Verena Siewers

List of Publications by Year
in descending order

118 papers	7,618 citations	36303 51 h-index	56724 83 g-index
135 all docs	135 docs citations	135 times ranked	6484 citing authors

#	Article	IF	Citations
1	A Hypersensitive Genetically Encoded Fluorescent Indicator (roGFP2-Prx1) Enables Continuous Measurement of Intracellular H2O2 during Cell Micro-cultivation. Bio-protocol, 2022, 12, e4317.	0.4	0
2	Identification of a novel gene required for competitive growth at high temperature in the thermotolerant yeast Kluyveromyces marxianus. Microbiology (United Kingdom), 2022, 168, .	1.8	5
3	Engineering Saccharomyces cerevisiae for the production and secretion of Affibody molecules. Microbial Cell Factories, 2022, 21, 36.	4.0	10
4	Saccharomyces cerevisiae as a Heterologous Host for Natural Products. Methods in Molecular Biology, 2022, 2489, 333-367.	0.9	3
5	Suppressors of amyloid-Î² toxicity improve recombinant protein production in yeast by reducing oxidative stress and tuning cellular metabolism. Metabolic Engineering, 2022, 72, 311-324.	7.0	9
6	An Overview on Selection Marker Genes for Transformation of Saccharomyces cerevisiae. Methods in Molecular Biology, 2022, , 1-13.	0.9	3
7	CRISPR/Cas9-mediated point mutations improve Î±-amylase secretion in <i>Saccharomyces cerevisiae</i>. FEMS Yeast Research, 2022, 22, .	2.3	6
8	Reconstruction of a catalogue of genome-scale metabolic models with enzymatic constraints using GECKO 2.0. Nature Communications, 2022, 13, .	12.8	39
9	Evaluating accessibility, usability and interoperability of genome-scale metabolic models for diverse yeasts species. FEMS Yeast Research, 2021, 21, .	2.3	6
10	Production of 10-methyl branched fatty acids in yeast. Biotechnology for Biofuels, 2021, 14, 12.	6.2	14
11	Transcriptomic response of <i>Saccharomyces cerevisiae</i> to octanoic acid production. FEMS Yeast Research, 2021, 21, .	2.3	4
12	GTR 2.0: gRNA-tRNA Array and Cas9-NG Based Genome Disruption and Single-Nucleotide Conversion in <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2021, 10, 1328-1337.	3.8	10
13	Rational gRNA design based on transcription factor binding data. Synthetic Biology, 2021, 6, ysab014.	2.2	0
14	Expression of antibody fragments in Saccharomyces cerevisiae strains evolved for enhanced protein secretion. Microbial Cell Factories, 2021, 20, 134.	4.0	21
15	The Yeast eIF2 Kinase Gcn2 Facilitates H ₂ O ₂ -Mediated Feedback Inhibition of Both Protein Synthesis and Endoplasmic Reticulum Oxidative Folding during Recombinant Protein Production. Applied and Environmental Microbiology, 2021, 87, e0030121.	3.1	8
16	Development of an Haa1-based biosensor for acetic acid sensing in <i>Saccharomyces cerevisiae</i>. FEMS Yeast Research, 2021, 21, .	2.3	9
17	A single chromosome strain of S. cerevisiae exhibits diminished ethanol metabolism and tolerance. BMC Genomics, 2021, 22, 688.	2.8	2
18	Expansion of the Yeast Modular Cloning Toolkit for CRISPR-Based Applications, Genomic Integrations and Combinatorial Libraries. ACS Synthetic Biology, 2021, 10, 3461-3474.	3.8	22

