## Lars Mathias Blank

List of Publications by Year in descending order

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243 papers 10,602 citations

54 h-index 86 g-index

269 all docs

269 docs citations

times ranked

269

9203 citing authors

#	Article	IF	CITATIONS
1	MEMOTE for standardized genome-scale metabolic model testing. Nature Biotechnology, 2020, 38, 272-276.	9.4	314
2	Microbial hyaluronic acid production. Applied Microbiology and Biotechnology, 2005, 66, 341-351.	1.7	305
3	Large-scale 13C-flux analysis reveals mechanistic principles of metabolic network robustness to null mutations in yeast. Genome Biology, 2005, 6, R49.	13.9	274
4	Possibilities and limitations of biotechnological plastic degradation and recycling. Nature Catalysis, 2020, 3, 867-871.	16.1	233
5	Metabolic functions of duplicate genes in Saccharomyces cerevisiae. Genome Research, 2005, 15, 1421-1430.	2.4	208
6	Growth independent rhamnolipid production from glucose using the non-pathogenic Pseudomonas putida KT2440. Microbial Cell Factories, 2011, 10, 80.	1.9	206
7	Metabolic-flux and network analysis in fourteen hemiascomycetous yeasts. FEMS Yeast Research, 2005, 5, 545-558.	1.1	192
8	Involvement of Pex13p in Pex14p Localization and Peroxisomal Targeting Signal 2–dependent Protein Import into Peroxisomes. Journal of Cell Biology, 1999, 144, 1151-1162.	2.3	178
9	Chemical and biological single cell analysis. Current Opinion in Biotechnology, 2010, 21, 12-20.	3.3	173
10	Tn7-Based Device for Calibrated Heterologous Gene Expression in <i>Pseudomonas putida</i> Synthetic Biology, 2015, 4, 1341-1351.	1.9	169
11	Machine Learning Applications for Mass Spectrometry-Based Metabolomics. Metabolites, 2020, 10, 243.	1.3	164
12	Pex17p of Saccharomyces cerevisiae Is a Novel Peroxin and Component of the Peroxisomal Protein Translocation Machinery. Journal of Cell Biology, 1998, 140, 49-60.	2.3	160
13	Towards bio-upcycling of polyethylene terephthalate. Metabolic Engineering, 2021, 66, 167-178.	3.6	151
14	Metabolic response of <i>Pseudomonasâ€∫putida</i> during redox biocatalysis in the presence of a second octanol phase. FEBS Journal, 2008, 275, 5173-5190.	2.2	135
15	Plastic waste as a novel substrate for industrial biotechnology. Microbial Biotechnology, 2015, 8, 900-903.	2.0	134
16	TCA cycle activity in Saccharomyces cerevisiae is a function of the environmentally determined specific growth and glucose uptake rates. Microbiology (United Kingdom), 2004, 150, 1085-1093.	0.7	130
17	Selected <i>Pseudomonas putida</i> Strains Able To Grow in the Presence of High Butanol Concentrations. Applied and Environmental Microbiology, 2009, 75, 4653-4656.	1.4	126
18	Engineering Pseudomonas putida KT2440 for efficient ethylene glycol utilization. Metabolic Engineering, 2018, 48, 197-207.	3.6	125

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19	Biotechnological upcycling of plastic waste and other non-conventional feedstocks in a circular economy. Current Opinion in Biotechnology, 2020, 62, 212-219.	3.3	124
20	Metabolic and Transcriptional Response to Cofactor Perturbations in Escherichia coli. Journal of Biological Chemistry, 2010, 285, 17498-17506.	1.6	115
21	Oxygen- and Glucose-Dependent Regulation of Central Carbon Metabolism in Pichia anomala. Applied and Environmental Microbiology, 2004, 70, 5905-5911.	1.4	114
22	Response of Pseudomonas putida KT2440 to Increased NADH and ATP Demand. Applied and Environmental Microbiology, 2011, 77, 6597-6605.	1.4	110
23	<i>Ustilago maydis</i> produces itaconic acid via the unusual intermediate <i>trans</i> â€aconitate. Microbial Biotechnology, 2016, 9, 116-126.	2.0	107
24	Fermentation characterization and flux analysis of recombinant strains of Clostridium acetobutylicum with an inactivated solR gene. Journal of Industrial Microbiology and Biotechnology, 2001, 27, 322-328.	1.4	102
25	Redox Biocatalysis and Metabolism: Molecular Mechanisms and Metabolic Network Analysis. Antioxidants and Redox Signaling, 2010, 13, 349-394.	2.5	101
26	Engineering mediator-based electroactivity in the obligate aerobic bacterium Pseudomonas putida KT2440. Frontiers in Microbiology, 2015, 6, 284.	1.5	100
27	Engineering and systems-level analysis of Saccharomyces cerevisiae for production of 3-hydroxypropionic acid via malonyl-CoA reductase-dependent pathway. Microbial Cell Factories, 2016, 15, 53.	1.9	98
28	Biodegradation and up-cycling of polyurethanes: Progress, challenges, and prospects. Biotechnology Advances, 2021, 48, 107730.	6.0	95
29	Carbon metabolism limits recombinant protein production in <i>Pichia pastoris</i> and Bioengineering, 2011, 108, 1942-1953.	1.7	93
30	The Functional Structure of Central Carbon Metabolism in Pseudomonas putida KT2440. Applied and Environmental Microbiology, 2014, 80, 5292-5303.	1.4	93
31	Designer rhamnolipids by reduction of congener diversity: production and characterization. Microbial Cell Factories, 2017, 16, 225.	1.9	93
32	The polyhydroxyalkanoate metabolism controls carbon and energy spillage in <i>Pseudomonas putida</i> . Environmental Microbiology, 2012, 14, 1049-1063.	1.8	92
33	Correlation between TCA cycle flux and glucose uptake rate during respiro-fermentative growth of Saccharomyces cerevisiae. Microbiology (United Kingdom), 2009, 155, 3827-3837.	0.7	91
34	Quantitative physiology of <i>Pichia pastoris</i> during glucoseâ€limited highâ€cell density fedâ€batch cultivation for recombinant protein production. Biotechnology and Bioengineering, 2010, 107, 357-368.	1.7	90
35	Novel insights into biosynthesis and uptake of rhamnolipids and their precursors. Applied Microbiology and Biotechnology, 2017, 101, 2865-2878.	1.7	89
36	Metabolic engineering of Pseudomonas taiwanensis VLB120 with minimal genomic modifications for high-yield phenol production. Metabolic Engineering, 2018, 47, 121-133.	3.6	87

