

Sebastian Josef Maerkl

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

6,050
citations

147566

31
h-index

143772

57
g-index

77
all docs

77
docs citations

77
times ranked

7286
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Throughput Single-Cell TCR-pMHC Dissociation Rate Measurements Performed by an Autonomous Microfluidic Cellular Processing Unit. <i>ACS Sensors</i> , 2022, 7, 159-165.	4.0	1
2	A SARS-CoV-2 omicron (B.1.1.529) variant outbreak in a primary school in Geneva, Switzerland. <i>Lancet Infectious Diseases</i> , The, 2022, 22, 767-768.	4.6	16
3	An automated do-it-yourself system for dynamic stem cell and organoid culture in standard multi-well plates. <i>Cell Reports Methods</i> , 2022, 2, 100244.	1.4	6
4	CFPU: A Cell-Free Processing Unit for High-Throughput, Automated In Vitro Circuit Characterization in Steady-State Conditions. <i>Biodesign Research</i> , 2021, 2021, .	0.8	9
5	A high-throughput microfluidic nanoimmunoassay for detecting anti-SARS-CoV-2 antibodies in serum or ultralow-volume blood samples. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	44
6	OnePot PURE Cell-Free System. <i>Journal of Visualized Experiments</i> , 2021, , .	0.2	7
7	Nature-Inspired Circular-Economy Recycling for Proteins: Proof of Concept. <i>Advanced Materials</i> , 2021, 33, e2104581.	11.1	14
8	Steady-State Cell-Free Gene Expression with Microfluidic Chemostats. <i>Methods in Molecular Biology</i> , 2021, 2229, 189-203.	0.4	9
9	Nature-Inspired Circular-Economy Recycling for Proteins: Proof of Concept (Adv. Mater. 44/2021). <i>Advanced Materials</i> , 2021, 33, 2170345.	11.1	0
10	Microfluidic systems for cancer diagnostics. <i>Current Opinion in Biotechnology</i> , 2020, 65, 37-44.	3.3	71
11	How single-cell immunology is benefiting from microfluidic technologies. <i>Microsystems and Nanoengineering</i> , 2020, 6, 45.	3.4	41
12	A partially self-regenerating synthetic cell. <i>Nature Communications</i> , 2020, 11, 6340.	5.8	40
13	Bottom-Up Construction of Complex Biomolecular Systems With Cell-Free Synthetic Biology. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 213.	2.0	91
14	A Multilayer Microfluidic Platform for the Conduction of Prolonged Cell-Free Gene Expression. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	8
15	A Simple, Robust, and Low-Cost Method To Produce the PURE Cell-Free System. <i>ACS Synthetic Biology</i> , 2019, 8, 455-462.	1.9	100
16	Cascaded amplifying circuits enable ultrasensitive cellular sensors for toxic metals. <i>Nature Chemical Biology</i> , 2019, 15, 540-548.	3.9	199
17	Cell-free gene-regulatory network engineering with synthetic transcription factors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 5892-5901.	3.3	59
18	Microfluidic Module for Real-Time Generation of Complex Multimolecule Temporal Concentration Profiles. <i>Analytical Chemistry</i> , 2018, 90, 696-701.	3.2	16

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19	Microfluidic Transfection for High-Throughput Mammalian Protein Expression. <i>Methods in Molecular Biology</i> , 2018, 1850, 189-208.	0.4	0
20	Microfluidic device for real-time formulation of reagents and their subsequent encapsulation into double emulsions. <i>Scientific Reports</i> , 2018, 8, 8143.	1.6	14
21	A Microfluidic Biodisplay. <i>ACS Synthetic Biology</i> , 2017, 6, 1979-1987.	1.9	13
22	A High-Throughput Microfluidic Platform for Mammalian Cell Transfection and Culturing. <i>Scientific Reports</i> , 2016, 6, 23937.	1.6	35
23	GreA and GreB Enhance Expression of <i>Escherichia coli</i> RNA Polymerase Promoters in a Reconstituted Transcription-Translation System. <i>ACS Synthetic Biology</i> , 2016, 5, 929-935.	1.9	21
24	Integrating gene synthesis and microfluidic protein analysis for rapid protein engineering. <i>Nucleic Acids Research</i> , 2016, 44, e68-e68.	6.5	19
25	Microfluidic co-culture platform to quantify chemotaxis of primary stem cells. <i>Lab on A Chip</i> , 2016, 16, 1934-1945.	3.1	13
26	Single Molecule Localization and Discrimination of DNA-Protein Complexes by Controlled Translocation Through Nanocapillaries. <i>Nano Letters</i> , 2016, 16, 7882-7890.	4.5	34
27	A Digital-Analog Microfluidic Platform for Patient-Centric Multiplexed Biomarker Diagnostics of Ultralow Volume Samples. <i>ACS Nano</i> , 2016, 10, 1699-1710.	7.3	71
28	Mechanically Induced Trapping of Molecular Interactions and Its Applications. <i>Journal of the Association for Laboratory Automation</i> , 2016, 21, 356-367.	2.8	16
29	A Microfluidic Platform for High-Throughput Multiplexed Protein Quantitation. <i>PLoS ONE</i> , 2015, 10, e0117744.	1.1	35
30	Rapid cell-free forward engineering of novel genetic ring oscillators. <i>ELife</i> , 2015, 4, e09771.	2.8	214
31	Long-Term Single Cell Analysis of <i>S. pombe</i> on a Microfluidic Microchemostat Array. <i>PLoS ONE</i> , 2014, 9, e93466.	1.1	67
32	LSPR Chip for Parallel, Rapid, and Sensitive Detection of Cancer Markers in Serum. <i>Nano Letters</i> , 2014, 14, 2636-2641.	4.5	262
33	A 1024-sample serum analyzer chip for cancer diagnostics. <i>Lab on A Chip</i> , 2014, 14, 2642-2650.	3.1	44
34	Two distinct promoter architectures centered on dynamic nucleosomes control ribosomal protein gene transcription. <i>Genes and Development</i> , 2014, 28, 1695-1709.	2.7	109
35	Mapping the fine structure of a eukaryotic promoter input-output function. <i>Nature Genetics</i> , 2013, 45, 1207-1215.	9.4	53
36	Real-Time mRNA Measurement during an <i>In Vitro</i> Transcription and Translation Reaction Using Binary Probes. <i>ACS Synthetic Biology</i> , 2013, 2, 411-417.	1.9	40