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19	Promiscuous phosphoketolase and metabolic rewiring enables novel non-oxidative glycolysis in yeast for high-yield production of acetyl-CoA derived products. Metabolic Engineering, 2020, 62, 150-160.	7.0	30
20	Deep learning suggests that gene expression is encoded in all parts of a co-evolving interacting gene regulatory structure. Nature Communications, 2020, 11, 6141.	12.8	83
21	Different Routes of Protein Folding Contribute to Improved Protein Production in Saccharomyces cerevisiae. MBio, 2020, 11, .	4.1	12
22	Engineering carboxylic acid reductase for selective synthesis of medium-chain fatty alcohols in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22974-22983.	7.1	27
23	Stress-induced expression is enriched for evolutionarily young genes in diverse budding yeasts. Nature Communications, 2020, 11, 2144.	12.8	24
24	The transcription factor Leu3 shows differential binding behavior in response to changing leucine availability. FEMS Microbiology Letters, 2020, 367, .	1.8	1
25	Adaptive Laboratory Evolution of Ale and Lager Yeasts for Improved Brewing Efficiency and Beer Quality. Annual Review of Food Science and Technology, 2020, 11, 23-44.	9.9	33
26	Multidimensional engineering of Saccharomyces cerevisiae for efficient synthesis of medium-chain fatty acids. Nature Catalysis, 2020, 3, 64-74.	34.4	80
27	Does co-expression of Yarrowia lipolytica genes encoding Yas1p, Yas2p and Yas3p make a potential alkane-responsive biosensor in Saccharomyces cerevisiae?. PLoS ONE, 2020, 15, e0239882.	2.5	0
28	Expanding the Dynamic Range of a Transcription Factor-Based Biosensor in <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2019, 8, 1968-1975.	3.8	44
29	FadR-Based Biosensor-Assisted Screening for Genes Enhancing Fatty Acyl-CoA Pools in <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2019, 8, 1788-1800.	3.8	44
30	Model-Assisted Fine-Tuning of Central Carbon Metabolism in Yeast through dCas9-Based Regulation. ACS Synthetic Biology, 2019, 8, 2457-2463.	3.8	39
31	Engineering <i>Saccharomyces cerevisiae</i> cells for production of fatty acid-derived biofuels and chemicals. Open Biology, 2019, 9, 190049.	3.6	56
32	Strategies and challenges for metabolic rewiring. Current Opinion in Systems Biology, 2019, 15, 30-38.	2.6	27
33	Identification of genes involved in shea butter biosynthesis from Vitellaria paradoxa fruits through transcriptomics and functional heterologous expression. Applied Microbiology and Biotechnology, 2019, 103, 3727-3736.	3.6	19
34	Heterologous phosphoketolase expression redirects flux towards acetate, perturbs sugar phosphate pools and increases respiratory demand in Saccharomyces cerevisiae. Microbial Cell Factories, 2019, 18, 25.	4.0	27
35	Increasing jojoba-like wax ester production in Saccharomyces cerevisiae by enhancing very long-chain, monounsaturated fatty acid synthesis. Microbial Cell Factories, 2019, 18, 49.	4.0	20
36	Effects of overexpression of <i>STB5</i> in <i>Saccharomyces cerevisiae</i> on fatty acid biosynthesis, physiology and transcriptome. FEMS Yeast Research, 2019, 19, .	2.3	8

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37	Integration of a multi-step heterologous pathway in Saccharomyces cerevisiae for the production of abscisic acid. Microbial Cell Factories, 2019, 18, 205.	4.0	22
38	<i>Saccharomyces cerevisiae</i> displays a stable transcription start site landscape in multiple conditions. FEMS Yeast Research, 2019, 19, .	2.3	10
39	Metabolic engineering of Saccharomyces cerevisiae for overproduction of triacylglycerols. Metabolic Engineering Communications, 2018, 6, 22-27.	3.6	63
40	Redirection of lipid flux toward phospholipids in yeast increases fatty acid turnover and secretion. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1262-1267.	7.1	51
41	Engineering 1-Alkene Biosynthesis and Secretion by Dynamic Regulation in Yeast. ACS Synthetic Biology, 2018, 7, 584-590.	3.8	59
42	Modulation of saturation and chain length of fatty acids in <i>Saccharomyces cerevisiae</i> for production of cocoa butterâ€like lipids. Biotechnology and Bioengineering, 2018, 115, 932-942.	3.3	24
43	Engineering microbial fatty acid metabolism for biofuels and biochemicals. Current Opinion in Biotechnology, 2018, 50, 39-46.	6.6	114
44	Heterologous transporter expression for improved fatty alcohol secretion in yeast. Metabolic Engineering, 2018, 45, 51-58.	7.0	57
45	Global rewiring of cellular metabolism renders Saccharomyces cerevisiae Crabtree negative. Nature Communications, 2018, 9, 3059.	12.8	79
46	Expression of cocoa genes in Saccharomyces cerevisiae improves cocoa butter production. Microbial Cell Factories, 2018, 17, 11.	4.0	21
47	Engineering lipid droplet assembly mechanisms for improved triacylglycerol accumulation in Saccharomyces cerevisiae. FEMS Yeast Research, 2018, 18, .	2.3	16
48	Cocoa butter-like lipid production ability of non-oleaginous and oleaginous yeasts under nitrogen-limited culture conditions. Applied Microbiology and Biotechnology, 2017, 101, 3577-3585.	3.6	60
49	Increasing cocoa butter-like lipid production of Saccharomyces cerevisiae by expression of selected cocoa genes. AMB Express, 2017, 7, 34.	3.0	24
50	Effects of acetoacetyl-CoA synthase expression on production of farnesene in <i>Saccharomyces cerevisiae</i>. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 911-922.	3.0	30
51	Metabolic engineering of Saccharomyces cerevisiae for production of very long chain fatty acid-derived chemicals. Nature Communications, 2017, 8, 15587.	12.8	82
52	Dynamic regulation of fatty acid pools for improved production of fatty alcohols in Saccharomyces cerevisiae. Microbial Cell Factories, 2017, 16, 45.	4.0	38
53	Evolutionary engineering reveals divergent paths when yeast is adapted to different acidic environments. Metabolic Engineering, 2017, 39, 19-28.	7.0	80
54	Establishing very longâ€chain fatty alcohol and wax ester biosynthesis in <i>Saccharomyces cerevisiae</i>. Biotechnology and Bioengineering, 2017, 114, 1025-1035.	3.3	43

