

Susann MÃ¼ller

List of Publications by Year in descending order

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118
papers

5,433
citations

101384

36
h-index

95083

68
g-index

129
all docs

129
docs citations

129
times ranked

8800
citing authors

#	ARTICLE	IF	CITATIONS
1	Stabilizing microbial communities by looped mass transfer. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117814119.	3.3	4
2	Exploring the Extent of Phosphorus and Heavy Metal Uptake by Single Cells of <i>Saccharomyces cerevisiae</i> and Their Effects on Intrinsic Elements by SC-ICP-TOF-MS. <i>Frontiers in Microbiology</i> , 2022, 13, 870931.	1.5	3
3	A framework for P-cycle assessment in wastewater treatment plants. <i>Science of the Total Environment</i> , 2021, 760, 143392.	3.9	15
4	New developments in biological phosphorus accessibility and recovery approaches from soil and waste streams. <i>Engineering in Life Sciences</i> , 2021, 21, 77-86.	2.0	11
5	Determination of elemental distribution and evaluation of elemental concentration in single <i>Saccharomyces cerevisiae</i> cells using single cell-inductively coupled plasma mass spectrometry. <i>Metallomics</i> , 2021, 13, .	1.0	8
6	Predicting the Presence and Abundance of Bacterial Taxa in Environmental Communities through Flow Cytometric Fingerprinting. <i>MSystems</i> , 2021, 6, e0055121.	1.7	9
7	Community and single cell analyses reveal complex predatory interactions between bacteria in high diversity systems. <i>Nature Communications</i> , 2021, 12, 5481.	5.8	14
8	The Impact of the Antibiotic Fosfomycin on Wastewater Communities Measured by Flow Cytometry. <i>Frontiers in Microbiology</i> , 2021, 12, 737831.	1.5	5
9	Monitoring stratification of anode biofilms in bioelectrochemical laminar flow reactors using flow cytometry. <i>Environmental Science and Ecotechnology</i> , 2020, 4, 100062.	6.7	5
10	Bacterial mock communities as standards for reproducible cytometric microbiome analysis. <i>Nature Protocols</i> , 2020, 15, 2788-2812.	5.5	26
11	The Activation of Mucosal-Associated Invariant T (MAIT) Cells Is Affected by Microbial Diversity and Riboflavin Utilization in vitro. <i>Frontiers in Microbiology</i> , 2020, 11, 755.	1.5	14
12	Microorganisms and Their Activities Within Microbial Communities. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2020, 97, 681-682.	1.1	0
13	Gastric bypass surgery in a rat model alters the community structure and functional composition of the intestinal microbiota independently of weight loss. <i>Microbiome</i> , 2020, 8, 13.	4.9	40
14	Bacterial Community Diversity Dynamics Highlight Degrees of Nestedness and Turnover Patterns. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2020, 97, 742-748.	1.1	15
15	Following the community development of SIHUMix – a new intestinal <i>in vitro</i> model for bioreactor use. <i>Gut Microbes</i> , 2020, 11, 1116-1129.	4.3	32
16	Investigating Community Dynamics and Performance During Microbial Electrochemical Degradation of Whey. <i>ChemElectroChem</i> , 2020, 7, 989-997.	1.7	8
17	Guidelines for the use of flow cytometry and cell sorting in immunological studies (second edition). <i>European Journal of Immunology</i> , 2019, 49, 1457-1973.	1.6	766
18	Key sub-community dynamics of medium-chain carboxylate production. <i>Microbial Cell Factories</i> , 2019, 18, 92.	1.9	56