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37	Laboratory evolution reveals the metabolic and regulatory basis of ethylene glycol metabolism by <i>Pseudomonas putida</i> KT2440. Environmental Microbiology, 2019, 21, 3669-3682.	1.8	85
38	Metabolic capacity estimation of <i>Escherichia coli</i> as a platform for redox biocatalysis: constraintâ€based modeling and experimental verification. Biotechnology and Bioengineering, 2008, 100, 1050-1065.	1.7	84
39	Comparison of Three Xylose Pathways in Pseudomonas putida KT2440 for the Synthesis of Valuable Products. Frontiers in Bioengineering and Biotechnology, 2019, 7, 480.	2.0	83
40	Prospecting the biodiversity of the fungal family Ustilaginaceae for the production of value-added chemicals. Fungal Biology and Biotechnology, 2014, $1,2$ .	2.5	80
41	Detection of volatile metabolites of Escherichia coli by multi capillary column coupled ion mobility spectrometry. Analytical and Bioanalytical Chemistry, 2009, 394, 791-800.	1.9	79
42	Influence of carbon and nitrogen concentration on itaconic acid production by the smut fungus <i>Ustilago maydis</i> . Engineering in Life Sciences, 2014, 14, 129-134.	2.0	75
43	NADH Availability Limits Asymmetric Biocatalytic Epoxidation in a Growing Recombinant <i>Escherichia coli</i> Strain. Applied and Environmental Microbiology, 2008, 74, 1436-1446.	1.4	74
44	Creating metabolic demand as an engineering strategy in Pseudomonas putida – Rhamnolipid synthesis as an example. Metabolic Engineering Communications, 2016, 3, 234-244.	1.9	73
45	Mechanism-specific and whole-organism ecotoxicity of mono-rhamnolipids. Science of the Total Environment, 2016, 548-549, 155-163.	3.9	68
46	Grand Challenge Commentary: Chassis cells for industrial biochemical production. Nature Chemical Biology, 2010, 6, 875-877.	3.9	64
47	Enhanced malic acid production from glycerol with high-cell density Ustilago trichophora TZ1 cultivations. Biotechnology for Biofuels, 2016, 9, 135.	6.2	64
48	Microfluidic Platform for Multimodal Analysis of Enzyme Secretion in Nanoliter Droplet Arrays. Analytical Chemistry, 2019, 91, 2066-2073.	3.2	62
49	Defined Microbial Mixed Culture for Utilization of Polyurethane Monomers. ACS Sustainable Chemistry and Engineering, 2020, 8, 17466-17474.	3.2	60
50	Evolution of the Hyaluronic Acid Synthesis (has) Operon in Streptococcus zooepidemicus and Other Pathogenic Streptococci. Journal of Molecular Evolution, 2008, 67, 13-22.	0.8	58
51	The Envirostat – a new bioreactor concept. Lab on A Chip, 2009, 9, 576-585.	3.1	58
52	Quantification of metabolic limitations during recombinant protein production in Escherichia coli. Journal of Biotechnology, 2011, 155, 178-184.	1.9	58
53	Genetic and biochemical insights into the itaconate pathway of Ustilago maydis enable enhanced production. Metabolic Engineering, 2016, 38, 427-435.	3.6	58
54	Efficient malic acid production from glycerol with Ustilago trichophora TZ1. Biotechnology for Biofuels, 2016, 9, 67.	6.2	58