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55	Affibody Scaffolds Improve Sesquiterpene Production in <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2017, 6, 19-28.	3.8	66
56	Biosynthesis of very long-chain fatty alcohols and wax esters in metabolically engineered strains of Saccharomyces cerevisiae. New Biotechnology, 2016, 33, S54.	4.4	0
57	Functional expression and evaluation of heterologous phosphoketolases in Saccharomyces cerevisiae. AMB Express, 2016, 6, 115.	3.0	39
58	Harnessing Yeast Peroxisomes for Biosynthesis of Fatty-Acid-Derived Biofuels and Chemicals with Relieved Side-Pathway Competition. Journal of the American Chemical Society, 2016, 138, 15368-15377.	13.7	157
59	Production of fatty acid-derived oleochemicals and biofuels by synthetic yeast cell factories. Nature Communications, 2016, 7, 11709.	12.8	306
60	Flux Control at the Malonyl-CoA Node through Hierarchical Dynamic Pathway Regulation in <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2016, 5, 224-233.	3.8	131
61	Improved production of fatty acids by<i>Saccharomyces cerevisiae</i>through screening a cDNA library from the oleaginous yeast<i>Yarrowia lipolytica</i>. FEMS Yeast Research, 2016, 16, fov108.	2.3	21
62	Physiological and transcriptional characterization of<i>Saccharomyces cerevisiae</i>engineered for production of fatty acid ethyl esters. FEMS Yeast Research, 2016, 16, fov105.	2.3	10
63	Production of farnesene and santalene by <i>Saccharomyces cerevisiae</i> using fedâ€batch cultivations with <i>RQ</i>â€controlled feed. Biotechnology and Bioengineering, 2016, 113, 72-81.	3.3	102
64	RNA-seq analysis of Pichia anomala reveals important mechanisms required for survival at low pH. Microbial Cell Factories, 2015, 14, 143.	4.0	20
65	Longâ€chain alkane production by the yeast <i>Saccharomyces cerevisiae</i>. Biotechnology and Bioengineering, 2015, 112, 1275-1279.	3.3	101
66	Adaptive mutations in sugar metabolism restore growth on glucose in a pyruvate decarboxylase negative yeast strain. Microbial Cell Factories, 2015, 14, 116.	4.0	19
67	Functional pyruvate formate lyase pathway expressed with two different electron donors in Saccharomyces cerevisiae at aerobic growth. FEMS Yeast Research, 2015, 15, fov024.	2.3	17
68	Editorial: Yeast synthetic biology: new tools to unlock cellular function. FEMS Yeast Research, 2015, 15, 1-1.	2.3	374
69	Metabolic pathway engineering for fatty acid ethyl ester production in <i>Saccharomyces cerevisiae</i> using stable chromosomal integration. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 477-486.	3.0	37
70	Production of Î²-ionone by combined expression of carotenogenic and plant CCD1 genes in Saccharomyces cerevisiae. Microbial Cell Factories, 2015, 14, 84.	4.0	71
71	Molecular Mechanism of Flocculation Self-Recognition in Yeast and Its Role in Mating and Survival. MBio, 2015, 6, .	4.1	62
72	Ach1 is involved in shuttling mitochondrial acetyl units for cytosolic C2 provision in Saccharomyces cerevisiae lacking pyruvate decarboxylase. FEMS Yeast Research, 2015, 15, .	2.3	28