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37	Multiplexed surface micropatterning of proteins with a pressure-modulated microfluidic button-membrane. <i>Chemical Communications</i> , 2013, 49, 1264-1266.	2.2	22
38	A high-throughput nanoimmunoassay chip applied to large-scale vaccine adjuvant screening. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 650-658.	0.6	46
39	Live mammalian cell arrays. <i>Nature Methods</i> , 2013, 10, 550-552.	9.0	20
40	A chemostat array enables the spatio-temporal analysis of the yeast proteome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15842-15847.	3.3	123
41	Implementation of cell-free biological networks at steady state. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15985-15990.	3.3	137
42	iSLIM: a comprehensive approach to mapping and characterizing gene regulatory networks. <i>Nucleic Acids Research</i> , 2013, 41, e52-e52.	6.5	17
43	Probing the Informational and Regulatory Plasticity of a Transcription Factor DNA-Binding Domain. <i>PLoS Genetics</i> , 2012, 8, e1002614.	1.5	23
44	Topology and Dynamics of the Zebrafish Segmentation Clock Core Circuit. <i>PLoS Biology</i> , 2012, 10, e1001364.	2.6	108
45	Massively parallel measurements of molecular interaction kinetics on a microfluidic platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 16540-16545.	3.3	99
46	Rapid Synthesis of Defined Eukaryotic Promoter Libraries. <i>ACS Synthetic Biology</i> , 2012, 1, 483-490.	1.9	7
47	A High-Throughput Microfluidic Method for Generating and Characterizing Transcription Factor Mutant Libraries. <i>Methods in Molecular Biology</i> , 2012, 813, 107-123.	0.4	4
48	MITOMI: A Microfluidic Platform for In Vitro Characterization of Transcription Factor-DNA Interaction. <i>Methods in Molecular Biology</i> , 2012, 786, 97-114.	0.4	22
49	Does Positive Selection Drive Transcription Factor Binding Site Turnover? A Test with <i>Drosophila</i> Cis-Regulatory Modules. <i>PLoS Genetics</i> , 2011, 7, e1002053.	1.5	78
50	A software-programmable microfluidic device for automated biology. <i>Lab on A Chip</i> , 2011, 11, 1612.	3.1	134
51	Next generation microfluidic platforms for high-throughput protein biochemistry. <i>Current Opinion in Biotechnology</i> , 2011, 22, 59-65.	3.3	25
52	Experimental strategies for studying transcription factor-DNA binding specificities. <i>Briefings in Functional Genomics</i> , 2010, 9, 362-373.	1.3	77
53	Multi-target tracking of packed yeast cells. , 2010, , .		6
54	Experimental determination of the evolvability of a transcription factor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 18650-18655.	3.3	64

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55	An in vitro microfluidic approach to generating protein-interaction networks. Nature Methods, 2009, 6, 71-74.	9.0	138
56	Integration of plasmonic trapping in a microfluidic environment. Optics Express, 2009, 17, 6018.	1.7	134
57	A Protein Interaction Network generated from Streptococcus Pneumoniae. Biophysical Journal, 2009, 96, 7a.	0.2	0
58	Integration column: Microfluidic high-throughput screening. Integrative Biology (United Kingdom), 2009, 1, 19-29.	0.6	32
59	Discovery of a hepatitis C target and its pharmacological inhibitors by microfluidic affinity analysis. Nature Biotechnology, 2008, 26, 1019-1027.	9.4	215
60	A Systems Approach to Measuring the Binding Energy Landscapes of Transcription Factors. Science, 2007, 315, 233-237.	6.0	555
61	Microfluidic Large-Scale Integration. Science, 2002, 298, 580-584.	6.0	2,155
62	Biochemistry of Aminoacyl tRNA Synthetase and tRNAs and Their Engineering for Cell-Free and Synthetic Cell Applications. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	6