

# Lars Mathias Blank

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7641597/lars-mathias-blank-publications-by-citations.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

241  
papers

7,238  
citations

47  
h-index

74  
g-index

269  
ext. papers

9,160  
ext. citations

5.9  
avg, IF

6.36  
L-index

#	Paper	IF	Citations
241	Microbial hyaluronic acid production. <i>Applied Microbiology and Biotechnology</i> , <b>2005</b> , 66, 341-51	5.7	258
240	Large-scale <sup>13</sup> C-flux analysis reveals mechanistic principles of metabolic network robustness to null mutations in yeast. <i>Genome Biology</i> , <b>2005</b> , 6, R49	18.3	249
239	Metabolic functions of duplicate genes in <i>Saccharomyces cerevisiae</i> . <i>Genome Research</i> , <b>2005</b> , 15, 1421-30.	9.7	184
238	Metabolic-flux and network analysis in fourteen hemiascomycetous yeasts. <i>FEMS Yeast Research</i> , <b>2005</b> , 5, 545-58	3.1	167
237	Growth independent rhamnolipid production from glucose using the non-pathogenic <i>Pseudomonas putida</i> KT2440. <i>Microbial Cell Factories</i> , <b>2011</b> , 10, 80	6.4	163
236	Involvement of Pex13p in Pex14p localization and peroxisomal targeting signal 2-dependent protein import into peroxisomes. <i>Journal of Cell Biology</i> , <b>1999</b> , 144, 1151-62	7.3	155
235	Chemical and biological single cell analysis. <i>Current Opinion in Biotechnology</i> , <b>2010</b> , 21, 12-20	11.4	153
234	Pex17p of <i>Saccharomyces cerevisiae</i> is a novel peroxin and component of the peroxisomal protein translocation machinery. <i>Journal of Cell Biology</i> , <b>1998</b> , 140, 49-60	7.3	140
233	MEMOTE for standardized genome-scale metabolic model testing. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 272-276	16.5	121
232	Metabolic response of <i>Pseudomonas putida</i> during redox biocatalysis in the presence of a second octanol phase. <i>FEBS Journal</i> , <b>2008</b> , 275, 5173-90	5.7	121
231	Selected <i>Pseudomonas putida</i> strains able to grow in the presence of high butanol concentrations. <i>Applied and Environmental Microbiology</i> , <b>2009</b> , 75, 4653-6	4.8	113
230	TCA cycle activity in <i>Saccharomyces cerevisiae</i> is a function of the environmentally determined specific growth and glucose uptake rates. <i>Microbiology (United Kingdom)</i> , <b>2004</b> , 150, 1085-1093	2.9	113
229	Metabolic and transcriptional response to cofactor perturbations in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 17498-506	5.4	100
228	Fermentation characterization and flux analysis of recombinant strains of <i>Clostridium acetobutylicum</i> with an inactivated solR gene. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2001</b> , 27, 322-8	4.2	96
227	Tn7-Based Device for Calibrated Heterologous Gene Expression in <i>Pseudomonas putida</i> . <i>ACS Synthetic Biology</i> , <b>2015</b> , 4, 1341-51	5.7	94
226	Plastic waste as a novel substrate for industrial biotechnology. <i>Microbial Biotechnology</i> , <b>2015</b> , 8, 900-3	6.3	93
225	Oxygen- and glucose-dependent regulation of central carbon metabolism in <i>Pichia anomala</i> . <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 5905-11	4.8	88

224	Response of <i>Pseudomonas putida</i> KT2440 to increased NADH and ATP demand. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 6597-605	4.8	84
223	Redox biocatalysis and metabolism: molecular mechanisms and metabolic network analysis. <i>Antioxidants and Redox Signaling</i> , <b>2010</b> , 13, 349-94	8.4	84
222	Carbon metabolism limits recombinant protein production in <i>Pichia pastoris</i> . <i>Biotechnology and Bioengineering</i> , <b>2011</b> , 108, 1942-53	4.9	83
221	Quantitative physiology of <i>Pichia pastoris</i> during glucose-limited high-cell density fed-batch cultivation for recombinant protein production. <i>Biotechnology and Bioengineering</i> , <b>2010</b> , 107, 357-68	4.9	79
220	Correction for Thompson et al., Fatty Acid and Alcohol Metabolism in <i>Pseudomonas putida</i> : Functional Analysis Using Random Barcode Transposon Sequencing. <i>Applied and Environmental Microbiology</i> , <b>2021</b> , 87,	4.8	78
219	Correlation between TCA cycle flux and glucose uptake rate during respiro-fermentative growth of <i>Saccharomyces cerevisiae</i> . <i>Microbiology (United Kingdom)</i> , <b>2009</b> , 155, 3827-3837	2.9	77
218	Metabolic capacity estimation of <i>Escherichia coli</i> as a platform for redox biocatalysis: constraint-based modeling and experimental verification. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 100, 1050-65	4.9	77
217	<i>Ustilago maydis</i> produces itaconic acid via the unusual intermediate trans-aconitate. <i>Microbial Biotechnology</i> , <b>2016</b> , 9, 116-26	6.3	76
216	The polyhydroxyalkanoate metabolism controls carbon and energy spillage in <i>Pseudomonas putida</i> . <i>Environmental Microbiology</i> , <b>2012</b> , 14, 1049-63	5.2	73
215	The functional structure of central carbon metabolism in <i>Pseudomonas putida</i> KT2440. <i>Applied and Environmental Microbiology</i> , <b>2014</b> , 80, 5292-303	4.8	71
214	NADH availability limits asymmetric biocatalytic epoxidation in a growing recombinant <i>Escherichia coli</i> strain. <i>Applied and Environmental Microbiology</i> , <b>2008</b> , 74, 1436-46	4.8	70
213	Biotechnological upcycling of plastic waste and other non-conventional feedstocks in a circular economy. <i>Current Opinion in Biotechnology</i> , <b>2020</b> , 62, 212-219	11.4	70
212	Engineering mediator-based electroactivity in the obligate aerobic bacterium <i>Pseudomonas putida</i> KT2440. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 284	5.7	69
211	Designer rhamnolipids by reduction of congener diversity: production and characterization. <i>Microbial Cell Factories</i> , <b>2017</b> , 16, 225	6.4	67
210	Detection of volatile metabolites of <i>Escherichia coli</i> by multi capillary column coupled ion mobility spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 394, 791-800	4.4	67
209	Engineering and systems-level analysis of <i>Saccharomyces cerevisiae</i> for production of 3-hydroxypropionic acid via malonyl-CoA reductase-dependent pathway. <i>Microbial Cell Factories</i> , <b>2016</b> , 15, 53	6.4	64
208	Novel insights into biosynthesis and uptake of rhamnolipids and their precursors. <i>Applied Microbiology and Biotechnology</i> , <b>2017</b> , 101, 2865-2878	5.7	61
207	Machine Learning Applications for Mass Spectrometry-Based Metabolomics. <i>Metabolites</i> , <b>2020</b> , 10,	5.6	61