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55	Strain- and Substrate-Dependent Redox Mediator and Electricity Production by Pseudomonas aeruginosa. Applied and Environmental Microbiology, 2016, 82, 5026-5038.	1.4	57
56	Integrated strain- and process design enable production of 220ÂgÂLâ^1 itaconic acid with Ustilago maydis. Biotechnology for Biofuels, 2019, 12, 263.	6.2	57
57	Integration of Genetic and Process Engineering for Optimized Rhamnolipid Production Using Pseudomonas putida. Frontiers in Bioengineering and Biotechnology, 2020, 8, 976.	2.0	56
58	Stable production of hyaluronic acid in Streptococcus zooepidemicus chemostats operated at high dilution rate. Biotechnology and Bioengineering, 2005, 90, 685-693.	1.7	55
59	<scp>D</scp> â€Xylose assimilation via the <scp>W</scp> eimberg pathway by solventâ€tolerant <scp><i>P</i><scp><i>P</i><fo>120. Environmental Microbiology, 2015, 17, 156-170.</fo></scp></scp>	1.8	55
60	The metabolic potential of plastics as biotechnological carbon sources – Review and targets for the future. Metabolic Engineering, 2022, 71, 77-98.	3.6	55
61	Ethanol reduces mitochondrial membrane integrity and thereby impacts carbon metabolism of Saccharomyces cerevisiae. FEMS Yeast Research, 2012, 12, 675-684.	1.1	53
62	Metabolic engineering of Ustilago trichophora TZ1 for improved malic acid production. Metabolic Engineering Communications, 2017, 4, 12-21.	1.9	53
63	Efficient itaconic acid production from glycerol with Ustilago vetiveriae TZ1. Biotechnology for Biofuels, 2017, 10, 131.	6.2	53
64	From beech wood to itaconic acid: case study on biorefinery process integration. Biotechnology for Biofuels, 2018, 11, 279.	6.2	52
65	Fatty Acid and Alcohol Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencing. Applied and Environmental Microbiology, 2020, 86, .	1.4	52
66	Systems biotechnology – Rational wholeâ€cell biocatalyst and bioprocess design. Engineering in Life Sciences, 2010, 10, 384-397.	2.0	51
67	Complete genome sequence of Pseudomonas sp. strain VLB120 a solvent tolerant, styrene degrading bacterium, isolated from forest soil. Journal of Biotechnology, 2013, 168, 729-730.	1.9	51
68	Metabolic Engineering of Pseudomonas putida KT2440 to Produce Anthranilate from Glucose. Frontiers in Microbiology, 2015, 6, 1310.	1.5	51
69	Heterologous production of long-chain rhamnolipids from Burkholderia glumae in Pseudomonas putida—a step forward to tailor-made rhamnolipids. Applied Microbiology and Biotechnology, 2018, 102, 1229-1239.	1.7	51
70	Methods for the Analysis of Polyphosphate in the Life Sciences. Analytical Chemistry, 2020, 92, 4167-4176.	3.2	49
71	Characterization of rhamnolipids by liquid chromatography/mass spectrometry after solid-phase extraction. Analytical and Bioanalytical Chemistry, 2016, 408, 2505-2514.	1.9	48
72	Engineering the morphology and metabolism of pH tolerant Ustilago cynodontis for efficient itaconic acid production. Metabolic Engineering, 2019, 54, 293-300.	3.6	47

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73	High performance liquid chromatography-charged aerosol detection applying an inverse gradient for quantification of rhamnolipid biosurfactants. Journal of Chromatography A, 2016, 1455, 125-132.	1.8	45
74	Activating Intrinsic Carbohydrate-Active Enzymes of the Smut Fungus Ustilago maydis for the Degradation of Plant Cell Wall Components. Applied and Environmental Microbiology, 2016, 82, 5174-5185.	1.4	45
75	Electrochemical conversion of a bio-derivable hydroxy acid to a drop-in oxygenate diesel fuel. Energy and Environmental Science, 2019, 12, 2406-2411.	15.6	45
76	Consolidated bioprocessing of cellulose to itaconic acid by a co-culture of Trichoderma reesei and Ustilago maydis. Biotechnology for Biofuels, 2020, 13, 207.	6.2	45
77	High temperature stimulates acetic acid accumulation and enhances the growth inhibition and ethanol production by Saccharomyces cerevisiae under fermenting conditions. Applied Microbiology and Biotechnology, 2014, 98, 6085-6094.	1.7	43
78	Remobilization of pollutants during extreme flood events poses severe risks to human and environmental health. Journal of Hazardous Materials, 2022, 421, 126691.	6.5	43
79	Hemin Reconstitutes Proton Extrusion in an H + -ATPase-Negative Mutant of Lactococcus lactis. Journal of Bacteriology, 2001, 183, 6707-6709.	1.0	42
80	The glycerophospholipid inventory of <i>Pseudomonas putida</i> is conserved between strains and enables growth conditionâ€related alterations. Microbial Biotechnology, 2012, 5, 45-58.	2.0	42
81	Picoliter nDEP traps enable time-resolved contactless single bacterial cell analysis in controlled microenvironments. Lab on A Chip, 2013, 13, 397-408.	3.1	42
82	Unraveling 1,4-Butanediol Metabolism in Pseudomonas putida KT2440. Frontiers in Microbiology, 2020, $11,382.$	1.5	42
83	Glycerophospholipid profiling by highâ€performance liquid chromatography/mass spectrometry using exact mass measurements and multiâ€stage mass spectrometric fragmentation experiments in parallel. Rapid Communications in Mass Spectrometry, 2009, 23, 1636-1646.	0.7	41
84	Fermentation and purification strategies for the production of betulinic acid and its lupaneâ€type precursors in ⟨i⟩Saccharomyces cerevisiae⟨/i⟩. Biotechnology and Bioengineering, 2017, 114, 2528-2538.	1.7	41
85	A Physiologically Based Pharmacokinetic Model of Isoniazid and Its Application in Individualizing Tuberculosis Chemotherapy. Antimicrobial Agents and Chemotherapy, 2016, 60, 6134-6145.	1.4	40
86	Increased biomass yield of <i>Lactococcus lactis</i> during energetically limited growth and respiratory conditions. Biotechnology and Applied Biochemistry, 2008, 50, 25-33.	1.4	39
87	Tailor-made poly-Î <sup>3</sup> -glutamic acid production. Metabolic Engineering, 2019, 55, 239-248.	3.6	38
88	Insights into cell wall disintegration of Chlorella vulgaris. PLoS ONE, 2022, 17, e0262500.	1.1	38
89	Dynamics of benzoate metabolism in Pseudomonas putida KT2440. Metabolic Engineering Communications, 2016, 3, 97-110.	1.9	37
90	Exploiting the Natural Diversity of RhlA Acyltransferases for the Synthesis of the Rhamnolipid Precursor 3-(3-Hydroxyalkanoyloxy)Alkanoic Acid. Applied and Environmental Microbiology, 2020, 86, .	1.4	37