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19	Cytometry Score: 23 to 4. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2019, 95, 259-260.	1.1	2
20	Long-Term Behavior of Defined Mixed Cultures of <i>Geobacter sulfurreducens</i> and <i>Shewanella oneidensis</i> in Bioelectrochemical Systems. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 60.	2.0	51
21	Quantitation and Comparison of Phenotypic Heterogeneity Among Single Cells of Monoclonal Microbial Populations. <i>Frontiers in Microbiology</i> , 2019, 10, 2814.	1.5	17
22	The Simplified Human Intestinal Microbiota (SIHUMix) Shows High Structural and Functional Resistance against Changing Transit Times in In Vitro Bioreactors. <i>Microorganisms</i> , 2019, 7, 641.	1.6	35
23	flowEMMi: an automated model-based clustering tool for microbial cytometric data. <i>BMC Bioinformatics</i> , 2019, 20, 643.	1.2	16
24	Neutral mechanisms and niche differentiation in steady-state insular microbial communities revealed by single cell analysis. <i>Environmental Microbiology</i> , 2019, 21, 164-181.	1.8	46
25	Overview of recent advances in phosphorus recovery for fertilizer production. <i>Engineering in Life Sciences</i> , 2018, 18, 434-439.	2.0	73
26	Ecological Stability Properties of Microbial Communities Assessed by Flow Cytometry. <i>MSphere</i> , 2018, 3, .	1.3	46
27	Personalized microbiome dynamics – Cytometric fingerprints for routine diagnostics. <i>Molecular Aspects of Medicine</i> , 2018, 59, 123-134.	2.7	28
28	The intestinal microbiota determines the colitis-inducing potential of β -deficient Th cells in mice. <i>European Journal of Immunology</i> , 2018, 48, 161-167.	1.6	11
29	A cytometric approach to follow variation and dynamics of the salivary microbiota. <i>Methods</i> , 2018, 134-135, 67-79.	1.9	21
30	Long-Term Biogas Production from Glycolate by Diverse and Highly Dynamic Communities. <i>Microorganisms</i> , 2018, 6, 103.	1.6	12
31	Characterizing Microbiome Dynamics – Flow Cytometry Based Workflows from Pure Cultures to Natural Communities. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	12
32	AgNPs Change Microbial Community Structures of Wastewater. <i>Frontiers in Microbiology</i> , 2018, 9, 3211.	1.5	14
33	Heterogenic response of prokaryotes toward silver nanoparticles and ions is facilitated by phenotypes and attachment of silver aggregates to cell surfaces. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2017, 91, 775-784.	1.1	12
34	Guidelines for the use of flow cytometry and cell sorting in immunological studies[*]. <i>European Journal of Immunology</i> , 2017, 47, 1584-1797.	1.6	505
35	Mass Cytometry for Detection of Silver at the Bacterial Single Cell Level. <i>Frontiers in Microbiology</i> , 2017, 8, 1326.	1.5	28
36	Flow cytometric quantification, sorting and sequencing of methanogenic archaea based on F420 autofluorescence. <i>Microbial Cell Factories</i> , 2017, 16, 180.	1.9	39

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37	Species sorting and mass transfer paradigms control managed natural metacommunities. <i>Environmental Microbiology</i> , 2016, 18, 4862-4877.	1.8	31
38	Copy number variability of expression plasmids determined by cell sorting and Droplet Digital PCR. <i>Microbial Cell Factories</i> , 2016, 15, 211.	1.9	111
39	Environmental stress speeds up DNA replication in <i>Pseudomonas putida</i> in chemostat cultivations. <i>Biotechnology Journal</i> , 2016, 11, 155-163.	1.8	16
40	High-resolution microbiota flow cytometry reveals dynamic colitis-associated changes in fecal bacterial composition. <i>European Journal of Immunology</i> , 2016, 46, 1300-1303.	1.6	57
41	Facilitated gate setting by sequential dot plot scanning. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2015, 87, 661-664.	1.1	6
42	Phenotypic heterogeneity in metabolic traits among single cells of a rare bacterial species in its natural environment quantified with a combination of flow cell sorting and NanoSIMS. <i>Frontiers in Microbiology</i> , 2015, 06, 243.	1.5	72
43	Variability in subpopulation formation propagates into biocatalytic variability of engineered <i>Pseudomonas putida</i> strains. <i>Frontiers in Microbiology</i> , 2015, 6, 1042.	1.5	16
44	Non-random distribution of macromolecules as driving forces for phenotypic variation. <i>Current Opinion in Microbiology</i> , 2015, 25, 49-55.	2.3	18
45	Editorial overview: Environmental microbiology: Revisiting the physiology of microorganisms on the single cell scale. <i>Current Opinion in Microbiology</i> , 2015, 25, v-vi.	2.3	1
46	Coupling electric energy and biogas production in anaerobic digesters – impacts on the microbiome. <i>RSC Advances</i> , 2015, 5, 31329-31340.	1.7	44
47	Cytometric patterns reveal growth states of <i>S. hewanella putrefaciens</i> . <i>Microbial Biotechnology</i> , 2015, 8, 379-391.	2.0	7
48	Monitoring and engineering reactor microbiomes of denitrifying bioelectrochemical systems. <i>RSC Advances</i> , 2015, 5, 68326-68333.	1.7	39
49	Cytometric fingerprints: evaluation of new tools for analyzing microbial community dynamics. <i>Frontiers in Microbiology</i> , 2014, 5, 273.	1.5	67
50	Dynamics in the microbial cytoeme – single cell analytics in natural systems. <i>Current Opinion in Biotechnology</i> , 2014, 27, 134-141.	3.3	38
51	Analysis of aging in lager brewing yeast during serial repitching. <i>Journal of Biotechnology</i> , 2014, 187, 60-70.	1.9	16
52	Subpopulation-proteomics reveal growth rate, but not cell cycling, as a major impact on protein composition in <i>Pseudomonas putida</i> KT2440. <i>AMB Express</i> , 2014, 4, 71.	1.4	16
53	Microbiomes in bioenergy production: From analysis to management. <i>Current Opinion in Biotechnology</i> , 2014, 27, 65-72.	3.3	60
54	Accurate Determination of Plasmid Copy Number of Flow-Sorted Cells using Droplet Digital PCR. <i>Analytical Chemistry</i> , 2014, 86, 5969-5976.	3.2	45