206	Influence of carbon and nitrogen concentration on itaconic acid production by the smut fungus <i>Ustilago maydis</i> . <i>Engineering in Life Sciences</i> , <b>2014</b> , 14, 129-134	3.4	61
205	Engineering <i>Pseudomonas putida</i> KT2440 for efficient ethylene glycol utilization. <i>Metabolic Engineering</i> , <b>2018</b> , 48, 197-207	9.7	60
204	Prospecting the biodiversity of the fungal family Ustilaginaceae for the production of value-added chemicals. <i>Fungal Biology and Biotechnology</i> , <b>2014</b> , 1, 2	7.5	55
203	Grand challenge commentary: Chassis cells for industrial biochemical production. <i>Nature Chemical Biology</i> , <b>2010</b> , 6, 875-7	11.7	52
202	The Envirostat - a new bioreactor concept. <i>Lab on A Chip</i> , <b>2009</b> , 9, 576-85	7.2	52
201	Quantification of metabolic limitations during recombinant protein production in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , <b>2011</b> , 155, 178-84	3.7	51
200	Creating metabolic demand as an engineering strategy in - Rhamnolipid synthesis as an example. <i>Metabolic Engineering Communications</i> , <b>2016</b> , 3, 234-244	6.5	51
199	Metabolic engineering of <i>Pseudomonas taiwanensis</i> VLB120 with minimal genomic modifications for high-yield phenol production. <i>Metabolic Engineering</i> , <b>2018</b> , 47, 121-133	9.7	50
198	Evolution of the hyaluronic acid synthesis (has) operon in <i>Streptococcus zooepidemicus</i> and other pathogenic streptococci. <i>Journal of Molecular Evolution</i> , <b>2008</b> , 67, 13-22	3.1	50
197	Mechanism-specific and whole-organism ecotoxicity of mono-rhamnolipids. <i>Science of the Total Environment</i> , <b>2016</b> , 548-549, 155-163	10.2	47
196	Enhanced malic acid production from glycerol with high-cell density <i>Ustilago trichophora</i> TZ1 cultivations. <i>Biotechnology for Biofuels</i> , <b>2016</b> , 9, 135	7.8	47
195	Efficient malic acid production from glycerol with <i>Ustilago trichophora</i> TZ1. <i>Biotechnology for Biofuels</i> , <b>2016</b> , 9, 67	7.8	46
194	Comparison of Three Xylose Pathways in KT2440 for the Synthesis of Valuable Products. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 480	5.8	45
193	Laboratory evolution reveals the metabolic and regulatory basis of ethylene glycol metabolism by <i>Pseudomonas putida</i> KT2440. <i>Environmental Microbiology</i> , <b>2019</b> , 21, 3669-3682	5.2	43
192	Heterologous production of long-chain rhamnolipids from <i>Burkholderia glumae</i> in <i>Pseudomonas putida</i> -a step forward to tailor-made rhamnolipids. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 1229-1239	5.7	43
191	Towards bio-upcycling of polyethylene terephthalate. <i>Metabolic Engineering</i> , <b>2021</b> , 66, 167-178	9.7	42
190	Genetic and biochemical insights into the itaconate pathway of <i>Ustilago maydis</i> enable enhanced production. <i>Metabolic Engineering</i> , <b>2016</b> , 38, 427-435	9.7	41
189	Ethanol reduces mitochondrial membrane integrity and thereby impacts carbon metabolism of <i>Saccharomyces cerevisiae</i> . <i>FEMS Yeast Research</i> , <b>2012</b> , 12, 675-84	3.1	41

