Antonius J A Van Maris

List of Publications by Year
in descending order

52 papers	3,563 citations	218677 26 h-index	189892 50 g-index
52 all docs	52 docs citations	52 times ranked	3510 citing authors

#	Article	IF	Citations
1	Alcoholic fermentation of carbon sources in biomass hydrolysates by Saccharomyces cerevisiae: current status. Antonie Van Leeuwenhoek, 2006, 90, 391-418.	1.7	411
2	Microbial export of lactic and 3-hydroxypropanoic acid: implications for industrial fermentation processes. Metabolic Engineering, 2004, 6, 245-255.	7.0	409
3	Homofermentative Lactate Production Cannot Sustain Anaerobic Growth of Engineered Saccharomyces cerevisiae : Possible Consequence of Energy-Dependent Lactate Export. Applied and Environmental Microbiology, 2004, 70, 2898-2905.	3.1	365
4	CRISPR/Cas9: a molecular Swiss army knife for simultaneous introduction of multiple genetic modifications in Saccharomyces cerevisiae. FEMS Yeast Research, 2015, 15, .	2.3	360
5	Directed Evolution of Pyruvate Decarboxylase-Negative Saccharomyces cerevisiae , Yielding a C 2 -Independent, Glucose-Tolerant, and Pyruvate-Hyperproducing Yeast. Applied and Environmental Microbiology, 2004, 70, 159-166.	3.1	188
6	Development of Efficient Xylose Fermentation in Saccharomyces cerevisiae: Xylose Isomerase as aÂKey Component. Advances in Biochemical Engineering/Biotechnology, 2007, 108, 179-204.	1.1	143
7	Saccharomyces cerevisiae strains for second-generation ethanol production: from academic exploration to industrial implementation. FEMS Yeast Research, 2017, 17, .	2.3	140
8	Engineering cytosolic acetyl-coenzyme A supply in Saccharomyces cerevisiae: Pathway stoichiometry, free-energy conservation and redox-cofactor balancing. Metabolic Engineering, 2016, 36, 99-115.	7.0	117
9	Polycistronic expression of a Î²-carotene biosynthetic pathway in Saccharomyces cerevisiae coupled to Î²-ionone production. Journal of Biotechnology, 2014, 192, 383-392.	3.8	110
10	A new laboratory evolution approach to select for constitutive acetic acid tolerance in Saccharomyces cerevisiae and identification of causal mutations. Biotechnology for Biofuels, 2016, 9, 173.	6.2	109
11	Replacement of the Saccharomyces cerevisiae acetyl-CoA synthetases by alternative pathways for cytosolic acetyl-CoA synthesis. Metabolic Engineering, 2014, 21, 46-59.	7.0	93
12	Engineering Acetyl Coenzyme A Supply: Functional Expression of a Bacterial Pyruvate Dehydrogenase Complex in the Cytosol of Saccharomyces cerevisiae. MBio, 2014, 5, e01696-14.	4.1	84
13	Genome-wide analytical approaches for reverse metabolic engineering of industrially relevant phenotypes in yeast. FEMS Yeast Research, 2012, 12, 183-196.	2.3	75
14	Improving conversion yield of fermentable sugars into fuel ethanol in 1st generation yeast-based production processes. Current Opinion in Biotechnology, 2015, 33, 81-86.	6.6	66
15	Mutations in PMR1 stimulate xylose isomerase activity and anaerobic growth on xylose of engineered Saccharomyces cerevisiae by influencing manganese homeostasis. Scientific Reports, 2017, 7, 46155.	3.3	61
16	Optimizing anaerobic growth rate and fermentation kinetics in Saccharomyces cerevisiae strains expressing Calvin-cycle enzymes for improved ethanol yield. Biotechnology for Biofuels, 2018, 11, 17.	6.2	57
17	Laboratory evolution of new lactate transporter genes in a jen1Î" mutant of Saccharomyces cerevisiae and their identification as ADY2 alleles by whole-genome resequencing and transcriptome analysis. FEMS Yeast Research, 2012, 12, 359-374.	2.3	56
18	Improving ethanol yield in acetate-reducing Saccharomyces cerevisiae by cofactor engineering of 6-phosphogluconate dehydrogenase and deletion of ALD6. Microbial Cell Factories, 2016, 15, 67.	4.0	49