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91	Boosting Heterologous Phenazine Production in Pseudomonas putida KT2440 Through the Exploration of the Natural Sequence Space. Frontiers in Microbiology, 2019, 10, 1990.	1.5	36
92	Simple enzymatic procedure for <scp>l</scp> â€carnosine synthesis: wholeâ€cell biocatalysis and efficient biocatalyst recycling. Microbial Biotechnology, 2010, 3, 74-83.	2.0	34
93	The cell and P: from cellular function to biotechnological application. Current Opinion in Biotechnology, 2012, 23, 846-851.	3.3	34
94	Comprehensive Real-Time Analysis of the Yeast Volatilome. Scientific Reports, 2017, 7, 14236.	1.6	34
95	Proline Availability Regulates Proline-4-Hydroxylase Synthesis and Substrate Uptake in Proline-Hydroxylating Recombinant Escherichia coli. Applied and Environmental Microbiology, 2013, 79, 3091-3100.	1.4	33
96	Restoration of biofuel production levels and increased tolerance under ionic liquid stress is enabled by a mutation in the essential Escherichia coli gene cydC. Microbial Cell Factories, 2018, 17, 159.	1.9	33
97	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. Environmental Sciences Europe, 2021, 33, 99.	2.6	33
98	Engineering yield and rate of reductive biotransformation in Escherichia coli by partial cyclization of the pentose phosphate pathway and PTS-independent glucose transport. Applied Microbiology and Biotechnology, 2012, 93, 1459-1467.	1.7	32
99	A breath of information: the volatilome. Current Genetics, 2018, 64, 959-964.	0.8	32
100	Multi-Omics Analysis of Fatty Alcohol Production in Engineered Yeasts Saccharomyces cerevisiae and Yarrowia lipolytica. Frontiers in Genetics, 2019, 10, 747.	1.1	32
101	An <i>Ustilago maydis</i> h> chassis for itaconic acid production without byâ€products. Microbial Biotechnology, 2020, 13, 350-362.	2.0	32
102	Identification of an endo-1,4-beta-xylanase of Ustilago maydis. BMC Biotechnology, 2013, 13, 59.	1.7	31
103	CO2 to succinic acid – Estimating the potential of biocatalytic routes. Metabolic Engineering Communications, 2018, 7, e00075.	1.9	31
104	High-Yield Production of 4-Hydroxybenzoate From Glucose or Glycerol by an Engineered Pseudomonas taiwanensis VLB120. Frontiers in Bioengineering and Biotechnology, 2019, 7, 130.	2.0	31
105	Metabolic flux distributions: genetic information, computational predictions, and experimental validation. Applied Microbiology and Biotechnology, 2010, 86, 1243-1255.	1.7	29
106	Discovery and Evaluation of Biosynthetic Pathways for the Production of Five Methyl Ethyl Ketone Precursors. ACS Synthetic Biology, 2018, 7, 1858-1873.	1.9	29
107	An Optimized Ustilago maydis for Itaconic Acid Production at Maximal Theoretical Yield. Journal of Fungi (Basel, Switzerland), 2021, 7, 20.	1.5	29
108	Flux-P: Automating Metabolic Flux Analysis. Metabolites, 2012, 2, 872-890.	1.3	28

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109	Complete genome sequence of solvent-tolerant Pseudomonas putida S12 including megaplasmid pTTS12. Journal of Biotechnology, 2015, 200, 17-18.	1.9	28
110	Integration of genome-scale metabolic networks into whole-body PBPK models shows phenotype-specific cases of drug-induced metabolic perturbation. Npj Systems Biology and Applications, 2018, 4, 10.	1.4	28
111	Streamlined <i>Pseudomonas taiwanensis</i> VLB120 Chassis Strains with Improved Bioprocess Features. ACS Synthetic Biology, 2019, 8, 2036-2050.	1.9	28
112	The interplay between transport and metabolism in fungal itaconic acid production. Fungal Genetics and Biology, 2019, 125, 45-52.	0.9	28
113	Increased TCA cycle activity and reduced oxygen consumption during cytochrome P450-dependent biotransformation in fission yeast. Yeast, 2006, 23, 779-794.	0.8	27
114	Analysis of carbon and nitrogen co-metabolism in yeast by ultrahigh-resolution mass spectrometry applying 13C- and 15N-labeled substrates simultaneously. Analytical and Bioanalytical Chemistry, 2012, 403, 2291-2305.	1.9	27
115	Metabolic response of <i>Pseudomonas putida</i> to increased NADH regeneration rates. Engineering in Life Sciences, 2017, 17, 47-57.	2.0	27
116	<i>Saccharomyces cerevisiae</i> containing 28% polyphosphate and production of a polyphosphate-rich yeast extract thereof. FEMS Yeast Research, 2019, 19, .	1.1	27
117	Killing Two Birds With One Stone – Strain Engineering Facilitates the Development of a Unique Rhamnolipid Production Process. Frontiers in Bioengineering and Biotechnology, 2020, 8, 899.	2.0	27
118	Engineering adipic acid metabolism in Pseudomonas putida. Metabolic Engineering, 2021, 67, 29-40.	3.6	27
119	A rapid, reliable, and automatable lab-on-a-chip interface. Lab on A Chip, 2009, 9, 1455.	3.1	26
120	Enzymatic quantification and length determination of polyphosphate down to a chain length of two. Analytical Biochemistry, 2018, 548, 82-90.	1.1	26
121	Poly- $\hat{l}^3$ -glutamic acid production by Bacillus subtilis 168 using glucose as the sole carbon source: A metabolomic analysis. Journal of Bioscience and Bioengineering, 2020, 130, 272-282.	1.1	26
122	Single cell analysis reveals unexpected growth phenotype of <i>S. cerevisiae</i> Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2009, 75A, 130-139.	1.1	25
123	Metabolic flux analysis of a phenol producing mutant of Pseudomonas putida S12: Verification and complementation of hypotheses derived from transcriptomics. Journal of Biotechnology, 2009, 143, 124-129.	1.9	25
124	Subtoxic product levels limit the epoxidation capacity of recombinant E. coli by increasing microbial energy demands. Journal of Biotechnology, 2013, 163, 194-203.	1,9	25
125	A Comparison of the Microbial Production and Combustion Characteristics of Three Alcohol Biofuels: Ethanol, 1-Butanol, and 1-Octanol. Frontiers in Bioengineering and Biotechnology, 2015, 3, 112.	2.0	25
126	Anionic Extraction for Efficient Recovery of Biobased 2,3â€Butanediol—A Platform for Bulk and Fine Chemicals. ChemSusChem, 2017, 10, 3252-3259.	3.6	25