188	Metabolic engineering of TZ1 for improved malic acid production. <i>Metabolic Engineering Communications</i> , <b>2017</b> , 4, 12-21	6.5	40
187	Complete genome sequence of <i>Pseudomonas</i> sp. strain VLB120 a solvent tolerant, styrene degrading bacterium, isolated from forest soil. <i>Journal of Biotechnology</i> , <b>2013</b> , 168, 729-30	3.7	40
186	Systems biotechnology - Rational whole-cell biocatalyst and bioprocess design. <i>Engineering in Life Sciences</i> , <b>2010</b> , 10, 384-397	3.4	40
185	Stable production of hyaluronic acid in <i>Streptococcus zooepidemicus</i> chemostats operated at high dilution rate. <i>Biotechnology and Bioengineering</i> , <b>2005</b> , 90, 685-93	4.9	40
184	Efficient itaconic acid production from glycerol with TZ1. <i>Biotechnology for Biofuels</i> , <b>2017</b> , 10, 131	7.8	39
183	Glycerophospholipid profiling by high-performance liquid chromatography/mass spectrometry using exact mass measurements and multi-stage mass spectrometric fragmentation experiments in parallel. <i>Rapid Communications in Mass Spectrometry</i> , <b>2009</b> , 23, 1636-46	2.2	39
182	Microfluidic Platform for Multimodal Analysis of Enzyme Secretion in Nanoliter Droplet Arrays. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 2066-2073	7.8	39
181	D-Xylose assimilation via the Weimberg pathway by solvent-tolerant <i>Pseudomonas taiwanensis</i> VLB120. <i>Environmental Microbiology</i> , <b>2015</b> , 17, 156-70	5.2	38
180	From beech wood to itaconic acid: case study on biorefinery process integration. <i>Biotechnology for Biofuels</i> , <b>2018</b> , 11, 279	7.8	38
179	High temperature stimulates acetic acid accumulation and enhances the growth inhibition and ethanol production by <i>Saccharomyces cerevisiae</i> under fermenting conditions. <i>Applied Microbiology and Biotechnology</i> , <b>2014</b> , 98, 6085-94	5.7	37
178	Defined Microbial Mixed Culture for Utilization of Polyurethane Monomers. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 17466-17474	8.3	37
177	Characterization of rhamnolipids by liquid chromatography/mass spectrometry after solid-phase extraction. <i>Analytical and Bioanalytical Chemistry</i> , <b>2016</b> , 408, 2505-14	4.4	36
176	Hemin reconstitutes proton extrusion in an H(+)-ATPase-negative mutant of <i>Lactococcus lactis</i> . <i>Journal of Bacteriology</i> , <b>2001</b> , 183, 6707-9	3.5	36
175	Metabolic Engineering of <i>Pseudomonas putida</i> KT2440 to Produce Anthranilate from Glucose. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 1310	5.7	35
174	Strain- and Substrate-Dependent Redox Mediator and Electricity Production by <i>Pseudomonas aeruginosa</i> . <i>Applied and Environmental Microbiology</i> , <b>2016</b> , 82, 5026-38	4.8	34
173	The glycerophospholipid inventory of <i>Pseudomonas putida</i> is conserved between strains and enables growth condition-related alterations. <i>Microbial Biotechnology</i> , <b>2012</b> , 5, 45-58	6.3	34
172	Picoliter nDEP traps enable time-resolved contactless single bacterial cell analysis in controlled microenvironments. <i>Lab on A Chip</i> , <b>2013</b> , 13, 397-408	7.2	34
171	Activating Intrinsic Carbohydrate-Active Enzymes of the Smut Fungus <i>Ustilago maydis</i> for the Degradation of Plant Cell Wall Components. <i>Applied and Environmental Microbiology</i> , <b>2016</b> , 82, 5174-85	4.8	32

170	Electrochemical conversion of a bio-derivable hydroxy acid to a drop-in oxygenate diesel fuel. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 2406-2411	35.4	31
169	Integrated strain- and process design enable production of 220 g/L itaconic acid with. <i>Biotechnology for Biofuels</i> , <b>2019</b> , 12, 263	7.8	31
168	Increased biomass yield of <i>Lactococcus lactis</i> during energetically limited growth and respiratory conditions. <i>Biotechnology and Applied Biochemistry</i> , <b>2008</b> , 50, 25-33	2.8	31
167	A Physiologically Based Pharmacokinetic Model of Isoniazid and Its Application in Individualizing Tuberculosis Chemotherapy. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2016</b> , 60, 6134-45	5.9	31
166	Engineering the morphology and metabolism of pH tolerant <i>Ustilago cynodontis</i> for efficient itaconic acid production. <i>Metabolic Engineering</i> , <b>2019</b> , 54, 293-300	9.7	29
165	Engineering yield and rate of reductive biotransformation in <i>Escherichia coli</i> by partial cyclization of the pentose phosphate pathway and PTS-independent glucose transport. <i>Applied Microbiology and Biotechnology</i> , <b>2012</b> , 93, 1459-67	5.7	29
164	Proline availability regulates proline-4-hydroxylase synthesis and substrate uptake in proline-hydroxylating recombinant <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 3091-100	4.8	29
163	Dynamics of benzoate metabolism in KT2440. <i>Metabolic Engineering Communications</i> , <b>2016</b> , 3, 97-110	6.5	29
162	Metabolic flux distributions: genetic information, computational predictions, and experimental validation. <i>Applied Microbiology and Biotechnology</i> , <b>2010</b> , 86, 1243-55	5.7	27
161	Simple enzymatic procedure for L-carnosine synthesis: whole-cell biocatalysis and efficient biocatalyst recycling. <i>Microbial Biotechnology</i> , <b>2010</b> , 3, 74-83	6.3	27
160	Identification of an endo-1,4-beta-xylanase of <i>Ustilago maydis</i> . <i>BMC Biotechnology</i> , <b>2013</b> , 13, 59	3.5	26
159	Memote: A community driven effort towards a standardized genome-scale metabolic model test suite		26
158	High performance liquid chromatography-charged aerosol detection applying an inverse gradient for quantification of rhamnolipid biosurfactants. <i>Journal of Chromatography A</i> , <b>2016</b> , 1455, 125-132	4.5	26
157	The cell and P: from cellular function to biotechnological application. <i>Current Opinion in Biotechnology</i> , <b>2012</b> , 23, 846-51	11.4	25
156	A rapid, reliable, and automatable lab-on-a-chip interface. <i>Lab on A Chip</i> , <b>2009</b> , 9, 1455-60	7.2	25
155	Increased TCA cycle activity and reduced oxygen consumption during cytochrome P450-dependent biotransformation in fission yeast. <i>Yeast</i> , <b>2006</b> , 23, 779-94	3.4	25
154	Fermentation and purification strategies for the production of betulonic acid and its lupane-type precursors in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology and Bioengineering</i> , <b>2017</b> , 114, 2528-2538	4.9	24
153	Restoration of biofuel production levels and increased tolerance under ionic liquid stress is enabled by a mutation in the essential <i>Escherichia coli</i> gene <i>cydC</i> . <i>Microbial Cell Factories</i> , <b>2018</b> , 17, 159	6.4	24