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55	Isolation of Intact RNA from Sorted <i>S. cerevisiae</i> Cells for Differential Gene Expression Analysis. , 2013, , 265-277.		0
56	Sustainability of industrial yeast serial repitching practice studied by gene expression and correlation analysis. Journal of Biotechnology, 2013, 168, 718-728.	1.9	18
57	Monitoring of population dynamics of <i>Corynebacterium glutamicum</i> by multiparameter flow cytometry. Microbial Biotechnology, 2013, 6, 157-167.	2.0	41
58	From multi-omics to basic structures of biological systems. Current Opinion in Biotechnology, 2013, 24, 1-3.	3.3	74
59	Subpopulation-proteomics in prokaryotic populations. Current Opinion in Biotechnology, 2013, 24, 79-87.	3.3	35
60	CHIC – an automated approach for the detection of dynamic variations in complex microbial communities. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2013, 83A, 561-567.	1.1	55
61	Recovery of soil unicellular eukaryotes: An efficiency and activity analysis on the single cell level. Journal of Microbiological Methods, 2013, 95, 463-469.	0.7	16
62	Cytometric fingerprinting for analyzing microbial intracommunity structure variation and identifying subcommunity function. Nature Protocols, 2013, 8, 190-202.	5.5	114
63	Monitoring Functions in Managed Microbial Systems by Cytometric Bar Coding. Environmental Science & Technology, 2013, 47, 130108105239000.	4.6	29
64	Biodiversity of Polyphosphate Accumulating Bacteria in Eight WWTPs with Different Modes of Operation. Journal of Environmental Engineering, ASCE, 2013, 139, 1089-1098.	0.7	16
65	Cultivation of <i>Aquicola tertiaricarbonis</i> L108 on the fuel oxygenate intermediate tert-butyl alcohol induces aerobic anoxygenic photosynthesis at extremely low feeding rates. Microbiology (United Kingdom) 153, 1074-1081 (2009)	1.0	14
66	Comparison of preservation methods for bacterial cells in cytomics and proteomics. Journal of Integrated OMICS, 2013, 3, .	0.5	5
67	High resolution single cell analytics to follow microbial community dynamics in anaerobic ecosystems. Methods, 2012, 57, 338-349.	1.9	20
68	Correlation of Community Dynamics and Process Parameters As a Tool for the Prediction of the Stability of Wastewater Treatment. Environmental Science & Technology, 2012, 46, 84-92.	4.6	57
69	Revealing the electrochemically driven selection in natural community derived microbial biofilms using flow-cytometry. Energy and Environmental Science, 2011, 4, 1265.	15.6	74
70	Electroactive mixed culture derived biofilms in microbial bioelectrochemical systems: The role of pH on biofilm formation, performance and composition. Bioresource Technology, 2011, 102, 9683-9690.	4.8	203
71	Using a carbon-based ASM3 EAWAG Bio-P for modelling the enhanced biological phosphorus removal in anaerobic/aerobic activated sludge systems. Bioprocess and Biosystems Engineering, 2011, 34, 287-295.	1.7	4
72	20 years of the German Society for Cytometry: Past and future concepts. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2011, 79A, 891-893.	1.1	0

