Michael Sauer

List of Publications by Citations

94 papers	4,889 citations	39 h-index	69 g-index
108 ext. papers	5,631 ext. citations	6.2 avg, IF	5.68 L-index

#	Paper	IF	Citations
94	Microbial production of organic acids: expanding the markets. *Trends in Biotechnology*, **2008**, 26, 100-8	15.1	599
93	Improvement of lactic acid production in Saccharomyces cerevisiae by cell sorting for high intracellular pH. *Applied and Environmental Microbiology*, **2006**, 72, 5492-9	4.8	290
92	Recombinant protein production in yeasts. *Methods in Molecular Biology*, **2012**, 824, 329-58	1.4	198
91	Stress in recombinant protein producing yeasts. *Journal of Biotechnology*, **2004**, 113, 121-35	3.7	189
90	Pichia pastoris: protein production host and model organism for biomedical research. *Future Microbiology*, **2013**, 8, 191-208	2.9	165
89	Genome, secretome and glucose transport highlight unique features of the protein production host Pichia pastoris. *Microbial Cell Factories*, **2009**, 8, 29	6.4	165
88	The effect of temperature on the proteome of recombinant Pichia pastoris. *Journal of Proteome Research*, **2009**, 8, 1380-92	5.6	154
87	Recombinant protein production in yeasts. *Molecular Biotechnology*, **2005**, 31, 245-59	3	134
86	Transcriptomics-based identification of novel factors enhancing heterologous protein secretion in yeasts. *Applied and Environmental Microbiology*, **2007**, 73, 6499-507	4.8	122
85	Biochemistry of microbial itaconic acid production. *Frontiers in Microbiology*, **2013**, 4, 23	5.7	113
84	1,3-Propanediol production from glycerol with Lactobacillus diolivorans. *Bioresource Technology*, **2012**, 119, 133-40	11	99
83	Monitoring of transcriptional regulation in Pichia pastoris under protein production conditions. *BMC Genomics*, **2007**, 8, 179	4.5	96
82	Identification and characterisation of novel Pichia pastoris promoters for heterologous protein production. *Journal of Biotechnology*, **2010**, 150, 519-29	3.7	95
81	Novel insights into the unfolded protein response using Pichia pastoris specific DNA microarrays. *BMC Genomics*, **2008**, 9, 390	4.5	90
80	Directed gene copy number amplification in Pichia pastoris by vector integration into the ribosomal DNA locus. *FEMS Yeast Research*, **2009**, 9, 1260-70	3.1	88
79	The industrial yeast Pichia pastoris is converted from a heterotroph into an autotroph capable of growth on CO. *Nature Biotechnology*, **2020**, 38, 210-216	44.5	87
78	16 years research on lactic acid production with yeast - ready for the market?. *Biotechnology and Genetic Engineering Reviews*, **2010**, 27, 229-56	4.1	86

77	Targeting enzymes to the right compartment: metabolic engineering for itaconic acid production by Aspergillus niger. *Metabolic Engineering*, **2013**, 19, 26-32	9.7	85
76	Intracellular pH distribution in Saccharomyces cerevisiae cell populations, analyzed by flow cytometry. *Applied and Environmental Microbiology*, **2005**, 71, 1515-21	4.8	83
75	Systems-level organization of yeast methylotrophic lifestyle. *BMC Biology*, **2015**, 13, 80	7.3	78
74	Production of recombinant proteins and metabolites in yeasts: when are these systems better than bacterial production systems?. *Applied Microbiology and Biotechnology*, **2011**, 89, 939-48	5.7	77
73	The Efficient Clade: Lactic Acid Bacteria for Industrial Chemical Production. *Trends in Biotechnology*, **2017**, 35, 756-769	15.1	70
72	Biosynthesis of vitamin C by yeast leads to increased stress resistance. *PLoS ONE*, **2007**, 2, e1092	3.7	69
71	Overexpression of the riboflavin biosynthetic pathway in Pichia pastoris. *Microbial Cell Factories*, **2008**, 7, 23	6.4	68
70	An efficient tool for metabolic pathway construction and gene integration for Aspergillus niger. *Bioresource Technology*, **2017**, 245, 1327-1333	11	66
69	The response to unfolded protein is involved in osmotolerance of Pichia pastoris. *BMC Genomics*, **2010**, 11, 207	4.5	65
68	Lactate production yield from engineered yeasts is dependent from the host background, the lactate dehydrogenase source and the lactate export. *Microbial Cell Factories*, **2006**, 5, 4	6.4	65
67	Production of L-ascorbic acid by metabolically engineered Saccharomyces cerevisiae and Zygosaccharomyces bailii. *Applied and Environmental Microbiology*, **2004**, 70, 6086-91	4.8	64
66	Heading for an economic industrial upgrading of crude glycerol from biodiesel production to 1,3-propanediol by Lactobacillus diolivorans. *Bioresource Technology*, **2014**, 152, 499-504	11	62
65	Enzymes revolutionize the bioproduction of value-added compounds: From enzyme discovery to special applications. *Biotechnology Advances*, **2020**, 40, 107520	17.8	61
64	Engineering of the citrate exporter protein enables high citric acid production in Aspergillus niger. *Metabolic Engineering*, **2019**, 52, 224-231	9.7	61
63	GoldenPiCS: a Golden Gate-derived modular cloning system for applied synthetic biology in the yeast Pichia pastoris. *BMC Systems Biology*, **2017**, 11, 123	3.5	59
62	U13C cell extract of Pichia pastoris--a powerful tool for evaluation of sample preparation in metabolomics. *Journal of Separation Science*, **2012**, 35, 3091-105	3.4	54
61	Differential gene expression in recombinant Pichia pastoris analysed by heterologous DNA microarray hybridisation. *Microbial Cell Factories*, **2004**, 3, 17	6.4	53
60	Six novel constitutive promoters for metabolic engineering of Aspergillus niger. *Applied Microbiology and Biotechnology*, **2013**, 97, 259-67	5.7	50