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127	Process engineering of pH tolerant Ustilago cynodontis for efficient itaconic acid production. Microbial Cell Factories, 2019, 18, 213.	1.9	25
128	Selection of a recyclable <i>in situ </i> iliquid–liquid extraction solvent for foam-free synthesis of rhamnolipids in a two-phase fermentation. Green Chemistry, 2020, 22, 8495-8510.	4.6	25
129	Activation of the Glutamic Acid-Dependent Acid Resistance System in Escherichia coli BL21(DE3) Leads to Increase of the Fatty Acid Biotransformation Activity. PLoS ONE, 2016, 11, e0163265.	1.1	25
130	Integrated process development of a reactive extraction concept for itaconic acid and application to a real fermentation broth. Engineering in Life Sciences, 2017, 17, 809-816.	2.0	24
131	Investigating metabolic interactions in a microbial co-culture through integrated modelling and experiments. Computational and Structural Biotechnology Journal, 2020, 18, 1249-1258.	1.9	24
132	Promoters from the itaconate cluster of Ustilago maydis are induced by nitrogen depletion. Fungal Biology and Biotechnology, 2017, 4, 11.	2.5	23
133	A model-based assay design to reproduce in vivo patterns of acute drug-induced toxicity. Archives of Toxicology, 2018, 92, 553-555.	1.9	23
134	Rational Engineering of Phenylalanine Accumulation in Pseudomonas taiwanensis to Enable High-Yield Production of Trans-Cinnamate. Frontiers in Bioengineering and Biotechnology, 2019, 7, 312.	2.0	23
135	Hypothesis-driven omics integration. Nature Chemical Biology, 2010, 6, 485-487.	3.9	22
136	Genetic Cell-Surface Modification for Optimized Foam Fractionation. Frontiers in Bioengineering and Biotechnology, 2020, 8, 572892.	2.0	22
137	Towards real time analysis of protein secretion from single cells. Lab on A Chip, 2009, 9, 3047.	3.1	21
138	Interaction of rhamnolipids with model biomembranes of varying complexity. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183431.	1.4	21
139	Comparison of Isomerase and Weimberg Pathway for γ-PGA Production From Xylose by Engineered Bacillus subtilis. Frontiers in Bioengineering and Biotechnology, 2019, 7, 476.	2.0	21
140	Analytical polyphosphate extraction from Saccharomyces cerevisiae. Analytical Biochemistry, 2018, 563, 71-78.	1.1	20
141	A Straightforward Assay for Screening and Quantification of Biosurfactants in Microbial Culture Supernatants. Frontiers in Bioengineering and Biotechnology, 2020, 8, 958.	2.0	20
142	The Inflection Point Hypothesis: The Relationship between the Temperature Dependence of Enzyme-Catalyzed Reaction Rates and Microbial Growth Rates. Biochemistry, 2020, 59, 3562-3569.	1.2	20
143	Uncoupling Foam Fractionation and Foam Adsorption for Enhanced Biosurfactant Synthesis and Recovery. Microorganisms, 2020, 8, 2029.	1.6	20
144	Adaptive laboratory evolution of Pseudomonas putida and Corynebacterium glutamicum to enhance anthranilate tolerance. Microbiology (United Kingdom), 2020, 166, 1025-1037.	0.7	20

