Samuel K Sia

List of Publications by Year
in descending order

70 papers	8,500 citations	126858 33 h-index	106281 65 g-index
75 all docs	75 docs citations	75 times ranked	11143 citing authors

#	Article	IF	Citations
1	Acceptability and Use of a Dual HIV/Syphilis Rapid Test and Accompanying Smartphone App to Facilitate Self- and Partner-Testing Among Cisgender Men and Transgender Women Who Have Sex with Men. AIDS and Behavior, 2022, 26, 35-46.	1.4	13
2	Rapid video-based deep learning of cognate versus non-cognate T cell-dendritic cell interactions. Scientific Reports, 2022, 12, 559.	1.6	3
3	Ultrasoundâ€Responsive Aqueous Twoâ€Phase Microcapsules for Onâ€Demand Drug Release. Angewandte Chemie, 2022, 134, .	1.6	4
4	Ultrasoundâ€Responsive Aqueous Twoâ€Phase Microcapsules for Onâ€Demand Drug Release. Angewandte Chemie - International Edition, 2022, 61, .	7.2	14
5	Point-of-care diagnostics: recent developments in a pandemic age. Lab on A Chip, 2021, 21, 4517-4548.	3.1	34
6	SMARTtest: A Smartphone App to Facilitate HIV and Syphilis Self- and Partner-Testing, Interpretation of Results, and Linkage to Care. AIDS and Behavior, 2020, 24, 1560-1573.	1.4	33
7	Biosensors for Personal Mobile Health: A System Architecture Perspective. Advanced Materials Technologies, 2020, 5, 1900720.	3.0	18
8	Rule Out Acute Kidney Injury in the Emergency Department With a Urinary Dipstick. Kidney International Reports, 2020, 5, 1982-1992.	0.4	9
9	Injectable Therapeutic Organoids Using Sacrificial Hydrogels. IScience, 2020, 23, 101052.	1.9	19
10	Soft medical microrobots: Design components and system integration. Applied Physics Reviews, 2019, 6, 041305.	5.5	40
11	A Multiplexed Serologic Test for Diagnosis of Lyme Disease for Point-of-Care Use. Journal of Clinical Microbiology, 2019, 57, .	1.8	27
12	Integrating user behavior with engineering design of point-of-care diagnostic devices: theoretical framework and empirical findings. Lab on A Chip, 2019, 19, 2241-2255.	3.1	21
13	Hydrogel Microfilaments toward Intradermal Health Monitoring. IScience, 2019, 21, 328-340.	1.9	12
14	Evolution of Materials in Novel Point-of-Care Diagnostics. Clinical Chemistry, 2018, 64, 1125-1126.	1.5	2
15	An Additive Manufacturing Technique for the Facile and Rapid Fabrication of Hydrogel-based Micromachines with Magnetically Responsive Components. Journal of Visualized Experiments, 2018, , .	0.2	8
16	A direct tissue-grafting approach to increasing endogenous brown fat. Scientific Reports, 2018, 8, 7957.	1.6	22
17	Bringing Real-Time Geospatial Precision to HIV Surveillance Through Smartphones: Feasibility Study. JMIR Public Health and Surveillance, 2018, 4, e11203.	1.2	7
18	Additive manufacturing of hydrogel-based materials for next-generation implantable medical devices. Science Robotics, 2017, 2, .	9.9	131

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19	Point-of-Care Diagnostics: Recent Developments in a Connected Age. Analytical Chemistry, 2017, 89, 102-123.	3.2	386
20	Human Skin Constructs with Spatially Controlled Vasculature Using Primary and iPSCâ€Derived Endothelial Cells. Advanced Healthcare Materials, 2016, 5, 1800-1807.	3.9	185
21	Personalized Disease Models on a Chip. Cell Systems, 2016, 3, 416-418.	2.9	7
22	Point-of-Care Technologies for Precision Cardiovascular Care and Clinical Research. JACC Basic To Translational Science, 2016, 1, 73-86.	1.9	42
23	An implantable compound-releasing capsule triggered on demand by ultrasound. Scientific Reports, 2016, 6, 22803.	1.6	31
24	Microfluidics-based point-of-care test for serodiagnosis of Lyme Disease. Scientific Reports, 2016, 6, 35069.	1.6	51
25	Toward a Microfluidics-Based Home Male Fertility Test. Clinical Chemistry, 2016, 62, 421-422.	1.5	5
26	Improving Present and Future Patient Care. Point of Care, 2015, 14, 124-126.	0.5	2
27	Share and share alike. Nature Biotechnology, 2015, 33, 1224-1228.	9.4	13
28	Smartphone dongle for simultaneous measurement of hemoglobin concentration and detection of HIV antibodies. Lab on A Chip, 2015, 15, 3514-3520.	3.1	77
29	A smartphone dongle for diagnosis of infectious diseases at the point of care. Science Translational Medicine, 2015, 7, 273re1.	5.8	370
30	On the Path from Materials Chemistry to Clinical Use. Clinical Chemistry, 2014, 60, 573-574.	1.5	0
31	Challenges and promises in modeling dermatologic disorders with bioengineered skin. Experimental Biology and Medicine, 2014, 239, 1215-1224.	1.1	16
32	Microfluidics for Engineering 3D Tissues and Cellular Microenvironments. , 2013, , 53-79.		1
33	Competitive stem cell recruitment by multiple cytotactic cues. Lab on A Chip, 2013, 13, 1156.	3.1	13
34	Mobile Device for Disease Diagnosis and Data Tracking in Resource-Limited Settings. Clinical Chemistry, 2013, 59, 629-640.	1.5	70
35	Assembly of complex cell microenvironments using geometrically docked hydrogel shapes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4551-4556.	3.3	76
36	Point-of-Care Microdevices for Global Health Diagnostics of Infectious Diseases. , 2013, , 115-133.		0