59	The yeast Zygosaccharomyces bailii: a new host for heterologous protein production, secretion and for metabolic engineering applications. *FEMS Yeast Research*, **2004**, 4, 493-504	3.1	45
58	Industrial production of acetone and butanol by fermentation-100 years later. *FEMS Microbiology Letters*, **2016**, 363,	2.9	44
57	Metabolic Flexibility of Growing on Glycerol. *Frontiers in Microbiology*, **2017**, 8, 49	5.7	44
56	Influence of growth temperature on the production of antibody Fab fragments in different microbes: a host comparative analysis. *Biotechnology Progress*, **2011**, 27, 38-46	2.8	37
55	Genome sequence of the ruminal bacterium Megasphaera elsdenii. *Journal of Bacteriology*, **2011**, 193, 5578-9	3.5	36
54	Characterizing MttA as a mitochondrial cis-aconitic acid transporter by metabolic engineering. *Metabolic Engineering*, **2016**, 35, 95-104	9.7	33
53	Cloning, disruption and protein secretory phenotype of the GAS1 homologue of Pichia pastoris. *FEMS Microbiology Letters*, **2006**, 264, 40-7	2.9	32
52	Microbial production of 1,3-propanediol. *Recent Patents on Biotechnology*, **2008**, 2, 191-7	2.2	30
51	Genome-scale analysis of library sorting (GALibSo): Isolation of secretion enhancing factors for recombinant protein production in Pichia pastoris. *Biotechnology and Bioengineering*, **2010**, 105, 543-55	4.9	29
50	Construction of microbial cell factories for industrial bioprocesses. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 445-450	3.5	28
49	LC-MS/MS-based analysis of coenzyme A and short-chain acyl-coenzyme A thioesters. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 6681-8	4.4	27
48	Mass spectrometry based analysis of nucleotides, nucleosides, and nucleobases--application to feed supplements. *Analytical and Bioanalytical Chemistry*, **2012**, 404, 799-808	4.4	27
47	Organic acids from lignocellulose: Candida lignohabitans as a new microbial cell factory. *Journal of Industrial Microbiology and Biotechnology*, **2015**, 42, 681-91	4.2	26
46	Enhanced glutathione production by evolutionary engineering of Saccharomyces cerevisiae strains. *Biotechnology Journal*, **2015**, 10, 1719-26	5.6	25
45	Growth characteristics of Escherichia coli HB101[pGEc47] on defined medium. *Biotechnology and Bioengineering*, **1998**, 58, 92-100	4.9	25
44	Reverse engineering of protein secretion by uncoupling of cell cycle phases from growth. *Biotechnology and Bioengineering*, **2011**, 108, 2403-12	4.9	24
43	Old obstacles and new horizons for microbial chemical production. *Current Opinion in Biotechnology* , **2014**, 30, 101-6	11.4	22
42	Effect of HXT1 and HXT7 hexose transporter overexpression on wild-type and lactic acid producing Saccharomyces cerevisiae cells. *Microbial Cell Factories*, **2010**, 9, 15	6.4	22