152	A breath of information: the volatilome. <i>Current Genetics</i> , <b>2018</b> , 64, 959-964	2.9	23
151	Multi-Omics Analysis of Fatty Alcohol Production in Engineered Yeasts and. <i>Frontiers in Genetics</i> , <b>2019</b> , 10, 747	4.5	23
150	Single cell analysis reveals unexpected growth phenotype of <i>S. cerevisiae</i> . <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , <b>2009</b> , 75, 130-9	4.6	23
149	Integration of Genetic and Process Engineering for Optimized Rhamnolipid Production Using. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 976	5.8	23
148	Biodegradation and up-cycling of polyurethanes: Progress, challenges, and prospects. <i>Biotechnology Advances</i> , <b>2021</b> , 48, 107730	17.8	23
147	Exploiting the Natural Diversity of RhIA Acyltransferases for the Synthesis of the Rhamnolipid Precursor 3-(3-Hydroxyalkanoyloxy)Alkanoic Acid. <i>Applied and Environmental Microbiology</i> , <b>2020</b> , 86,	4.8	22
146	Flux-p: automating metabolic flux analysis. <i>Metabolites</i> , <b>2012</b> , 2, 872-90	5.6	22
145	Metabolic flux analysis of a phenol producing mutant of <i>Pseudomonas putida</i> S12: verification and complementation of hypotheses derived from transcriptomics. <i>Journal of Biotechnology</i> , <b>2009</b> , 143, 124-37	3.7	22
144	The interplay between transport and metabolism in fungal itaconic acid production. <i>Fungal Genetics and Biology</i> , <b>2019</b> , 125, 45-52	3.9	21
143	Complete genome sequence of solvent-tolerant <i>Pseudomonas putida</i> S12 including megaplasmid pTTS12. <i>Journal of Biotechnology</i> , <b>2015</b> , 200, 17-8	3.7	21
142	Analysis of carbon and nitrogen co-metabolism in yeast by ultrahigh-resolution mass spectrometry applying <sup>13</sup> C- and <sup>15</sup> N-labeled substrates simultaneously. <i>Analytical and Bioanalytical Chemistry</i> , <b>2012</b> , 403, 2291-305	4.4	21
141	Subtoxic product levels limit the epoxidation capacity of recombinant <i>E. coli</i> by increasing microbial energy demands. <i>Journal of Biotechnology</i> , <b>2013</b> , 163, 194-203	3.7	21
140	Activation of the Glutamic Acid-Dependent Acid Resistance System in <i>Escherichia coli</i> BL21(DE3) Leads to Increase of the Fatty Acid Biotransformation Activity. <i>PLoS ONE</i> , <b>2016</b> , 11, e0163265	3.7	21
139	CO to succinic acid - Estimating the potential of biocatalytic routes. <i>Metabolic Engineering Communications</i> , <b>2018</b> , 7, e00075	6.5	21
138	Comprehensive Real-Time Analysis of the Yeast Volatilome. <i>Scientific Reports</i> , <b>2017</b> , 7, 14236	4.9	20
137	Unraveling 1,4-Butanediol Metabolism in KT2440. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 382	5.7	20
136	A Comparison of the Microbial Production and Combustion Characteristics of Three Alcohol Biofuels: Ethanol, 1-Butanol, and 1-Octanol. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2015</b> , 3, 112	5.8	20
135	Towards real time analysis of protein secretion from single cells. <i>Lab on A Chip</i> , <b>2009</b> , 9, 3047-9	7.2	20