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37	Commercialization of microfluidic point-of-care diagnostic devices. Lab on A Chip, 2012, 12, 2118.	3.1	1,105
38	Sweet solution to sensing. Nature Chemistry, 2011, 3, 659-660.	6.6	4
39	Engineering extracellular matrix structure in 3D multiphase tissues. Biomaterials, 2011, 32, 8067-8076.	5.7	67
40	Microfluidics-based diagnostics of infectious diseases in the developing world. Nature Medicine, 2011, 17, 1015-1019.	15.2	654
41	Uncovering the behaviors of individual cells within a multicellular microvascular community. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5133-5138.	3.3	23
42	Dynamic Hydrogels: Switching of 3D Microenvironments Using Twoâ€Component Naturally Derived Extracellular Matrices. Advanced Materials, 2010, 22, 686-691.	11.1	148
43	Strongly Binding Cellâ€Adhesive Polypeptides of Programmable Valencies. Angewandte Chemie - International Edition, 2010, 49, 1971-1975.	7.2	16
44	Reversible switching of 3D microenvironments in extracellular matrices and effects on collagen fibers and cell morphology. , 2010, , .		0
45	Actuation of elastomeric microvalves in point-of-care settings using handheld, battery-powered instrumentation. Lab on A Chip, 2010, 10, 1618.	3.1	40
46	Microfluidic CD4+ T-Cell Counting Device Using Chemiluminescence-Based Detection. Analytical Chemistry, 2010, 82, 36-40.	3.2	80
47	Patterning micro-stiffness in cell-adhesive substrate using microfluidics-based lithography. , 2010, , .		2
48	Microscale Control of Stiffness in a Cellâ€Adhesive Substrate Using Microfluidicsâ€Based Lithography. Angewandte Chemie - International Edition, 2009, 48, 7188-7192.	7.2	55
49	Cover Picture: Microscale Control of Stiffness in a Cell-Adhesive Substrate Using Microfluidics-Based Lithography (Angew. Chem. Int. Ed. 39/2009). Angewandte Chemie - International Edition, 2009, 48, 7103-7103.	7.2	0
50	Cutting edge: Thin, lightweight, foldable thermochromic displays on paper. Lab on A Chip, 2009, 9, 2763.	3.1	7
51	A microfabricated porous collagen-based scaffold as prototype for skin substitutes. Biomedical Microdevices, 2008, 10, 459-467.	1.4	34
52	In situ collagen assembly for integrating microfabricated three-dimensional cell-seeded matrices. Nature Materials, 2008, 7, 636-640.	13.3	214
53	Microfluidics and point-of-care testing. Lab on A Chip, 2008, 8, 1982.	3.1	237
54	Effect of volume- and time-based constraints on capture of analytes in microfluidic heterogeneous immunoassays. Lab on A Chip, 2008, 8, 2062.	3.1	88

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55	Real-Time Microfluidic System for Studying Mammalian Cells in 3D Microenvironments. Analytical Chemistry, 2008, 80, 3640-3647.	3.2	93
56	Direct patterning of composite biocompatible microstructures using microfluidics. Lab on A Chip, 2007, 7, 574.	3.1	64
57	Synthetic tissue biology: Tissue engineering meets synthetic biology. Birth Defects Research Part C: Embryo Today Reviews, 2007, 81, 354-361.	3.6	18
58	Lab-on-a-chip devices for global health: Past studies and future opportunities. Lab on A Chip, 2007, 7, 41-57.	3.1	700
59	Mixing with bubbles: a practical technology for use with portable microfluidic devices. Lab on A Chip, 2006, 6, 207-212.	3.1	129
60	Space- and time-resolved spectrophotometry in microsystems. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10035-10039.	3.3	16
61	Reagent-Loaded Cartridges for Valveless and Automated Fluid Delivery in Microfluidic Devices. Analytical Chemistry, 2005, 77, 64-71.	3.2	155
62	Torque-Actuated Valves for Microfluidics. Analytical Chemistry, 2005, 77, 4726-4733.	3.2	183
63	An Integrated Approach to a Portable and Low-Cost Immunoassay for Resource-Poor Settings. Angewandte Chemie - International Edition, 2004, 43, 498-502.	7.2	267
64	Patterning Multiple Aligned Self-Assembled Monolayers Using Light. Langmuir, 2004, 20, 9080-9088.	1.6	146
65	Microfluidic devices fabricated in Poly(dimethylsiloxane) for biological studies. Electrophoresis, 2003, 24, 3563-3576.	1.3	1,532
66	Protein grafting of an HIV-1-inhibiting epitope. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9756-9761.	3.3	63
67	Short constrained peptides that inhibit HIV-1 entry. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14664-14669.	3.3	192
68	Structure of Cardiac Muscle Troponin C Unexpectedly Reveals a Closed Regulatory Domain. Journal of Biological Chemistry, 1997, 272, 18216-18221.	1.6	181
69	Refined X-ray crystallographic structure of the poliovirus 3C gene product 1 1Edited By D. Rees. Journal of Molecular Biology, 1997, 273, 1032-1047.	2.0	181
70	Solid-phase fluorescent labeling reaction of picomole amounts of insulin in very dilute solutions and their analysis by capillary electrophoresis. Electrophoresis, 1995, 16, 534-540.	1.3	33