Bastian Blombach

List of Publications by Year
in descending order

56 papers	2,939 citations	147566 31 h-index	168136 53 g-index
60 all docs	60 docs citations	60 times ranked	1917 citing authors

#	Article	IF	Citations
1	Corynebacterium glutamicum Tailored for Efficient Isobutanol Production. Applied and Environmental Microbiology, 2011, 77, 3300-3310.	1.4	290
2	Bioâ€based production of organic acids with <i><scp>C</scp>orynebacterium glutamicum</i>. Microbial Biotechnology, 2013, 6, 87-102.	2.0	154
3	l-Valine Production with Pyruvate Dehydrogenase Complex-Deficient Corynebacterium glutamicum. Applied and Environmental Microbiology, 2007, 73, 2079-2084.	1.4	135
4	Corynebacterium glutamicum tailored for high-yield L-valine production. Applied Microbiology and Biotechnology, 2008, 79, 471-479.	1.7	131
5	Using gas mixtures of CO, CO₂ and H₂ as microbial substrates: the do's and don'ts of successful technology transfer from laboratory to production scale. Microbial Biotechnology, 2018, 11, 606-625.	2.0	126
6	High Substrate Uptake Rates Empower Vibrio natriegens as Production Host for Industrial Biotechnology. Applied and Environmental Microbiology, 2017, 83, .	1.4	112
7	Engineering Corynebacterium glutamicum for the production of pyruvate. Applied Microbiology and Biotechnology, 2012, 94, 449-459.	1.7	108
8	Carbohydrate metabolism in Corynebacterium glutamicum and applications for the metabolic engineering of l-lysine production strains. Applied Microbiology and Biotechnology, 2010, 86, 1313-1322.	1.7	102
9	Application of a Genetically Encoded Biosensor for Live Cell Imaging of L-Valine Production in Pyruvate Dehydrogenase Complex-Deficient Corynebacterium glutamicum Strains. PLoS ONE, 2014, 9, e85731.	1.1	100
10	Platform Engineering of Corynebacterium glutamicum with Reduced Pyruvate Dehydrogenase Complex Activity for Improved Production of <scp>l</scp> -Lysine, <scp>l</scp> -Valine, and 2-Ketoisovalerate. Applied and Environmental Microbiology, 2013, 79, 5566-5575.	1.4	98
11	Metabolic Engineering of <i>Corynebacterium glutamicum</i> for 2-Ketoisovalerate Production. Applied and Environmental Microbiology, 2010, 76, 8053-8061.	1.4	97
12	Current knowledge on isobutanol production with<i>Escherichia coli</i>,<i>Bacillus subtilis</i>and<i>Corynebacterium glutamicum</i>. Bioengineered Bugs, 2011, 2, 346-350.	2.0	87
13	Comparative¹³C Metabolic Flux Analysis of Pyruvate Dehydrogenase Complex-Deficient,<scp>l</scp>-Valine-Producing Corynebacterium glutamicum. Applied and Environmental Microbiology, 2011, 77, 6644-6652.	1.4	70
14	Cell-Free Protein Synthesis From Fast-Growing Vibrio natriegens. Frontiers in Microbiology, 2018, 9, 1146.	1.5	69
15	Importance of NADPH supply for improved <scp>L</scp>â€valine formation in <i>Corynebacterium glutamicum</i>. Biotechnology Progress, 2010, 26, 361-371.	1.3	67
16	CO2/HCO3 â^’ perturbations of simulated large scale gradients in a scale-down device cause fast transcriptional responses in Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2014, 98, 8563-8572.	1.7	63
17	Effect of pyruvate dehydrogenase complex deficiency on l-lysine production with Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2007, 76, 615-623.	1.7	60
18	Application of metabolic engineering for the biotechnological production of l-valine. Applied Microbiology and Biotechnology, 2014, 98, 5859-5870.	1.7	59