134	Discovery and Evaluation of Biosynthetic Pathways for the Production of Five Methyl Ethyl Ketone Precursors. <i>ACS Synthetic Biology</i> , <b>2018</b> , 7, 1858-1873	5.7	19
133	Integrated process development of a reactive extraction concept for itaconic acid and application to a real fermentation broth. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 809-816	3.4	17
132	An <i>Ustilago maydis</i> chassis for itaconic acid production without by-products. <i>Microbial Biotechnology</i> , <b>2020</b> , 13, 350-362	6.3	17
131	Integration of genome-scale metabolic networks into whole-body PBPK models shows phenotype-specific cases of drug-induced metabolic perturbation. <i>Npj Systems Biology and Applications</i> , <b>2018</b> , 4, 10	5	17
130	Tailor-made poly- $\gamma$ -glutamic acid production. <i>Metabolic Engineering</i> , <b>2019</b> , 55, 239-248	9.7	17
129	Anionic Extraction for Efficient Recovery of Biobased 2,3-Butanediol-A Platform for Bulk and Fine Chemicals. <i>ChemSusChem</i> , <b>2017</b> , 10, 3252-3259	8.3	17
128	A model-based assay design to reproduce in vivo patterns of acute drug-induced toxicity. <i>Archives of Toxicology</i> , <b>2018</b> , 92, 553-555	5.8	17
127	<i>Saccharomyces cerevisiae</i> containing 28% polyphosphate and production of a polyphosphate-rich yeast extract thereof. <i>FEMS Yeast Research</i> , <b>2019</b> , 19,	3.1	16
126	Promoters from the itaconate cluster of are induced by nitrogen depletion. <i>Fungal Biology and Biotechnology</i> , <b>2017</b> , 4, 11	7.5	16
125	Fatty Acid and Alcohol Metabolism in <i>Pseudomonas putida</i> : Functional Analysis Using Random Barcode Transposon Sequencing. <i>Applied and Environmental Microbiology</i> , <b>2020</b> , 86,	4.8	16
124	Rhamnolipid biosurfactant analysis using online turbulent flow chromatography-liquid chromatography-tandem mass spectrometry. <i>Journal of Chromatography A</i> , <b>2016</b> , 1465, 90-7	4.5	15
123	Integration of biocatalyst and process engineering for sustainable and efficientn-butanol production. <i>Engineering in Life Sciences</i> , <b>2015</b> , 15, 4-19	3.4	15
122	Consolidated bioprocessing of cellulose to itaconic acid by a co-culture of <i>Trichoderma reesei</i> and <i>Ustilago maydis</i> . <i>Biotechnology for Biofuels</i> , <b>2020</b> , 13, 207	7.8	15
121	Model-based contextualization of in vitro toxicity data quantitatively predicts in vivo drug response in patients. <i>Archives of Toxicology</i> , <b>2017</b> , 91, 865-883	5.8	14
120	High-Yield Production of 4-Hydroxybenzoate From Glucose or Glycerol by an Engineered VLB120. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 130	5.8	14
119	A blueprint of the amino acid biosynthesis network of hemiascomycetes. <i>FEMS Yeast Research</i> , <b>2014</b> , 14, 1090-100	3.1	14
118	Killing Two Birds With One Stone - Strain Engineering Facilitates the Development of a Unique Rhamnolipid Production Process. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 899	5.8	14
117	Aromatisation of bio-derivable isobutyraldehyde over HZSM-5 zeolite catalysts. <i>Green Chemistry</i> , <b>2019</b> , 21, 1710-1717	10	13



116	Elucidation of the regulatory role of the fructose operon reveals a novel target for enhancing the NADPH supply in <i>Corynebacterium glutamicum</i> . <i>Metabolic Engineering</i> , <b>2016</b> , 38, 344-357	9.7	13
115	Boosting Heterologous Phenazine Production in KT2440 Through the Exploration of the Natural Sequence Space. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 1990	5.7	13
114	Improved sake metabolic profile during fermentation due to increased mitochondrial pyruvate dissimilation. <i>FEMS Yeast Research</i> , <b>2014</b> , 14, 249-60	3.1	13
113	Single cell analytics: an overview. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2011</b> , 124, 99-122	1.7	13
112	Streamlined VLB120 Chassis Strains with Improved Bioprocess Features. <i>ACS Synthetic Biology</i> , <b>2019</b> , 8, 2036-2050	5.7	12
111	Comparison of Isomerase and Weimberg Pathway for $\alpha$ -PGA Production From Xylose by Engineered. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 476	5.8	12
110	Evolutionary freedom in the regulation of the conserved itaconate cluster by Ria1 in related Ustilaginaceae. <i>Fungal Biology and Biotechnology</i> , <b>2018</b> , 5, 14	7.5	12
109	Rational Engineering of Phenylalanine Accumulation in to Enable High-Yield Production of -Cinnamate. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 312	5.8	12
108	Regulation of solvent tolerance in <i>Pseudomonas putida</i> S12 mediated by mobile elements. <i>Microbial Biotechnology</i> , <b>2017</b> , 10, 1558-1568	6.3	11
107	Critical Factors for Microbial Contamination of Domestic Heating Oil. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 6394-6403	4.4	11
106	Using quantitative systems pharmacology to evaluate the drug efficacy of COX-2 and 5-LOX inhibitors in therapeutic situations. <i>Npj Systems Biology and Applications</i> , <b>2018</b> , 4, 28	5	11
105	Metabolic response of to increased NADH regeneration rates. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 47-53	3.4	11
104	Whole-Cell Biocatalytic Production of 2,5-Furandicarboxylic Acid. <i>Microbiology Monographs</i> , <b>2015</b> , 207-223	3.8	11
103	Ultrasonically manufactured microfluidic device for yeast analysis. <i>Microsystem Technologies</i> , <b>2017</b> , 23, 2139-2144	1.7	10
102	Investigating metabolic interactions in a microbial co-culture through integrated modelling and experiments. <i>Computational and Structural Biotechnology Journal</i> , <b>2020</b> , 18, 1249-1258	6.8	10
101	Enzymatic quantification and length determination of polyphosphate down to a chain length of two. <i>Analytical Biochemistry</i> , <b>2018</b> , 548, 82-90	3.1	10
100	Improved microscale cultivation of for clonal screening. <i>Fungal Biology and Biotechnology</i> , <b>2018</b> , 5, 8	7.5	10
99	From measurement to implementation of metabolic fluxes. <i>Current Opinion in Biotechnology</i> , <b>2013</b> , 24, 13-21	11.4	10