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73	Modular pathway rewiring of Saccharomyces cerevisiae enables high-level production of L-ornithine. Nature Communications, 2015, 6, 8224.	12.8	97
74	Microbial acetyl-CoA metabolism and metabolic engineering. Metabolic Engineering, 2015, 28, 28-42.	7.0	237
75	Enabling Technologies to Advance Microbial Isoprenoid Production. Advances in Biochemical Engineering/Biotechnology, 2014, 148, 143-160.	1.1	10
76	An Overview on Selection Marker Genes for Transformation of Saccharomyces cerevisiae. Methods in Molecular Biology, 2014, 1152, 3-15.	0.9	19
77	Improved production of fatty acid ethyl esters in Saccharomyces cerevisiae through up-regulation of the ethanol degradation pathway and expression of the heterologous phosphoketolase pathway. Microbial Cell Factories, 2014, 13, 39.	4.0	115
78	Enhanced ethanol production and reduced glycerol formation in fps1âˆ† mutants of Saccharomyces cerevisiae engineered for improved redox balancing. AMB Express, 2014, 4, 86.	3.0	23
79	Coupled incremental precursor and co-factor supply improves 3-hydroxypropionic acid production in Saccharomyces cerevisiae. Metabolic Engineering, 2014, 22, 104-109.	7.0	123
80	Engineering of chromosomal wax ester synthase integrated <i>Saccharomyces cerevisiae</i> mutants for improved biosynthesis of fatty acid ethyl esters. Biotechnology and Bioengineering, 2014, 111, 1740-1747.	3.3	72
81	Advances in yeast genome engineering. FEMS Yeast Research, 2014, 15, n/a-n/a.	2.3	26
82	Metabolic Engineering of Saccharomyces cerevisiae for Isoprenoid Production. New Biotechnology, 2014, 31, S165.	4.4	0
83	Improving Production of Malonyl Coenzyme A-Derived Metabolites by Abolishing Snf1-Dependent Regulation of Acc1. MBio, 2014, 5, e01130-14.	4.1	194
84	Metabolic engineering of Saccharomyces cerevisiae for production of fatty acid ethyl esters, an advanced biofuel, by eliminating non-essential fatty acid utilization pathways. Applied Energy, 2014, 115, 226-232.	10.1	99
85	Fatty Acid-Derived Biofuels and Chemicals Production in Saccharomyces cerevisiae. Frontiers in Bioengineering and Biotechnology, 2014, 2, 32.	4.1	65
86	Genetic Engineering Tools for Saccharomyces cerevisiae. , 2014, , 287-301.		2
87	Improved polyhydroxybutyrate production by <i>Saccharomyces cerevisiae</i> through the use of the phosphoketolase pathway. Biotechnology and Bioengineering, 2013, 110, 2216-2224.	3.3	86
88	Improving biobutanol production in engineered <i>Saccharomyces cerevisiae</i> by manipulation of acetyl-CoA metabolism. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 1051-1056.	3.0	96
89	From flavors and pharmaceuticals to advanced biofuels: Production of isoprenoids in <i>Saccharomyces cerevisiae</i>. Biotechnology Journal, 2013, 8, 1435-1444.	3.5	91
90	A universal fixation method based on quaternary ammonium salts (RNAlater) for omics-technologies: Saccharomyces cerevisiae as a case study. Biotechnology Letters, 2013, 35, 891-900.	2.2	19

