <i>Wound Repair and Regeneration</i> , 2013, 21, 226-234.	3.0	26
21	Quantitative and Temporal Control of Oxygen Microenvironment at the Single Islet Level. <i>Journal of Visualized Experiments</i> , 2013, , e50616.	0.3	8
22	Channel Surface Patterning of Alternating Biomimetic Protein Combinations for Enhanced Microfluidic Tumor Cell Isolation. <i>Analytical Chemistry</i> , 2012, 84, 4022-4028.	6.5	30
23	Islet Preconditioning via Multimodal Microfluidic Modulation of Intermittent Hypoxia. <i>Analytical Chemistry</i> , 2012, 84, 1987-1993.	6.5	71
24	Systematic prevention of bubble formation and accumulation for long-term culture of pancreatic islet cells in microfluidic device. <i>Biomedical Microdevices</i> , 2012, 14, 419-426.	2.8	51
25	Dual microfluidic perfusion networks for concurrent islet perfusion and optical imaging. <i>Biomedical Microdevices</i> , 2012, 14, 7-16.	2.8	36
26	Precise Spatial and Temporal Control of Oxygen within In Vitro Brain Slices via Microfluidic Gas Channels. <i>PLoS ONE</i> , 2012, 7, e43309.	2.5	41
27	Direct Measurements on CD24-Mediated Rolling of Human Breast Cancer MCF-7 Cells on E-Selectin. <i>Analytical Chemistry</i> , 2011, 83, 1078-1083.	6.5	53
28	Rheologically biomimetic cell suspensions for decreased cell settling in microfluidic devices. <i>Biomedical Microdevices</i> , 2011, 13, 549-557.	2.8	7
29	Dendrimer-Mediated Multivalent Binding for the Enhanced Capture of Tumor Cells. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11769-11772.	13.8	147
30	Leveraging stimuli responsive hydrogels for on/off control of mixing. <i>Sensors and Actuators B: Chemical</i> , 2011, 157, 722-726.	7.8	22
31	Microfluidic perfusion and imaging device for multi-parametric islet function assessment. <i>Biomedical Microdevices</i> , 2010, 12, 409-417.	2.8	64
32	Multiphysics simulation of a microfluidic perfusion chamber for brain slice physiology. <i>Biomedical Microdevices</i> , 2010, 12, 761-767.	2.8	12
33	Size-based separation and collection of mouse pancreatic islets for functional analysis. <i>Biomedical Microdevices</i> , 2010, 12, 865-874.	2.8	33
34	Application of microfluidic technology to pancreatic islet research: first decade of endeavor. <i>Bioanalysis</i> , 2010, 2, 1729-1744.	1.5	26
35	Size-Based Separation of Microparticles in a Multilayered Microfluidic Device. <i>Journal of Microelectromechanical Systems</i> , 2010, 19, 375-383.	2.5	27
36	Enhanced Tumor Cell Isolation by a Biomimetic Combination of E-selectin and anti-EpCAM: Implications for the Effective Separation of Circulating Tumor Cells (CTCs). <i>Langmuir</i> , 2010, 26, 8589-8596.	3.5	83

#	ARTICLE	IF	CITATIONS
37	A Multi-Parametric Islet Perifusion System within a Microfluidic Perifusion Device. Journal of Visualized Experiments, 2010, , .	0.3	4
38	Oxygen gradients for open well cellular cultures via microfluidic substrates. Lab on A Chip, 2010, 10, 2394.	6.0	110
39	Precise control over the oxygen conditions within the Boyden chamber using a microfabricated insert. Lab on A Chip, 2010, 10, 2366.	6.0	55
40	Oxygen sensitive microwells. Lab on A Chip, 2010, 10, 3291.	6.0	25
41	Modulating Temporal and Spatial Oxygenation over Adherent Cellular Cultures. PLoS ONE, 2009, 4, e6891.	2.5	72
42	Device for the control of oxygen concentration in multiwell cell culture plates. , 2009, 2009, 2097-100.		4
43	Microfluidic device for multimodal characterization of pancreatic islets. Lab on A Chip, 2009, 9, 97-106.	6.0	114
44	Rapid prototyping for neuroscience and neural engineering. Journal of Neuroscience Methods, 2008, 172, 263-269.	2.5	25
45	Microfluidic add-on for standard electrophysiology chambers. Lab on A Chip, 2008, 8, 1048.	6.0	32
46	Applying Microfluidics to Electrophysiology. Journal of Visualized Experiments, 2007, , 301.	0.3	0
47	Thermal aging and reduced hydrophobic recovery of polydimethylsiloxane. Sensors and Actuators B: Chemical, 2006, 114, 170-172.	7.8	289
48	Development of a Disposable Infusion System for the Delivery of Protein Therapeutics. Biomedical Microdevices, 2005, 7, 223-230.	2.8	12
49	Flow control with hydrogels. Advanced Drug Delivery Reviews, 2004, 56, 199-210.	13.7	340
50	An organic self-regulating microfluidic system. Lab on A Chip, 2001, 1, 96.	6.0	81