98	Multi-capillary column-ion mobility spectrometry of volatile metabolites emitted by <i>Saccharomyces cerevisiae</i> . <i>Metabolites</i> , <b>2014</b> , 4, 751-74	5.6	10
97	A minimal growth medium for the basidiomycete for metabolic flux analysis. <i>Fungal Biology and Biotechnology</i> , <b>2014</b> , 1, 9	7.5	10
96	Online in vivo monitoring of cytosolic NAD redox dynamics in <i>Ustilago maydis</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2018</b> , 1859, 1015-1024	4.6	10
95	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. <i>Environmental Sciences Europe</i> , <b>2021</b> , 33, 99	5	10
94	Poly- $\gamma$ -glutamic acid production by <i>Bacillus subtilis</i> 168 using glucose as the sole carbon source: A metabolomic analysis. <i>Journal of Bioscience and Bioengineering</i> , <b>2020</b> , 130, 272-282	3.3	9
93	Draft Genome Sequence of <i>Ustilago trichophora</i> RK089, a Promising Malic Acid Producer. <i>Genome Announcements</i> , <b>2016</b> , 4,		9
92	Draft Genome Sequences of Itaconate-Producing Ustilaginaceae. <i>Genome Announcements</i> , <b>2016</b> , 4,		9
91	Genetic Optimization Algorithm for Metabolic Engineering Revisited. <i>Metabolites</i> , <b>2018</b> , 8,	5.6	9
90	Targeting 16S rDNA for Stable Recombinant Gene Expression in. <i>ACS Synthetic Biology</i> , <b>2019</b> , 8, 1901-1912	3.7	9
89	An Optimized for Itaconic Acid Production at Maximal Theoretical Yield. <i>Journal of Fungi (Basel, Switzerland)</i> , <b>2020</b> , 7,	5.6	9
88	Bio-upcycling of polyethylene terephthalate		9
87	Interaction of rhamnolipids with model biomembranes of varying complexity. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2020</b> , 1862, 183431	3.8	9
86	Process engineering of pH tolerant <i>Ustilago cynodontis</i> for efficient itaconic acid production. <i>Microbial Cell Factories</i> , <b>2019</b> , 18, 213	6.4	9
85	Analytical polyphosphate extraction from <i>Saccharomyces cerevisiae</i> . <i>Analytical Biochemistry</i> , <b>2018</b> , 563, 71-78	3.1	9
84	Characterization of Context-Dependent Effects on Synthetic Promoters. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 551	5.8	8
83	mRNA 2.0: Boosting Gene Expression Through Enhanced mRNA Stability and Translational Efficiency. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2019</b> , 7, 458	5.8	8
82	A comprehensive evaluation of constraining amino acid biosynthesis in compartmented models for metabolic flux analysis. <i>Metabolic Engineering Communications</i> , <b>2017</b> , 5, 34-44	6.5	8
81	Pressure-resistant and reversible on-tube-sealing for microfluidics. <i>Microfluidics and Nanofluidics</i> , <b>2011</b> , 10, 679-684	2.8	8

80	Bilayer microfluidic chip for diffusion-controlled activation of yeast species. <i>Journal of Chromatography A</i> , <b>2008</b> , 1206, 77-82	4.5	8
79	A Comparative Analysis of Drug-Induced Hepatotoxicity in Clinically Relevant Situations. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005280	5	8
78	Exploration and Exploitation of the Yeast Volatilome. <i>Current Metabolomics</i> , <b>2017</b> , 5,	1	8
77	Adaptive laboratory evolution of and to enhance anthranilate tolerance. <i>Microbiology (United Kingdom)</i> , <b>2020</b> , 166, 1025-1037	2.9	8
76	Genetic Cell-Surface Modification for Optimized Foam Fractionation. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 572892	5.8	8
75	The Inflection Point Hypothesis: The Relationship between the Temperature Dependence of Enzyme-Catalyzed Reaction Rates and Microbial Growth Rates. <i>Biochemistry</i> , <b>2020</b> , 59, 3562-3569	3.2	8
74	Engineering adipic acid metabolism in <i>Pseudomonas putida</i> . <i>Metabolic Engineering</i> , <b>2021</b> , 67, 29-40	9.7	8
73	Elevated temperatures do not trigger a conserved metabolic network response among thermotolerant yeasts. <i>BMC Microbiology</i> , <b>2019</b> , 19, 100	4.5	7
72	Selection of a recyclable in situ liquid-liquid extraction solvent for foam-free synthesis of rhamnolipids in a two-phase fermentation. <i>Green Chemistry</i> , <b>2020</b> , 22, 8495-8510	10	7
71	Exploiting the diversity of streptococcal hyaluronan synthases for the production of molecular weight-tailored hyaluronan. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 7567-7581	5.7	7
70	Miniaturized octupole cytometry for cell type independent trapping and analysis. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	7
69	Remobilization of pollutants during extreme flood events poses severe risks to human and environmental health. <i>Journal of Hazardous Materials</i> , <b>2022</b> , 421, 126691	12.8	7
68	Microfluidic Irreversible Electroporation-A Versatile Tool to Extract Intracellular Contents of Bacteria and Yeast. <i>Metabolites</i> , <b>2019</b> , 9,	5.6	6
67	Glucose Catabolism Leading to Production of the Immunometabolite Acetate Has a Key Contribution to the Host Airway-Pathogen Interplay. <i>ACS Infectious Diseases</i> , <b>2020</b> , 6, 406-421	5.5	6
66	Physiologic and metabolic characterization of <i>Saccharomyces cerevisiae</i> reveals limitations in the synthesis of the triterpene squalene. <i>FEMS Yeast Research</i> , <b>2018</b> , 18,	3.1	6
65	Evaluation of pyruvate decarboxylase-negative strains for the production of succinic acid. <i>Engineering in Life Sciences</i> , <b>2019</b> , 19, 711-720	3.4	6
64	A Straightforward Assay for Screening and Quantification of Biosurfactants in Microbial Culture Supernatants. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 958	5.8	6
63	A Combined Bio-Chemical Synthesis Route for 1-Octene Sheds Light on Rhamnolipid Structure. <i>Catalysts</i> , <b>2020</b> , 10, 874	4	6