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145	Rhamnolipid biosurfactant analysis using online turbulent flow chromatography-liquid chromatography-tandem mass spectrometry. Journal of Chromatography A, 2016, 1465, 90-97.	1.8	19
146	Targeting 16S rDNA for Stable Recombinant Gene Expression in <i>Pseudomonas</i> ACS Synthetic Biology, 2019, 8, 1901-1912.	1.9	19
147	Integration of biocatalyst and process engineering for sustainable and efficient <i>n</i> â€butanol production. Engineering in Life Sciences, 2015, 15, 4-19.	2.0	18
148	Elucidation of the regulatory role of the fructose operon reveals a novel target for enhancing the NADPH supply in Corynebacterium glutamicum. Metabolic Engineering, 2016, 38, 344-357.	3.6	18
149	Aromatisation of bio-derivable isobutyraldehyde over HZSM-5 zeolite catalysts. Green Chemistry, 2019, 21, 1710-1717.	4.6	18
150	Lignin Aromatics to PHA Polymers: Nitrogen and Oxygen Are the Key Factors for <i>Pseudomonas</i> ACS Sustainable Chemistry and Engineering, 2021, 9, 10579-10590.	3.2	18
151	A blueprint of the amino acid biosynthesis network of hemiascomycetes. FEMS Yeast Research, 2014, 14, n/a-n/a.	1.1	17
152	Draft Genome Sequence of <i>Ustilago trichophora</i> RKO89, a Promising Malic Acid Producer. Genome Announcements, 2016, 4, .	0.8	17
153	Pseudomonas mRNA 2.0: Boosting Gene Expression Through Enhanced mRNA Stability and Translational Efficiency. Frontiers in Bioengineering and Biotechnology, 2019, 7, 458.	2.0	17
154	Single Cell Analytics: An Overview. Advances in Biochemical Engineering/Biotechnology, 2010, 124, 99-122.	0.6	16
155	Critical Factors for Microbial Contamination of Domestic Heating Oil. Energy & Energ	2.5	16
156	Model-based contextualization of in vitro toxicity data quantitatively predicts in vivo drug response in patients. Archives of Toxicology, 2017, 91, 865-883.	1.9	16
157	Elevated temperatures do not trigger a conserved metabolic network response among thermotolerant yeasts. BMC Microbiology, 2019, 19, 100.	1.3	16
158	Draft Genome Sequences of Itaconate-Producing <i>Ustilaginaceae</i> . Genome Announcements, 2016, 4, .	0.8	15
159	Using quantitative systems pharmacology to evaluate the drug efficacy of COX-2 and 5-LOX inhibitors in therapeutic situations. Npj Systems Biology and Applications, 2018, 4, 28.	1.4	15
160	High titer methyl ketone production with tailored Pseudomonas taiwanensis VLB120. Metabolic Engineering, 2020, 62, 84-94.	3.6	15
161	Coupling an Electroactive Pseudomonas putida KT2440 with Bioelectrochemical Rhamnolipid Production. Microorganisms, 2020, 8, 1959.	1.6	15
162	⟨i>Haemophilus influenzae Clucose Catabolism Leading to Production of the Immunometabolite Acetate Has a Key Contribution to the Host Airwayâ€"Pathogen Interplay. ACS Infectious Diseases, 2020, 6, 406-421.	1.8	15

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163	Exploration and Exploitation of the Yeast Volatilome. Current Metabolomics, 2017, 5, .	0.5	15
164	Improved sake metabolic profile during fermentation due to increased mitochondrial pyruvate dissimilation. FEMS Yeast Research, 2014, 14, 249-260.	1.1	14
165	Evolutionary freedom in the regulation of the conserved itaconate cluster by Ria1 in related Ustilaginaceae. Fungal Biology and Biotechnology, 2018, 5, 14.	2.5	14
166	Characterization of Context-Dependent Effects on Synthetic Promoters. Frontiers in Bioengineering and Biotechnology, 2020, 8, 551.	2.0	14
167	Electrophysiology of the Facultative Autotrophic Bacterium Desulfosporosinus orientis. Frontiers in Bioengineering and Biotechnology, 2020, 8, 457.	2.0	14
168	Brewers' spent grain as carbon source for itaconate production with engineered Ustilago maydis. Bioresource Technology, 2021, 336, 125262.	4.8	14
169	Ustilaginaceae Biocatalyst for Co-Metabolism of CO2-Derived Substrates toward Carbon-Neutral Itaconate Production. Journal of Fungi (Basel, Switzerland), 2021, 7, 98.	1.5	14
170	From measurement to implementation of metabolic fluxes. Current Opinion in Biotechnology, 2013, 24, 13-21.	3.3	13
171	Multi-Capillary Column-Ion Mobility Spectrometry of Volatile Metabolites Emitted by Saccharomyces Cerevisiae. Metabolites, 2014, 4, 751-774.	1.3	13
172	Online in vivo monitoring of cytosolic NAD redox dynamics in Ustilago maydis. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 1015-1024.	0.5	13
173	Genetic Optimization Algorithm for Metabolic Engineering Revisited. Metabolites, 2018, 8, 33.	1.3	13
174	Identification of Key Metabolites in Poly-Î <sup>3</sup> -Glutamic Acid Production by Tuning Î <sup>3</sup> -PGA Synthetase Expression. Frontiers in Bioengineering and Biotechnology, 2020, 8, 38.	2.0	13
175	A scalable bubbleâ€free membrane aerator for biosurfactant production. Biotechnology and Bioengineering, 2021, 118, 3545-3558.	1.7	13
176	Dataâ€driven personalization of a physiologically based pharmacokinetic model for caffeine: A systematic assessment. CPT: Pharmacometrics and Systems Pharmacology, 2021, 10, 782-793.	1.3	13
177	Phosphorus biotechnology. Current Opinion in Biotechnology, 2012, 23, 830-832.	3.3	12
178	Ultrasonically manufactured microfluidic device for yeast analysis. Microsystem Technologies, 2017, 23, 2139-2144.	1.2	12
179	Regulation of solvent tolerance inPseudomonas putidaS12 mediated by mobile elements. Microbial Biotechnology, 2017, 10, 1558-1568.	2.0	12
180	A comprehensive evaluation of constraining amino acid biosynthesis in compartmented models for metabolic flux analysis. Metabolic Engineering Communications, 2017, 5, 34-44.	1.9	12

