Sebastian Josef Maerkl

List of Publications by Year
in descending order

62 papers	6,050 citations	147801 31 h-index	144013 57 g-index
77 all docs	77 docs citations	77 times ranked	7286 citing authors

#	Article	IF	Citations
1	High-Throughput Single-Cell TCRâ€“pMHC Dissociation Rate Measurements Performed by an Autonomous Microfluidic Cellular Processing Unit. ACS Sensors, 2022, 7, 159-165.	7.8	1
2	A SARS-CoV-2 omicron (B.1.1.529) variant outbreak in a primary school in Geneva, Switzerland. Lancet Infectious Diseases, The, 2022, 22, 767-768.	9.1	16
3	An automated do-it-yourself system for dynamic stem cell and organoid culture in standard multi-well plates. Cell Reports Methods, 2022, 2, 100244.	2.9	6
4	CFPU: A Cell-Free Processing Unit for High-Throughput, Automated In Vitro Circuit Characterization in Steady-State Conditions. Biodesign Research, 2021, 2021, .	1.9	9
5	A high-throughput microfluidic nanoimmunoassay for detecting antiâ€“SARS-CoV-2 antibodies in serum or ultralow-volume blood samples. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	44
6	OnePot PURE Cell-Free System. Journal of Visualized Experiments, 2021, , .	0.3	7
7	Natureâ€Inspired Circularâ€Economy Recycling for Proteins: Proof of Concept. Advanced Materials, 2021, 33, e2104581.	21.0	14
8	Steady-State Cell-Free Gene Expression with Microfluidic Chemostats. Methods in Molecular Biology, 2021, 2229, 189-203.	0.9	9
9	Natureâ€Inspired Circularâ€Economy Recycling for Proteins: Proof of Concept (Adv. Mater. 44/2021). Advanced Materials, 2021, 33, 2170345.	21.0	0
10	Microfluidic systems for cancer diagnostics. Current Opinion in Biotechnology, 2020, 65, 37-44.	6.6	71
11	How single-cell immunology is benefiting from microfluidic technologies. Microsystems and Nanoengineering, 2020, 6, 45.	7.0	41
12	A partially self-regenerating synthetic cell. Nature Communications, 2020, 11, 6340.	12.8	40
13	Bottom-Up Construction of Complex Biomolecular Systems With Cell-Free Synthetic Biology. Frontiers in Bioengineering and Biotechnology, 2020, 8, 213.	4.1	91
14	A Multilayer Microfluidic Platform for the Conduction of Prolonged Cell-Free Gene Expression. Journal of Visualized Experiments, 2019, , .	0.3	8
15	A Simple, Robust, and Low-Cost Method To Produce the PURE Cell-Free System. ACS Synthetic Biology, 2019, 8, 455-462.	3.8	100
16	Cascaded amplifying circuits enable ultrasensitive cellular sensors for toxic metals. Nature Chemical Biology, 2019, 15, 540-548.	8.0	199
17	Cell-free gene-regulatory network engineering with synthetic transcription factors. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5892-5901.	7.1	59
18	Microfluidic Module for Real-Time Generation of Complex Multimolecule Temporal Concentration Profiles. Analytical Chemistry, 2018, 90, 696-701.	6.5	16

#	ARTICLE	IF	CITATIONS
19	Microfluidic Transfection for High-Throughput Mammalian Protein Expression. Methods in Molecular Biology, 2018, 1850, 189-208.	0.9	0
20	Microfluidic device for real-time formulation of reagents and their subsequent encapsulation into double emulsions. Scientific Reports, 2018, 8, 8143.	3.3	14
21	A Microfluidic Biodisplay. ACS Synthetic Biology, 2017, 6, 1979-1987.	3.8	13
22	A High-Throughput Microfluidic Platform for Mammalian Cell Transfection and Culturing. Scientific Reports, 2016, 6, 23937.	3.3	35
23	GreA and GreB Enhance Expression of <i>Escherichia coli</i> RNA Polymerase Promoters in a Reconstituted Transcriptionâ€“Translation System. ACS Synthetic Biology, 2016, 5, 929-935.	3.8	21
24	Integrating gene synthesis and microfluidic protein analysis for rapid protein engineering. Nucleic Acids Research, 2016, 44, e68-e68.	14.5	19
25	Microfluidic co-culture platform to quantify chemotaxis of primary stem cells. Lab on A Chip, 2016, 16, 1934-1945.	6.0	13
26	Single Molecule Localization and Discrimination of DNAâ€“Protein Complexes by Controlled Translocation Through Nanocapillaries. Nano Letters, 2016, 16, 7882-7890.	9.1	34
27	A Digitalâ€“Analog Microfluidic Platform for Patient-Centric Multiplexed Biomarker Diagnostics of Ultralow Volume Samples. ACS Nano, 2016, 10, 1699-1710.	14.6	71
28	Mechanically Induced Trapping of Molecular Interactions and Its Applications. Journal of the Association for Laboratory Automation, 2016, 21, 356-367.	2.8	16
29	A Microfluidic Platform for High-Throughput Multiplexed Protein Quantitation. PLoS ONE, 2015, 10, e0117744.	2.5	35
30	Rapid cell-free forward engineering of novel genetic ring oscillators. ELife, 2015, 4, e09771.	6.0	214
31	Long-Term Single Cell Analysis of S. pombe on a Microfluidic Microchemostat Array. PLoS ONE, 2014, 9, e93466.	2.5	67
32	LSPR Chip for Parallel, Rapid, and Sensitive Detection of Cancer Markers in Serum. Nano Letters, 2014, 14, 2636-2641.	9.1	262
33	A 1024-sample serum analyzer chip for cancer diagnostics. Lab on A Chip, 2014, 14, 2642-2650.	6.0	44
34	Two distinct promoter architectures centered on dynamic nucleosomes control ribosomal protein gene transcription. Genes and Development, 2014, 28, 1695-1709.	5.9	109
35	Mapping the fine structure of a eukaryotic promoter input-output function. Nature Genetics, 2013, 45, 1207-1215.	21.4	53
36	Real-Time mRNA Measurement during an <i>in Vitro</i> Transcription and Translation Reaction Using Binary Probes. ACS Synthetic Biology, 2013, 2, 411-417.	3.8	40