62	Benzoate Synthesis From Glucose or Glycerol Using Engineered <i>Pseudomonas taiwanensis</i> . <i>Biotechnology Journal</i> , <b>2020</b> , 15, e2000211	5.6	6
61	Uncoupling Foam Fractionation and Foam Adsorption for Enhanced Biosurfactant Synthesis and Recovery. <i>Microorganisms</i> , <b>2020</b> , 8,	4.9	6
60	Lignin Aromatics to PHA Polymers: Nitrogen and Oxygen Are the Key Factors for <i>Pseudomonas</i> . <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 10579-10590	8.3	6
59	Mitochondrial carriers of <i>Ustilago maydis</i> and <i>Aspergillus terreus</i> involved in itaconate production: same physiological role but different biochemical features. <i>FEBS Letters</i> , <b>2020</b> , 594, 728-739	3.8	6
58	The metabolic potential of plastics as biotechnological carbon sources - Review and targets for the future.. <i>Metabolic Engineering</i> , <b>2021</b> ,	9.7	6
57	Multiscale modeling reveals inhibitory and stimulatory effects of caffeine on acetaminophen-induced toxicity in humans. <i>CPT: Pharmacometrics and Systems Pharmacology</i> , <b>2017</b> , 6, 136-146	4.5	5
56	Rational Selection of Carbon Fiber Properties for High-Performance Textile Electrodes in Bioelectrochemical Systems. <i>Frontiers in Energy Research</i> , <b>2019</b> , 7,	3.8	5
55	Electrophysiology of the Facultative Autotrophic Bacterium. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 457	5.8	5
54	Biotechnological synthesis of water-soluble food-grade polyphosphate with <i>Saccharomyces cerevisiae</i> . <i>Biotechnology and Bioengineering</i> , <b>2020</b> , 117, 2089-2099	4.9	5
53	Double bond localization in unsaturated rhamnolipid precursors 3-(3-hydroxyalkanoyloxy)alkanoic acids by liquid chromatography-mass spectrometry applying online PaternEBChi reaction. <i>Analytical and Bioanalytical Chemistry</i> , <b>2020</b> , 412, 5601-5613	4.4	5
52	Methods for Recombinant Rhamnolipid Production. <i>Springer Protocols</i> , <b>2015</b> , 65-94	0.3	5
51	GC-MS-Based Metabolomics for the Smut Fungus : A Comprehensive Method Optimization to Quantify Intracellular Metabolites. <i>Frontiers in Molecular Biosciences</i> , <b>2020</b> , 7, 211	5.6	5
50	Itaconic Acid [An Emerging Building Block <b>2016</b> , 453-472		5
49	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. <i>Frontiers in Physiology</i> , <b>2019</b> , 10, 1192	4.6	4
48	Polyphosphate Chain Length Determination in the Range of Two to Several Hundred P-Subunits with a New Enzyme Assay and P NMR. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 7654-7661	7.8	4
47	Identification of Key Metabolites in Poly- $\gamma$ -Glutamic Acid Production by Tuning $\gamma$ -PGA Synthetase Expression. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 38	5.8	4
46	Defined inoculum for the investigation of microbial contaminations of liquid fuels. <i>International Biodeterioration and Biodegradation</i> , <b>2018</b> , 132, 84-93	4.8	4
45	Let's talk about flux or the importance of (intracellular) reaction rates. <i>Microbial Biotechnology</i> , <b>2017</b> , 10, 28-30	6.3	4

44	GC-MS-Based Determination of Mass Isotopomer Distributions for <sup>13</sup> C-Based Metabolic Flux Analysis. <i>Springer Protocols</i> , <b>2015</b> , 223-243	0.3	4
43	Upcycling of hydrolyzed PET by microbial conversion to a fatty acid derivative. <i>Methods in Enzymology</i> , <b>2021</b> , 648, 391-421	1.7	4
42	Seawater activated TiO <sub>2</sub> photocatalyst for degradation of organic compounds. <i>Sustainable Chemistry and Pharmacy</i> , <b>2020</b> , 16, 100251	3.9	3
41	Mass spectrometric characterization of siderophores produced by <i>Pseudomonas taiwanensis</i> VLB120 assisted by stable isotope labeling of nitrogen source. <i>BioMetals</i> , <b>2018</b> , 31, 785-795	3.4	3
40	Comparative Analysis of the Behaviour of Marine Litter in Thermochemical Waste Treatment Processes. <i>Processes</i> , <b>2021</b> , 9, 13	2.9	3
39	Successful downsizing for high-throughput <sup>13</sup> C-MFA applications. <i>Methods in Molecular Biology</i> , <b>2014</b> , 1191, 127-42	1.4	3
38	High titer methyl ketone production with tailored <i>Pseudomonas taiwanensis</i> VLB120. <i>Metabolic Engineering</i> , <b>2020</b> , 62, 84-94	9.7	3
37	Comprehensive liamocin biosurfactants analysis by reversed phase liquid chromatography coupled to mass spectrometric and charged-aerosol detection. <i>Journal of Chromatography A</i> , <b>2020</b> , 1627, 461404 <sup>4.5</sup>		3
36	Coupling an Electroactive KT2440 with Bioelectrochemical Rhamnolipid Production. <i>Microorganisms</i> , <b>2020</b> , 8,	4.9	3
35	Brewers' spent grain as carbon source for itaconate production with engineered <i>Ustilago maydis</i> . <i>Bioresource Technology</i> , <b>2021</b> , 336, 125262	11	3
34	The Transcriptome and Flux Profiling of Crabtree-Negative Hydroxy Acid-Producing Strains of <i>Saccharomyces cerevisiae</i> Reveals Changes in the Central Carbon Metabolism. <i>Biotechnology Journal</i> , <b>2019</b> , 14, e1900013	5.6	2
33	Systems Analysis of NADH Dehydrogenase Mutants Reveals Flexibility and Limits of <i>Pseudomonas taiwanensis</i> VLB120's Metabolism. <i>Applied and Environmental Microbiology</i> , <b>2020</b> , 86,	4.8	2
32	The trade-off of availability and growth inhibition through copper for the production of copper-dependent enzymes by <i>Pichia pastoris</i> . <i>BMC Biotechnology</i> , <b>2016</b> , 16, 20	3.5	2
31	Rhamnolipids: Production, Performance, and Application <b>2017</b> , 587-622		2
30	Insights into cell wall disintegration of <i>Chlorella vulgaris</i> .. <i>PLoS ONE</i> , <b>2022</b> , 17, e0262500	3.7	2
29	Systematic Screening of Fermentation Products as Future Platform Chemicals for Biofuels. <i>Computer Aided Chemical Engineering</i> , <b>2015</b> , 37, 1331-1336	0.6	2
28	Data-driven personalization of a physiologically based pharmacokinetic model for caffeine: A systematic assessment. <i>CPT: Pharmacometrics and Systems Pharmacology</i> , <b>2021</b> , 10, 782-793	4.5	2
27	Multi-capillary Column Ion Mobility Spectrometry of Volatile Metabolites for Phenotyping of Microorganisms. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1671, 229-258	1.4	2