#	Article	IF	CITATIONS
181	Improved microscale cultivation of Pichia pastoris for clonal screening. Fungal Biology and Biotechnology, 2018, 5, 8.	2.5	12
182	GC-MS-Based Metabolomics for the Smut Fungus Ustilago maydis: A Comprehensive Method Optimization to Quantify Intracellular Metabolites. Frontiers in Molecular Biosciences, 2020, 7, 211.	1.6	12
183	<i>Pseudomonas putida</i> KT2440 endures temporary oxygen limitations. Biotechnology and Bioengineering, 2021, 118, 4735-4750.	1.7	12
184	A minimal growth medium for the basidiomycete Pleurotus sapidus for metabolic flux analysis. Fungal Biology and Biotechnology, 2014, 1, 9.	2.5	11
185	Whole-Cell Biocatalytic Production of 2,5-Furandicarboxylic Acid. Microbiology Monographs, 2015, , 207-223.	0.3	11
186	Evaluation of pyruvate decarboxylaseâ€negative <i>Saccharomyces cerevisiae</i> strains for the production of succinic acid. Engineering in Life Sciences, 2019, 19, 711-720.	2.0	11
187	Exploiting the diversity of streptococcal hyaluronan synthases for the production of molecular weight–tailored hyaluronan. Applied Microbiology and Biotechnology, 2019, 103, 7567-7581.	1.7	11
188	Microfluidic Irreversible Electroporationâ€"A Versatile Tool to Extract Intracellular Contents of Bacteria and Yeast. Metabolites, 2019, 9, 211.	1.3	11
189	Polyphosphate Chain Length Determination in the Range of Two to Several Hundred P-Subunits with a New Enzyme Assay and <sup>31</sup> P NMR. Analytical Chemistry, 2019, 91, 7654-7661.	3.2	11
190	Biotechnological synthesis of waterâ€soluble foodâ€grade polyphosphate with <i>Saccharomyces cerevisiae</i> . Biotechnology and Bioengineering, 2020, 117, 2089-2099.	1.7	11
191	Seventeen Ustilaginaceae High-Quality Genome Sequences Allow Phylogenomic Analysis and Provide Insights into Secondary Metabolite Synthesis. Journal of Fungi (Basel, Switzerland), 2022, 8, 269.	1.5	11
192	Miniaturized octupole cytometry for cell type independent trapping and analysis. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	10
193	A Physiology-Based Model of Human Bile Acid Metabolism for Predicting Bile Acid Tissue Levels After Drug Administration in Healthy Subjects and BRIC Type 2 Patients. Frontiers in Physiology, 2019, 10, 1192.	1.3	10
194	Rational Selection of Carbon Fiber Properties for High-Performance Textile Electrodes in Bioelectrochemical Systems. Frontiers in Energy Research, 2019, 7, .	1.2	10
195	Benzoate Synthesis from Glucose or Glycerol Using Engineered <i>Pseudomonas taiwanensis</i> Biotechnology Journal, 2020, 15, e2000211.	1.8	10
196	A Comparative Analysis of Drug-Induced Hepatotoxicity in Clinically Relevant Situations. PLoS Computational Biology, 2017, 13, e1005280.	1.5	10
197	Bilayer microfluidic chip for diffusion-controlled activation of yeast species. Journal of Chromatography A, 2008, 1206, 77-82.	1.8	9
198	Defined inoculum for the investigation of microbial contaminations of liquid fuels. International Biodeterioration and Biodegradation, 2018, 132, 84-93.	1.9	9

#	Article	IF	Citations
199	Mitochondrial carriers of <i>UstilagoÂmaydis</i> and <i>AspergillusÂterreus</i> involved in itaconate production: same physiological role but different biochemical features. FEBS Letters, 2020, 594, 728-739.	1.3	9
200	A Combined Bio-Chemical Synthesis Route for 1-Octene Sheds Light on Rhamnolipid Structure. Catalysts, 2020, 10, 874.	1.6	9
201	Upcycling of hydrolyzed PET by microbial conversion to a fatty acid derivative. Methods in Enzymology, 2021, 648, 391-421.	0.4	9
202	An integrated yeastâ€based process for <i>cis</i> , <i>cis</i> â€muconic acid production. Biotechnology and Bioengineering, 2022, 119, 376-387.	1.7	9
203	Pressure-resistant and reversible on-tube-sealing for microfluidics. Microfluidics and Nanofluidics, 2011, 10, 679-684.	1.0	8
204	GC-MS-Based Determination of Mass Isotopomer Distributions for 13C-Based Metabolic Flux Analysis. Springer Protocols, 2015, , 223-243.	0.1	8
205	Multiscale modeling reveals inhibitory and stimulatory effects of caffeine on acetaminophenâ€induced toxicity in humans. CPT: Pharmacometrics and Systems Pharmacology, 2017, 6, 136-146.	1.3	8
206	Physiologic and metabolic characterization of Saccharomyces cerevisiae reveals limitations in the synthesis of the triterpene squalene. FEMS Yeast Research, 2018, 18, .	1.1	8
207	Comprehensive liamocin biosurfactants analysis by reversed phase liquid chromatography coupled to mass spectrometric and charged-aerosol detection. Journal of Chromatography A, 2020, 1627, 461404.	1.8	8
208	Designed to Be Green, Economic, and Efficient: A Ketoneâ€Esterâ€Alcoholâ€Alkane Blend for Future Sparkâ€Ignition Engines. ChemSusChem, 2021, 14, 5254-5264.	3.6	8
209	Nitrogen Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencing. Applied and Environmental Microbiology, 2022, 88, e0243021.	1.4	8
210	Methods for Recombinant Rhamnolipid Production. Springer Protocols, 2015, , 65-94.	0.1	7
211	Complete Genome Sequence and Annotation of the Paracoccus pantotrophus Type Strain DSM 2944. Microbiology Resource Announcements, 2020, 9, .	0.3	7
212	Genome-scale model reconstruction of the methylotrophic yeast Ogataea polymorpha. BMC Biotechnology, 2021, 21, 23.	1.7	7
213	Bio-energy conversion with carbon capture and utilization (BECCU): integrated biomass fermentation and chemo-catalytic CO2 hydrogenation for bioethanol and formic acid co-production. Green Chemistry, 2021, 23, 9860-9864.	4.6	7
214	Let's talk about flux or the importance of (intracellular) reaction rates. Microbial Biotechnology, 2017, 10, 28-30.	2.0	6
215	Double bond localization in unsaturated rhamnolipid precursors 3-(3-hydroxyalkanoyloxy)alkanoic acids by liquid chromatography–mass spectrometry applying online Paternò–BÃ⅓chi reaction. Analytical and Bioanalytical Chemistry, 2020, 412, 5601-5613.	1.9	6
216	Seawater activated TiO2 photocatalyst for degradation of organic compounds. Sustainable Chemistry and Pharmacy, 2020, 16, 100251.	1.6	6