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91	Establishing a platform cell factory through engineering of yeast acetyl-CoA metabolism. Metabolic Engineering, 2013, 15, 48-54.	7.0	268
92	Advanced biofuel production by the yeast Saccharomyces cerevisiae. Current Opinion in Chemical Biology, 2013, 17, 480-488.	6.1	173
93	Profiling of Cytosolic and Peroxisomal Acetyl-CoA Metabolism in Saccharomyces cerevisiae. PLoS ONE, 2012, 7, e42475.	2.5	100
94	Combined metabolic engineering of precursor and co-factor supply to increase Î±-santalene production by Saccharomyces cerevisiae. Microbial Cell Factories, 2012, 11, 117.	4.0	130
95	Engineering of acetyl-CoA metabolism for the improved production of polyhydroxybutyrate in Saccharomyces cerevisiae. AMB Express, 2012, 2, 52.	3.0	83
96	Systems biology of yeast: enabling technology for development of cell factories for production of advanced biofuels. Current Opinion in Biotechnology, 2012, 23, 624-630.	6.6	83
97	Physiological characterization of recombinant Saccharomyces cerevisiae expressing the Aspergillus nidulans phosphoketolase pathway: validation of activity through 13C-based metabolic flux analysis. Applied Microbiology and Biotechnology, 2012, 95, 1001-1010.	3.6	32
98	A systems-level approach for metabolic engineering of yeast cell factories. FEMS Yeast Research, 2012, 12, 228-248.	2.3	90
99	Enhancing the copy number of episomal plasmids in Saccharomyces cerevisiae for improved protein production. FEMS Yeast Research, 2012, 12, 598-607.	2.3	66
100	Dynamic control of gene expression in Saccharomyces cerevisiae engineered for the production of plant sesquitepene Î±-santalene in a fed-batch mode. Metabolic Engineering, 2012, 14, 91-103.	7.0	215
101	Functional expression and characterization of five wax ester synthases in Saccharomyces cerevisiae and their utility for biodiesel production. Biotechnology for Biofuels, 2012, 5, 7.	6.2	71
102	Functional expression and characterization of five wax ester synthases in Saccharomyces cerevisiae and their utility for biodiesel production. Biotechnology for Biofuels, 2012, 5, 7.	6.2	93
103	Reconstruction and Evaluation of the Synthetic Bacterial MEP Pathway in Saccharomyces cerevisiae. PLoS ONE, 2012, 7, e52498.	2.5	54
104	Prospects for microbial biodiesel production. Biotechnology Journal, 2011, 6, 277-285.	3.5	70
105	Opportunities for yeast metabolic engineering: Lessons from synthetic biology. Biotechnology Journal, 2011, 6, 262-276.	3.5	101
106	Meeting report: Gothenburg Life Science Conference XI - Industrial Systems Biology. Biotechnology Journal, 2011, 6, 259-261.	3.5	1
107	The Influence of Microgravity on Invasive Growth in<i>Saccharomyces cerevisiae</i>. Astrobiology, 2011, 11, 45-55.	3.0	32
108	Phosphoglycerate mutase knockâ€out mutant <i>Saccharomyces cerevisiae</i>: Physiological investigation and transcriptome analysis. Biotechnology Journal, 2010, 5, 1016-1027.	3.5	11

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109	Implementation of communicationâ€mediating domains for nonâ€ribosomal peptide production in <i>Saccharomyces cerevisiae</i>. Biotechnology and Bioengineering, 2010, 106, 841-844.	3.3	17
110	Characterization of different promoters for designing a new expression vector in <i>Saccharomyces cerevisiae</i>. Yeast, 2010, 27, 955-964.	1.7	281
111	Characterization of chromosomal integration sites for heterologous gene expression in <i>Saccharomyces cerevisiae</i>. Yeast, 2009, 26, 545-551.	1.7	233
112	Heterologous production of non-ribosomal peptide LLD-ACV in Saccharomyces cerevisiae. Metabolic Engineering, 2009, 11, 391-397.	7.0	38
113	Approaches to Molecular Genetics and Genomics of Botrytis. , 2007, , 53-66.		8
114	Ethylene Sensing and Gene Activation in Botrytis cinerea: A Missing Link in Ethylene Regulation of Fungus-Plant Interactions?. Molecular Plant-Microbe Interactions, 2006, 19, 33-42.	2.6	97
115	Identification of an Abscisic Acid Gene Cluster in the Grey Mold Botrytis cinerea. Applied and Environmental Microbiology, 2006, 72, 4619-4626.	3.1	131
116	Functional Analysis of the Cytochrome P450 Monooxygenase Gene bcbot1 of Botrytis cinerea Indicates That Botrydial Is a Strain-Specific Virulence Factor. Molecular Plant-Microbe Interactions, 2005, 18, 602-612.	2.6	207
117	The P450 Monooxygenase BcABA1 Is Essential for Abscisic Acid Biosynthesis in Botrytis cinerea. Applied and Environmental Microbiology, 2004, 70, 3868-3876.	3.1	149
118	Functional analysis of H2O2-generating systems in Botrytis cinerea: the major Cu-Zn-superoxide dismutase (BCSOD1) contributes to virulence on French bean, whereas a glucose oxidase (BCGOD1) is dispensable. Molecular Plant Pathology, 2004, 5, 17-27.	4.2	208