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37	Multiplexed surface micropatterning of proteins with a pressure-modulated microfluidic button-membrane. Chemical Communications, 2013, 49, 1264-1266.	4.1	22
38	A high-throughput nanoimmunoassay chip applied to large-scale vaccine adjuvant screening. Integrative Biology (United Kingdom), 2013, 5, 650-658.	1.3	46
39	Live mammalian cell arrays. Nature Methods, 2013, 10, 550-552.	19.0	20
40	A chemostat array enables the spatio-temporal analysis of the yeast proteome. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15842-15847.	7.1	123
41	Implementation of cell-free biological networks at steady state. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15985-15990.	7.1	137
42	iSLIM: a comprehensive approach to mapping and characterizing gene regulatory networks. Nucleic Acids Research, 2013, 41, e52-e52.	14.5	17
43	Probing the Informational and Regulatory Plasticity of a Transcription Factor DNAâ€"Binding Domain. PLoS Genetics, 2012, 8, e1002614.	3.5	23
44	Topology and Dynamics of the Zebrafish Segmentation Clock Core Circuit. PLoS Biology, 2012, 10, e1001364.	5.6	108
45	Massively parallel measurements of molecular interaction kinetics on a microfluidic platform. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16540-16545.	7.1	99
46	Rapid Synthesis of Defined Eukaryotic Promoter Libraries. ACS Synthetic Biology, 2012, 1, 483-490.	3.8	7
47	A High-Throughput Microfluidic Method for Generating and Characterizing Transcription Factor Mutant Libraries. Methods in Molecular Biology, 2012, 813, 107-123.	0.9	4
48	MITOMI: A Microfluidic Platform for In Vitro Characterization of Transcription Factorâ€"DNA Interaction. Methods in Molecular Biology, 2012, 786, 97-114.	0.9	22
49	Does Positive Selection Drive Transcription Factor Binding Site Turnover? A Test with Drosophila Cis-Regulatory Modules. PLoS Genetics, 2011, 7, e1002053.	3.5	78
50	A software-programmable microfluidic device for automated biology. Lab on A Chip, 2011, 11, 1612.	6.0	134
51	Next generation microfluidic platforms for high-throughput protein biochemistry. Current Opinion in Biotechnology, 2011, 22, 59-65.	6.6	25
52	Experimental strategies for studying transcription factor-DNA binding specificities. Briefings in Functional Genomics, 2010, 9, 362-373.	2.7	77
53	Multi-target tracking of packed yeast cells. , 2010, , .		6
54	Experimental determination of the evolvability of a transcription factor. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18650-18655.	7.1	64

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55	An in vitro microfluidic approach to generating protein-interaction networks. Nature Methods, 2009, 6, 71-74.	19.0	138
56	Integration of plasmonic trapping in a microfluidic environment. Optics Express, 2009, 17, 6018.	3.4	134
57	A Protein Interaction Network generated from Streptococcus Pneumoniae. Biophysical Journal, 2009, 96, 7a.	0.5	0
58	Integration column: Microfluidic high-throughput screening. Integrative Biology (United Kingdom), 2009, 1, 19-29.	1.3	32
59	Discovery of a hepatitis C target and its pharmacological inhibitors by microfluidic affinity analysis. Nature Biotechnology, 2008, 26, 1019-1027.	17.5	215
60	A Systems Approach to Measuring the Binding Energy Landscapes of Transcription Factors. Science, 2007, 315, 233-237.	12.6	555
61	Microfluidic Large-Scale Integration. Science, 2002, 298, 580-584.	12.6	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, .	4.1	6