#	Article	IF	CITATIONS
217	Proteome Regulation Patterns Determine Escherichia coli Wild-Type and Mutant Phenotypes. MSystems, 2021, 6, .	1.7	6
218	Comparative Analysis of the Behaviour of Marine Litter in Thermochemical Waste Treatment Processes, Processes, 2021, 9, 13.	1.3	6
219	Early prediction of decompensation ( <scp>EPOD</scp> ) score: Nonâ€invasive determination of cirrhosis decompensation risk. Liver International, 2022, 42, 640-650.	1.9	6
220	Ustilago maydis Metabolic Characterization and Growth Quantification with a Genome-Scale Metabolic Model. Journal of Fungi (Basel, Switzerland), 2022, 8, 524.	1.5	6
221	Impact of the number of rhamnose moieties of rhamnolipids on the structure, lateral organization and morphology of model biomembranes. Soft Matter, 2021, 17, 3191-3206.	1.2	5
222	A plea for the integration of Green Toxicology in sustainable bioeconomy strategies – Biosurfactants and microgel-based pesticide release systems as examples. Journal of Hazardous Materials, 2022, 426, 127800.	6.5	5
223	Rhamnolipids: Production, Performance, and Application. , 2017, , 587-622.		4
224	Systems Analysis of NADH Dehydrogenase Mutants Reveals Flexibility and Limits of Pseudomonas taiwanensis VLB120's Metabolism. Applied and Environmental Microbiology, 2020, 86, .	1.4	4
225	Successful Downsizing for High-Throughput 13C-MFA Applications. Methods in Molecular Biology, 2014, 1191, 127-142.	0.4	4
226	Insight to Gene Expression From Promoter Libraries With the Machine Learning Workflow Exp2lpynb. Frontiers in Bioinformatics, 2021, 1, .	1.0	4
227	Assessment of microbial activity by CO <sub>2</sub> production during heating oil storage. Engineering in Life Sciences, 2022, 22, 508-518.	2.0	4
228	Mix and Match: Promoters and Terminators for Tuning Gene Expression in the Methylotrophic Yeast Ogataea polymorpha. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	4
229	Mass spectrometric characterization of siderophores produced by Pseudomonas taiwanensis VLB120 assisted by stable isotope labeling of nitrogen source. BioMetals, 2018, 31, 785-795.	1.8	3
230	The Transcriptome and Flux Profiling of Crabtreeâ€Negative Hydroxy Acidâ€Producing Strains ofSaccharomyces cerevisiaeReveals Changes in the Central Carbon Metabolism. Biotechnology Journal, 2019, 14, 1900013.	1.8	3
231	A Modelâ€Based Workflow to Benchmark the Clinical Cholestasis Risk of Drugs. Clinical Pharmacology and Therapeutics, 2021, 110, 1293-1301.	2.3	3
232	Yeast-based production and in situ purification of acetaldehyde. Bioprocess and Biosystems Engineering, 2022, 45, 761-769.	1.7	3
233	The trade-off of availability and growth inhibition through copper for the production of copper-dependent enzymes by Pichia pastoris. BMC Biotechnology, 2016, 16, 20.	1.7	2
234	Multi-capillary Column Ion Mobility Spectrometry of Volatile Metabolites for Phenotyping of Microorganisms. Methods in Molecular Biology, 2018, 1671, 229-258.	0.4	2

#	Article	IF	CITATIONS
235	Systematic Screening of Fermentation Products as Future Platform Chemicals for Biofuels. Computer Aided Chemical Engineering, 2015, 37, 1331-1336.	0.3	2
236	Rhamnolipids: Production, Performance, and Application., 2017,, 1-37.		2
237	Predicting high recombinant protein producer strains of Pichia pastoris MutS using the oxygen transfer rate as an indicator of metabolic burden. Scientific Reports, 2022, 12, .	1.6	2
238	Microbial challenges for domestic heating oil storage tanks. Engineering in Life Sciences, 2016, 16, 474-482.	2.0	1
239	A rapid method to estimate NADH regeneration rates in living cells. Journal of Microbiological Methods, 2016, 130, 92-94.	0.7	1
240	Customized Woven Carbon Fiber Electrodes for Bioelectrochemical Systems—A Study of Structural Parameters. Frontiers in Chemical Engineering, 2022, 4, .	1.3	1
241	Malatproduktion aus Rohglycerin mit Ustilago. BioSpektrum, 2018, 24, 218-220.	0.0	0
242	Special Issue "Metabolic Engineering and Synthetic Biology Volume 2― Metabolites, 2021, 11, 35.	1.3	0
243	Correction for Thompson et al., "Fatty Acid and Alcohol Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencing― Applied and Environmental Microbiology, 2021, 87, .	1.4	0