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73	NBDT (3-(7-Nitrobenzo[2,1,3-diazol-4-yl]amino)propane-1-carboxylic acid) A novel fluorescent dye for studying mechanisms of toluene uptake into vital bacteria. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2010, 77A, 113-120.	1.1	7
74	Resolution of Natural Microbial Community Dynamics by Community Fingerprinting, Flow Cytometry, and Trend Interpretation Analysis. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2010, 124, 151-181.	0.6	13
75	Advanced tool for characterization of microbial cultures by combining cytomics and proteomics. <i>Applied Microbiology and Biotechnology</i> , 2010, 88, 575-584.	1.7	44
76	Viability states of bacteria—Specific mechanisms of selected probes. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2010, 77A, 623-634.	1.1	154
77	Origin and analysis of microbial population heterogeneity in bioprocesses. <i>Current Opinion in Biotechnology</i> , 2010, 21, 100-113.	3.3	123
78	Functional single-cell analyses: flow cytometry and cell sorting of microbial populations and communities. <i>FEMS Microbiology Reviews</i> , 2010, 34, 554-587.	3.9	303
79	Dynamics of Polyphosphate-Accumulating Bacteria in Wastewater Treatment Plant Microbial Communities Detected via DAPI (4',6'-Diamidino-2-Phenylindole) and Tetracycline Labeling. <i>Applied and Environmental Microbiology</i> , 2009, 75, 2111-2121.	1.4	101
80	Prediction of flocculation ability of brewing yeast inoculates by flow cytometry, proteome analysis, and mRNA profiling. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2009, 75A, 140-147.	1.1	23
81	Recent advances in the analysis of individual microbial cells. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2009, 75A, 83-85.	1.1	23
82	Community dynamics within a bacterial consortium during growth on toluene under sulfate-reducing conditions. <i>FEMS Microbiology Ecology</i> , 2009, 70, 586-596.	1.3	37
83	Microbes' heterogeneousness—a focus issue on cytometric technologies in microbial single cell analytics. <i>Biotechnology Journal</i> , 2009, 4, 591-592.	1.8	1
84	Effect of electrokinetic transport on the vulnerability of PAH-degrading bacteria in a model aquifer. <i>Environmental Geochemistry and Health</i> , 2008, 30, 177-182.	1.8	48
85	Factors influencing the electrokinetic dispersion of PAH-degrading bacteria in a laboratory model aquifer. <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 507-515.	1.7	29
86	Cytomics reaches microbiology—Population heterogeneity on the protein level caused by chemical stress. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 3-4.	1.1	6
87	Activity and viability of polycyclic aromatic hydrocarbon-degrading <i>Sphingomonas</i> sp. LB126 in a DC-electrical field typical for electrobioremediation measures. <i>Microbial Biotechnology</i> , 2008, 1, 53-61.	2.0	26
88	Fixation procedures for flow cytometric analysis of environmental bacteria. <i>Journal of Microbiological Methods</i> , 2008, 75, 127-134.	0.7	37
89	Community-based degradation of 4-chlorosalicylate tracked on the single cell level. <i>Journal of Microbiological Methods</i> , 2008, 75, 117-126.	0.7	17
90	Fluorogenic surrogate substrates for toluene-degrading bacteria—Are they useful for activity analysis?. <i>Journal of Microbiological Methods</i> , 2007, 70, 272-283.	0.7	7