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19	Acetohydroxyacid Synthase, a Novel Target for Improvement of <scp>l</scp> -Lysine Production by <i>Corynebacterium glutamicum</i>. Applied and Environmental Microbiology, 2009, 75, 419-427.	1.4	57
20	<scp>l</scp> -Valine Production during Growth of Pyruvate Dehydrogenase Complex- Deficient <i>Corynebacterium glutamicum</i> in the Presence of Ethanol or by Inactivation of the Transcriptional Regulator SugR. Applied and Environmental Microbiology, 2009, 75, 1197-1200.	1.4	55
21	Increased Glucose Utilization in <i>Corynebacterium glutamicum</i> by Use of Maltose, and Its Application for the Improvement of <scp>l</scp> -Valine Productivity. Applied and Environmental Microbiology, 2010, 76, 370-374.	1.4	48
22	CO2â€‰â€“â€‰Intrinsic Product, Essential Substrate, and Regulatory Trigger of Microbial and Mammalian Production Processes. Frontiers in Bioengineering and Biotechnology, 2015, 3, 108.	2.0	45
23	The pyruvate dehydrogenase complex of Corynebacterium glutamicum: An attractive target for metabolic engineering. Journal of Biotechnology, 2014, 192, 339-345.	1.9	44
24	Carbon Flux Analysis by ¹³ C Nuclear Magnetic Resonance To Determine the Effect of CO ₂ on Anaerobic Succinate Production by Corynebacterium glutamicum. Applied and Environmental Microbiology, 2014, 80, 3015-3024.	1.4	42
25	Metabolic engineering to guide evolution â€“ Creating a novel mode for L-valine production with Corynebacterium glutamicum. Metabolic Engineering, 2018, 47, 31-41.	3.6	41
26	Impact of different CO2/HCO3âˆ’ levels on metabolism and regulation in Corynebacterium glutamicum. Journal of Biotechnology, 2013, 168, 331-340.	1.9	40
27	Engineering Corynebacterium glutamicum for the production of 2,3-butanediol. Microbial Cell Factories, 2015, 14, 171.	1.9	38
28	Identification of the agr Peptide of Listeria monocytogenes. Frontiers in Microbiology, 2016, 7, 989.	1.5	36
29	Valorization of pyrolysis water: a biorefinery side stream, for 1,2-propanediol production with engineered Corynebacterium glutamicum. Biotechnology for Biofuels, 2017, 10, 277.	6.2	35
30	Improving the carbon balance of fermentations by total carbon analyses. Biochemical Engineering Journal, 2014, 90, 162-169.	1.8	34
31	Modular systems metabolic engineering enables balancing of relevant pathways for l-histidine production with Corynebacterium glutamicum. Biotechnology for Biofuels, 2019, 12, 65.	6.2	34
32	Harnessing novel chromosomal integration loci to utilize an organosolvâ€derived hemicellulose fraction forÂisobutanol production with engineered <i>Corynebacterium glutamicum</i>. Microbial Biotechnology, 2018, 11, 257-263.	2.0	33
33	Vibrio natriegens as Host for Expression of Multisubunit Membrane Protein Complexes. Frontiers in Microbiology, 2018, 9, 2537.	1.5	33
34	Exploiting unconventional prokaryotic hosts for industrial biotechnology. Trends in Biotechnology, 2022, 40, 385-397.	4.9	33
35	Generation of a Prophage-Free Variant of the Fast-Growing Bacterium Vibrio natriegens. Applied and Environmental Microbiology, 2019, 85, .	1.4	31
36	Continuous Adaptive Evolution of a Fast-Growing Corynebacterium glutamicum Strain Independent of Protocatechuate. Frontiers in Microbiology, 2019, 10, 1648.	1.5	29

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37	Exploiting Hydrogenophaga pseudoflava for aerobic syngas-based production of chemicals. Metabolic Engineering, 2019, 55, 220-230.	3.6	28
38	Metabolic engineering of <i>Vibrio natriegens</i>. Essays in Biochemistry, 2021, 65, 381-392.	2.1	28
39	Zeroâ€growth bioprocesses: A challenge for microbial production strains and bioprocess engineering. Engineering in Life Sciences, 2017, 17, 27-35.	2.0	26
40	Physiological Response of Corynebacterium glutamicum to Increasingly Nutrient-Rich Growth Conditions. Frontiers in Microbiology, 2018, 9, 2058.	1.5	24
41	The RamA regulon: complex regulatory interactions in relation to central metabolism in Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2018, 102, 5901-5910.	1.7	23
42	RamB Is an Activator of the Pyruvate Dehydrogenase Complex Subunit E1p Gene in <i>Corynebacterium glutamicum</i>. Journal of Molecular Microbiology and Biotechnology, 2009, 16, 236-239.	1.0	20
43	Deciphering the Adaptation of Corynebacterium glutamicum in Transition from Aerobiosis via Microaerobiosis to Anaerobiosis. Genes, 2018, 9, 297.	1.0	19
44	Acetate-based production of itaconic acid with Corynebacterium glutamicum using an integrated pH-coupled feeding control. Bioresource Technology, 2022, 351, 126994.	4.8	19
45	Engineering <i>Pseudomonas putida</i> KT2440 for the production of isobutanol. Engineering in Life Sciences, 2020, 20, 148-159.	2.0	18
46	Metabolic engineering of <i>Vibrio natriegens</i> for anaerobic succinate production. Microbial Biotechnology, 2022, 15, 1671-1684.	2.0	17
47	Identifying the Growth Modulon of Corynebacterium glutamicum. Frontiers in Microbiology, 2019, 10, 974.	1.5	12
48	CO ₂ /HCO ₃ ^{âˆ’} Accelerates Iron Reduction through Phenolic Compounds. MBio, 2020, 11, .	1.8	11
49	Stereospecificity of Corynebacterium glutamicum 2,3-butanediol dehydrogenase and implications for the stereochemical purity of bioproduced 2,3-butanediol. Applied Microbiology and Biotechnology, 2016, 100, 10573-10583.	1.7	10
50	A Timed Off-Switch for Dynamic Control of Gene Expression in Corynebacterium Glutamicum. Frontiers in Bioengineering and Biotechnology, 2021, 9, 704681.	2.0	10
51	Studies on substrate utilisation in l-valine-producing Corynebacterium glutamicum strains deficient in pyruvate dehydrogenase complex. Bioprocess and Biosystems Engineering, 2010, 33, 873-883.	1.7	9
52	Microâ€aerobic production of isobutanol with engineered Pseudomonas putida. Engineering in Life Sciences, 2021, 21, 475-488.	2.0	9
53	A synthetic glycerol assimilation pathway demonstrates biochemical constraints of cellular metabolism. FEBS Journal, 2020, 287, 160-172.	2.2	7
54	Streamlining the Analysis of Dynamic 13C-Labeling Patterns for the Metabolic Engineering of Corynebacterium glutamicum as l-Histidine Production Host. Metabolites, 2020, 10, 458.	1.3	5

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55	Comprehensive Analysis of C. glutamicum Anaplerotic Deletion Mutants Under Defined d-Glucose Conditions. Frontiers in Bioengineering and Biotechnology, 2020, 8, 602936.	2.0	2
56	Exploiting Aerobic Carboxydotrophic Bacteria for Industrial Biotechnology. Advances in Biochemical Engineering/Biotechnology, 2021, , 1-32.	0.6	2