26	Impact of the number of rhamnose moieties of rhamnolipids on the structure, lateral organization and morphology of model biomembranes. <i>Soft Matter</i> , <b>2021</b> , 17, 3191-3206	3.6	2
25	Ustilaginaceae Biocatalyst for Co-Metabolism of CO-Derived Substrates toward Carbon-Neutral Itaconate Production. <i>Journal of Fungi (Basel, Switzerland)</i> , <b>2021</b> , 7,	5.6	2
24	Early prediction of decompensation (EPOD) Score - non-invasive determination of liver cirrhosis decompensation risk.. <i>Liver International</i> , <b>2022</b> ,	7.9	1
23	An integrated yeast-based process for cis,cis-muconic acid production. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 119, 376	4.9	1
22	Bio-energy conversion with carbon capture and utilization (BECCU): integrated biomass fermentation and chemo-catalytic CO <sub>2</sub> hydrogenation for bioethanol and formic acid co-production. <i>Green Chemistry</i> , <b>2021</b> , 23, 9860-9864	10	1
21	Designed to Be Green, Economic, and Efficient: A Ketone-Ester-Alcohol-Alkane Blend for Future Spark-Ignition Engines. <i>ChemSusChem</i> , <b>2021</b> , 14, 5254-5264	8.3	1
20	Protein allocation and enzymatic constraints explain Escherichia coli wildtype and mutant phenotypes		1
19	Determination of growth-coupling strategies and their underlying principles		1
18	The metabolic response of Pseudomonas taiwanensis to NADH dehydrogenase deficiency		1
17	Proteome Regulation Patterns Determine Escherichia coli Wild-Type and Mutant Phenotypes. <i>MSystems</i> , <b>2021</b> , 6,	7.6	1
16	A scalable bubble-free membrane aerator for biosurfactant production. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 3545-3558	4.9	1
15	Microbial challenges for domestic heating oil storage tanks. <i>Engineering in Life Sciences</i> , <b>2016</b> , 16, 474-484	3.4	1
14	A rapid method to estimate NADH regeneration rates in living cells. <i>Journal of Microbiological Methods</i> , <b>2016</b> , 130, 92-94	2.8	1
13	Genome-scale model reconstruction of the methylotrophic yeast Ogataea polymorpha. <i>BMC Biotechnology</i> , <b>2021</b> , 21, 23	3.5	1
12	Pseudomonas putida KT2440 endures temporary oxygen limitations. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 4735-4750	4.9	1
11	Seventeen Ustilaginaceae High-Quality Genome Sequences Allow Phylogenomic Analysis and Provide Insights into Secondary Metabolite Synthesis.. <i>Journal of Fungi (Basel, Switzerland)</i> , <b>2022</b> , 8,	5.6	1
10	Yeast-based production and in situ purification of acetaldehyde.. <i>Bioprocess and Biosystems Engineering</i> , <b>2022</b> , 45, 761	3.7	0
9	A plea for the integration of Green Toxicology in sustainable bioeconomy strategies - Biosurfactants and microgel-based pesticide release systems as examples. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 127800	12.8	0

8	Rhamnolipids: Production, Performance, and Application <b>2017</b> , 1-37		o
7	A Model-Based Workflow to Benchmark the Clinical Cholestasis Risk of Drugs. <i>Clinical Pharmacology and Therapeutics</i> , <b>2021</b> , 110, 1293-1301	6.1	o
6	Nitrogen Metabolism in <i>Pseudomonas putida</i> : Functional Analysis Using Random Barcode Transposon Sequencing.. <i>Applied and Environmental Microbiology</i> , <b>2022</b> , e0243021	4.8	o
5	<i>Ustilago maydis</i> Metabolic Characterization and Growth Quantification with a Genome-Scale Metabolic Model. <i>Journal of Fungi (Basel, Switzerland)</i> , <b>2022</b> , 8, 524	5.6	o
4	Von Plastikmüll zu Plastikwertstoffen   Polymerrecycling neu gedacht. <i>BioSpektrum</i> , <b>2020</b> , 26, 212-214	0.1	
3	Malatproduktion aus Rohglycerin mit <i>Ustilago</i> . <i>BioSpektrum</i> , <b>2018</b> , 24, 218-220	0.1	
2	Modellierung metabolischer Netzwerke im menschlichen Körper. <i>BioSpektrum</i> , <b>2014</b> , 20, 39-41	0.1	
1	Entwicklung von <i>Ustilago</i> als Chassis für die CO <sub>2</sub> -neutrale Itakononatproduktion. <i>BioSpektrum</i> , <b>2022</b> , 28, 97-100	0.1	