#	Article	IF	Citations
19	Maintenance-energy requirements and robustness of Saccharomyces cerevisiae at aerobic near-zero specific growth rates. Microbial Cell Factories, 2016, 15, 111.	4.0	45
20	Overproduction of Threonine Aldolase Circumvents the Biosynthetic Role of Pyruvate Decarboxylase in Glucose-Limited Chemostat Cultures of Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2003, 69, 2094-2099.	3.1	43
21	Weak Acid Permeation in Synthetic Lipid Vesicles and Across the Yeast Plasma Membrane. Biophysical Journal, 2020, 118, 422-434.	0.5	42
22	Steady-state and transient-state analysis of growth and metabolite production in aSaccharomyces cerevisiae strain with reduced pyruvate-decarboxylase activity. , 1999, 66, 42-50.		36
23	Alternative reactions at the interface of glycolysis and citric acid cycle inSaccharomyces cerevisiae. FEMS Yeast Research, 2016, 16, fow017.	2.3	36
24	A CRISPR/Cas9-based exploration into the elusive mechanism for lactate export in Saccharomyces cerevisiae. FEMS Yeast Research, 2017, 17, .	2.3	35
25	Elimination of sucrose transport and hydrolysis in Saccharomyces cerevisiae: a platform strain for engineering sucrose metabolism. FEMS Yeast Research, 2017, 17, .	2.3	34
26	Metabolic engineering strategies for optimizing acetate reduction, ethanol yield and osmotolerance in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2017, 10, 107.	6.2	33
27	Fermentation of glucose-xylose-arabinose mixtures by a synthetic consortium of single-sugar-fermenting Saccharomyces cerevisiae strains. FEMS Yeast Research, 2018, 18, .	2.3	33
28	Laboratory Evolution of a Biotin-Requiring Saccharomyces cerevisiae Strain for Full Biotin Prototrophy and Identification of Causal Mutations. Applied and Environmental Microbiology, 2017, 83, .	3.1	30
29	The Penicillium chrysogenum transporter PcAraT enables high-affinity, glucose-insensitive l-arabinose transport in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2018, 11, 63.	6.2	29
30	Combined engineering of disaccharide transport and phosphorolysis for enhanced ATP yield from sucrose fermentation in Saccharomyces cerevisiae. Metabolic Engineering, 2018, 45, 121-133.	7.0	24
31	Continuous removal of the model pharmaceutical chloroquine from water using melanin-covered Escherichia coli in a membrane bioreactor. Journal of Hazardous Materials, 2019, 365, 74-80.	12.4	24
32	A Coculture Based Tyrosine-Tyrosinase Electrochemical Gene Circuit for Connecting Cellular Communication with Electronic Networks. ACS Synthetic Biology, 2020, 9, 1117-1128.	3.8	23
33	Requirements for Carnitine Shuttle-Mediated Translocation of Mitochondrial Acetyl Moieties to the Yeast Cytosol. MBio, 2016, 7, .	4.1	19
34	The role of the acyl-CoA thioesterase â€œYciAâ€•in the production of (R)-3-hydroxybutyrate by recombinant Escherichia coli. Applied Microbiology and Biotechnology, 2019, 103, 3693-3704.	3.6	18
35	Membrane potential independent transport of NH3 in the absence of ammonium permeases in Saccharomyces cerevisiae. BMC Systems Biology, 2017, 11, 49.	3.0	17
36	Specific Arabidopsis thaliana malic enzyme isoforms can provide anaplerotic pyruvate carboxylation function in Saccharomyces cerevisiae. FEBS Journal, 2017, 284, 654-665.	4.7	16

#	Article	IF	Citations
37	Laboratory evolution of a glucose-phosphorylation-deficient, arabinose-fermenting S. cerevisiae strain reveals mutations in GAL2 that enable glucose-insensitive l-arabinose uptake. FEMS Yeast Research, 2018, 18, .	2.3	16
38	Galacturonate Metabolism in Anaerobic Chemostat Enrichment Cultures: Combined Fermentation and Acetogenesis by the Dominant sp. nov. â€œCandidatus Galacturonibacter soehngeniiâ€• Applied and Environmental Microbiology, 2018, 84, .	3.1	16
39	Engineering and Analysis of a Saccharomyces cerevisiae Strain That Uses Formaldehyde as an Auxiliary Substrate. Applied and Environmental Microbiology, 2008, 74, 3182-3188.	3.1	14
40	Molecular optimization of autotransporter-based tyrosinase surface display. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 486-494.	2.6	14
41	Replacement of the initial steps of ethanol metabolism inSaccharomyces cerevisiaeby ATP-independent acetylating acetaldehyde dehydrogenase. FEMS Yeast Research, 2016, 16, fow006.	2.3	13
42	Evaluation of a novel cloud-based software platform for structured experiment design and linked data analytics. Scientific Data, 2018, 5, 180195.	5.3	10
43	Identification of novel genes involved in acetic acid tolerance of Saccharomyces cerevisiae using pooled-segregant RNA sequencing. FEMS Yeast Research, 2018, 18, .	2.3	9
44	Laboratory Evolution and Reverse Engineering of Clostridium thermocellum for Growth on Glucose and Fructose. Applied and Environmental Microbiology, 2021, 87, .	3.1	9
45	Comparison of engineered Escherichia coli AF1000 and BL21 strains for (R)-3-hydroxybutyrate production in fed-batch cultivation. Applied Microbiology and Biotechnology, 2019, 103, 5627-5639.	3.6	8
46	Reassessment of requirements for anaerobic xylose fermentation by engineered, non-evolved Saccharomyces cerevisiae strains. FEMS Yeast Research, 2018, 19, .	2.3	6
47	Laboratory evolution and physiological analysis of Saccharomyces cerevisiae strains dependent on sucrose uptake via the Phaseolus vulgaris<scp>Suf1</scp> transporter. Yeast, 2018, 35, 639-652.	1.7	6
48	Functional Analysis of H ⁺ -Pumping Membrane-Bound Pyrophosphatase, ADP-Glucose Synthase, and Pyruvate Phosphate Dikinase as Pyrophosphate Sources in Clostridium thermocellum. Applied and Environmental Microbiology, 2022, 88, AEM0185721.	3.1	6
49	A Simulator-Assisted Workshop for Teaching Chemostat Cultivation in Academic Classes on Microbial Physiology. Journal of Microbiology and Biology Education, 2017, 18, .	1.0	3
50	Characterization of volatile fatty-acid utilization in Escherichia coli aiming for robust valorisation of food residues. AMB Express, 2020, 10, 184.	3.0	2
51	Steadyâ€state and transientâ€state analysis of growth and metabolite production in a Saccharomyces cerevisiae strain with reduced pyruvateâ€decarboxylase activity. Biotechnology and Bioengineering, 1999, 66, 42-50.	3.3	1
52	Metabolic engineering applications of the Escherichia coli bacterial artificial chromosome. Journal of Biotechnology, 2019, 305, 43-50.	3.8	0