41	Biotransformation of octane by E. coli HB101[pGEc47] on defined medium: Octanoate production and product inhibition **1998**, 58, 356-365		21
40	Interlaboratory comparison for quantitative primary metabolite profiling in Pichia pastoris. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 5159-69	4.4	20
39	Microbial 2-butanol production with. *Biotechnology for Biofuels*, **2019**, 12, 262	7.8	19
38	Effect of carbon pulsing on the redox household of Lactobacillus diolivorans in order to enhance 1,3-propanediol production. *New Biotechnology*, **2017**, 34, 32-39	6.4	19
37	Understanding How Microorganisms Respond to Acid pH Is Central to Their Control and Successful Exploitation. *Frontiers in Microbiology*, **2020**, 11, 556140	5.7	19
36	Golden Gate-based metabolic engineering strategy for wild-type strains of Yarrowia lipolytica. *FEMS Microbiology Letters*, **2019**, 366,	2.9	18
35	Spotlight on biodiversity of microbial cell factories for glycerol conversion. *Biotechnology Advances*, **2019**, 37, 107395	17.8	17
34	3-Hydroxypropionaldehyde production from crude glycerol by with enhanced glycerol uptake. *Biotechnology for Biofuels*, **2017**, 10, 295	7.8	17
33	Microbial organic acid production as carbon dioxide sink. *FEMS Microbiology Letters*, **2017**, 364,	2.9	17
32	Genetic engineering of Lactobacillus diolivorans. *FEMS Microbiology Letters*, **2013**, 344, 152-8	2.9	15
31	Metabolomics sampling of Pichia pastoris revisited: rapid filtration prevents metabolite loss during quenching. *FEMS Yeast Research*, **2015**, 15,	3.1	12
30	Measurement uncertainty of isotopologue fractions in fluxomics determined via mass spectrometry. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 5133-46	4.4	9
29	Microbial carbon dioxide fixation: new tricks for an old game. *FEMS Microbiology Letters*, **2018**, 365,	2.9	7
28	Complete genome sequence and transcriptome regulation of the pentose utilizing yeast Sugiyamaella lignohabitans. *FEMS Yeast Research*, **2016**, 16,	3.1	7
27	Impact of glutathione metabolism on zinc homeostasis in Saccharomyces cerevisiae. *FEMS Yeast Research*, **2017**, 17,	3.1	6
26	Investigating the multibudded and binucleate phenotype of the yeast Zygosaccharomyces bailii growing on minimal medium. *FEMS Yeast Research*, **2008**, 8, 906-15	3.1	6
25	Itaconic Acid An Emerging Building Block **2016**, 453-472		5
24	Downscaling screening cultures in a multifunctional bioreactor array-on-a-chip for speeding up optimization of yeast-based lactic acid bioproduction. *Biotechnology and Bioengineering*, **2020**, 117, 2046-2057	4.0	4

23	Non-genetic impact factors on chronological lifespan and stress resistance of baker's yeast. *Microbial Cell*, **2016**, 3, 232-235	3.9	4
22	Industrial Microorganisms: Pichia pastoris **2016**, 687-714		4
21	Microscale Perfusion-Based Cultivation for Pichia pastoris Clone Screening Enables Accelerated and Optimized Recombinant Protein Production Processes. *Biotechnology Journal*, **2021**, 16, e2000215	5.6	4
20	Efficient conversion of hemicellulose sugars from spent sulfite liquor into optically pure L-lactic acid by Enterococcus mundtii. *Bioresource Technology*, **2021**, 333, 125215	11	4
19	Sclerotia formed by citric acid producing strains of Aspergillus niger: Induction and morphological analysis. *Fungal Biology*, **2021**, 125, 485-494	2.8	3
18	Lactic acid bacteria: little helpers for many human tasks. *Essays in Biochemistry*, **2021**, 65, 163-171	7.6	3
17	Synthetic Biology Assisting Metabolic Pathway Engineering **2016**, 255-280		2
16	Utilizing yeasts for the conversion of renewable feedstocks to sugar alcohols - a review. *Bioresource Technology*, **2021**, 346, 126296	11	2
15	Identification of the citrate exporter Cex1 of Yarrowia lipolytica. *FEMS Yeast Research*, **2020**, 20,	3.1	2
14	A synthetic Calvin cycle enables autotrophic growth in yeast		2
13	The Plasma Membrane at the Cornerstone Between Flexibility and Adaptability: Implications for as a Cell Factory. *Frontiers in Microbiology*, **2021**, 12, 715891	5.7	2
12	Biorefineries Concepts for Sustainability **2014**, 1-27		1
11	The fungal sexual revolution continues: discovery of sexual development in members of the genus Aspergillus and its consequences. *Fungal Biology and Biotechnology*, **2020**, 7, 17	7.5	1
10	Production of Metabolites and Heterologous Proteins **2014**, 299-326		1
9	Slow Growth and Increased Spontaneous Mutation Frequency in Respiratory Deficient Yeast Suppressed by a Dominant Mutation in. *G3: Genes, Genomes, Genetics*, **2020**, 10, 4637-4648	3.2	1
8	Production of Metabolites and Heterologous Proteins **2014**, 299-326		0
7	Improvement of 3-Hydroxypropionic Acid Tolerance in Klebsiella pneumoniae by Novel Transporter YohJK.. *Bioresource Technology*, **2021**, 346, 126613	11	0
6	Industrial Microorganisms: Saccharomyces cerevisiae and other Yeasts **2016**, 673-686		0

List of Publications

5	Microbial production of organic acids for use in food **2013**, 288-320	
4	Analysis of bottlenecks in Rhizopus oryzae lipase production in Pichia pastoris using the nitrogen source-regulated formaldehyde dehydrogenase promoter (PFLD1). *Microbial Cell Factories*, **2006**, 5, P53	6.4
3	Disruption of the GAS1 gene of Pichia pastoris confers a supersecretory phenotype for Rhizopus oryzae lipase, but not for human trypsinogen. *Microbial Cell Factories*, **2006**, 5, P69	6.4
2	Yeast Cell Factories **2020**, 319-337	
1	Membrane transport as a target for metabolic engineering **2022**, 27-43	