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91	Limits of propidium iodide as a cell viability indicator for environmental bacteria. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2007, 71A, 592-598.	1.1	231
92	Isolation of intact RNA from cytometrically sorted <i>Saccharomyces cerevisiae</i> for the analysis of intrapopulation diversity of gene expression. <i>Nature Protocols</i> , 2007, 2, 2203-2211.	5.5	32
93	Modes of cytometric bacterial DNA pattern: a tool for pursuing growth. <i>Cell Proliferation</i> , 2007, 40, 621-639.	2.4	62
94	Detection of Sulfur Microparticles in Bacterial Cultures by Flow Cytometry. <i>Engineering in Life Sciences</i> , 2007, 7, 403-407.	2.0	10
95	A cytomic approach reveals population heterogeneity of <i>Cupriavidus necator</i> in response to harmful phenol concentrations. <i>Proteomics</i> , 2006, 6, 5983-5994.	1.3	44
96	Control of continuous polyhydroxybutyrate synthesis using calorimetry and flow cytometry. <i>Biotechnology and Bioengineering</i> , 2006, 93, 541-552.	1.7	22
97	Analysis of living <i>S. cerevisiae</i> cell states – A three color approach. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2006, 69A, 173-177.	1.1	38
98	Population Dynamics within a Microbial Consortium during Growth on Diesel Fuel in Saline Environments. <i>Applied and Environmental Microbiology</i> , 2006, 72, 3531-3542.	1.4	133
99	Population profiles of a stable, commensalistic bacterial culture grown with toluene under sulphate-reducing conditions. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2005, 66A, 91-102.	1.1	26
100	Cell cycle synchronization of <i>Cupriavidus necator</i> by continuous phasing measured via flow cytometry. <i>Biotechnology and Bioengineering</i> , 2005, 92, 635-642.	1.7	15
101	Affinity of single <i>S. cerevisiae</i> cells to 2-NBDglucose under changing substrate concentrations. , 2004, 61A, 88-98.		20
102	Population profiles of a commercial yeast strain in the course of brewing. <i>Journal of Food Engineering</i> , 2004, 63, 375-381.	2.7	29
103	Population analysis of a binary bacterial culture by multi-parametric flow cytometry. <i>Journal of Biotechnology</i> , 2002, 97, 163-176.	1.9	19
104	How Should Microbial Life be Quantified to Optimise Bioprocesses?. <i>Acta Biotechnologica</i> , 2002, 22, 401-409.	1.0	2
105	<i>Muricauda ruestringensis</i> Has an Asymmetric Cell Cycle. <i>Acta Biotechnologica</i> , 2001, 21, 343-357.	1.0	7
106	Optimisation of High Gravity and Diet Beer Production in a German Brewery by Flow Cytometry. <i>Journal of the Institute of Brewing</i> , 2001, 107, 373-382.	0.8	12
107	Flow cytometric techniques to characterise physiological states of <i>Acinetobacter calcoaceticus</i> . <i>Journal of Microbiological Methods</i> , 2000, 40, 67-77.	0.7	34
108	Adaptive responses of <i>Ralstonia eutropha</i> to feast and famine conditions analysed by flow cytometry. <i>Journal of Biotechnology</i> , 1999, 75, 81-97.	1.9	52

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109	Dynamics of yeast cell states during proliferation and non proliferation periods in a brewing reactor monitored by multidimensional flow cytometry. <i>Bioprocess and Biosystems Engineering</i> , 1997, 17, 287.	0.5	21
110	Flow cytometric discrimination between <i>Acinetobacter calcoaceticus</i> 69-V and <i>Alcaligenes eutrophus</i> JMP134 by fluorescently labelled rRNA-targeted oligonucleotide probes and DNA staining. <i>Acta Biotechnologica</i> , 1997, 17, 19-38.	1.0	10
111	Membrane-potential-related fluorescence intensity indicates bacterial injury. <i>Microbiological Research</i> , 1996, 151, 127-131.	2.5	17
112	Flow Cytometric Monitoring of Bacterial Cell States Under Growth Limiting Conditions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 213-216.	0.4	1
113	<i>Methylobacterium rhodesianum</i> cells tend to double the DNA content under growth limitations and accumulate PHB. <i>Journal of Biotechnology</i> , 1995, 39, 9-20.	1.9	61
114	FLOW CYTOMETRIC MONITORING OF BACTERIAL CELL STATES UNDER GROWTH LIMITING CONDITIONS. , 1995, , 213-216.		2
115	Staining procedures for flow cytometric monitoring of bacterial populations. <i>Acta Biotechnologica</i> , 1993, 13, 289-297.	1.0	15
116	Immuno- and flow cytometric analytical methods for biotechnological research and process monitoring. <i>Journal of Biotechnology</i> , 1992, 25, 115-144.	1.9	42
117	Flow-cytometric investigation of sterol content and proliferation activity of yeast. <i>Acta Biotechnologica</i> , 1992, 12, 365-375.	1.0	13
118	Flow cytometric determination of yeast sterol content. <i>Acta Biotechnologica</i> , 1989, 9, 89-93.	1.0	12