Lothar Eggeling

List of Publications by Year
in descending order

75 papers	6,605 citations	53660 45 h-index	79541 73 g-index
78 all docs	78 docs citations	78 times ranked	3407 citing authors

#	Article	IF	Citations
1	The complete Corynebacterium glutamicum ATCC 13032 genome sequence and its impact on the production of l-aspartate-derived amino acids and vitamins. Journal of Biotechnology, 2003, 104, 5-25.	1.9	844
2	Determination of the fluxes in the central metabolism ofCorynebacterium glutamicum by nuclear magnetic resonance spectroscopy combined with metabolite balancing. Biotechnology and Bioengineering, 1996, 49, 111-129.	1.7	421
3	A new type of transporter with a new type of cellular function: l â€‑lysine export from Corynebacterium glutamicum. Molecular Microbiology, 1996, 22, 815-826.	1.2	232
4	A high-throughput approach to identify genomic variants of bacterial metabolite producers at the single-cell level. Genome Biology, 2012, 13, R40.	13.9	223
5	A giant market and a powerful metabolism: l-lysine provided by Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2015, 99, 3387-3394.	1.7	193
6	In Vivo Quantification of Parallel and Bidirectional Fluxes in the Anaplerosis of Corynebacterium glutamicum. Journal of Biological Chemistry, 2000, 275, 35932-35941.	1.6	172
7	Acyl-CoA Carboxylases (accD2 and accD3), Together with a Unique Polyketide Synthase (Cg-pks), Are Key to Mycolic Acid Biosynthesis in Corynebacterianeae Such as Corynebacterium glutamicum and Mycobacterium tuberculosis. Journal of Biological Chemistry, 2004, 279, 44847-44857.	1.6	159
8	Control of the Lysine Biosynthesis Sequence in <i>Corynebacterium glutamicum</i> as Analyzed by Overexpression of the Individual Corresponding Genes. Applied and Environmental Microbiology, 1991, 57, 1746-1752.	1.4	155
9	Export of l -Isoleucine from Corynebacterium glutamicum : a Two-Gene-Encoded Member of a New Translocator Family. Journal of Bacteriology, 2002, 184, 3947-3956.	1.0	148
10	Recombineering in Corynebacterium glutamicum combined with optical nanosensors: a general strategy for fast producer strain generation. Nucleic Acids Research, 2013, 41, 6360-6369.	6.5	141
11	Novel screening methodsâ€”biosensors. Current Opinion in Biotechnology, 2015, 35, 30-36.	3.3	130
12	Metabolic Engineering of Corynebacterium glutamicum for l -Serine Production. Applied and Environmental Microbiology, 2005, 71, 7139-7144.	1.4	125
13	Taking Control over Control: Use of Product Sensing in Single Cells to Remove Flux Control at Key Enzymes in Biosynthesis Pathways. ACS Synthetic Biology, 2014, 3, 21-29.	1.9	125
14	Looking for the pick of the bunch: high-throughput screening of producing microorganisms with biosensors. Current Opinion in Biotechnology, 2014, 26, 148-154.	3.3	125
15	Improved Lâ€‑lysine production with <i>Corynebacterium glutamicum</i> and systemic insight into citrate synthase flux and activity. Biotechnology and Bioengineering, 2012, 109, 2070-2081.	1.7	121
16	SoxR as a Single-Cell Biosensor for NADPH-Consuming Enzymes in <i>Escherichia coli</i>. ACS Synthetic Biology, 2014, 3, 41-47.	1.9	117
17	Isolation and prominent characteristics of an L-lysine hyperproducing strain of Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 1992, 37, 566.	1.7	116
18	Ethambutol, a cell wall inhibitor of Mycobacterium tuberculosis, elicits l-glutamate efflux of Corynebacterium glutamicum. Microbiology (United Kingdom), 2005, 151, 1359-1368.	0.7	116

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19	Response of the Central Metabolism inCorynebacterium glutamicumto the use of an NADH-Dependent Glutamate Dehydrogenase. Metabolic Engineering, 1999, 1, 35-48.	3.6	113
20	Pushing product formation to its limit: Metabolic engineering of Corynebacterium glutamicum for l-leucine overproduction. Metabolic Engineering, 2014, 22, 40-52.	3.6	113
21	Linking Central Metabolism with Increased Pathway Flux: l -Valine Accumulation by Corynebacterium glutamicum. Applied and Environmental Microbiology, 2002, 68, 2246-2250.	1.4	112
22	l -Threonine Export: Use of Peptides To Identify a New Translocator from Corynebacterium glutamicum. Journal of Bacteriology, 2001, 183, 5317-5324.	1.0	110
23	New ubiquitous translocators: amino acid export by Corynebacterium glutamicum and Escherichia coli. Archives of Microbiology, 2003, 180, 155-160.	1.0	107
24	A disposable picolitre bioreactor for cultivation and investigation of industrially relevant bacteria on the single cell level. Lab on A Chip, 2012, 12, 2060.	3.1	103
25	Response of the central metabolism ofCorynebacterium glutamicum to different flux burdens. , 1997, 56, 168-180.		102
26	Regulation of acetohydroxy acid synthase in Corynebacterium glutamicum during fermentation of ?-ketobutyrate to l-isoleucine. Applied Microbiology and Biotechnology, 1987, 25, 346.	1.7	101
27	Identification of glyA (Encoding Serine Hydroxymethyltransferase) and Its Use Together with the Exporter ThrE To Increase l -Threonine Accumulation by Corynebacterium glutamicum. Applied and Environmental Microbiology, 2002, 68, 3321-3327.	1.4	99
28	The Two Carboxylases of Corynebacterium glutamicum Essential for Fatty Acid and Mycolic Acid Synthesis. Journal of Bacteriology, 2007, 189, 5257-5264.	1.0	99
29	Characterization of myo -Inositol Utilization by Corynebacterium glutamicum : the Stimulon, Identification of Transporters, and Influence on l -Lysine Formation. Journal of Bacteriology, 2006, 188, 8054-8061.	1.0	94
30	Functional Analysis of All Aminotransferase Proteins Inferred from the Genome Sequence of Corynebacterium glutamicum. Journal of Bacteriology, 2005, 187, 7639-7646.	1.0	88
31	Cometabolism of a Nongrowth Substrate: l -Serine Utilization by Corynebacterium glutamicum. Applied and Environmental Microbiology, 2004, 70, 7148-7155.	1.4	78
32	Reduced Folate Supply as a Key to Enhanced l -Serine Production by Corynebacterium glutamicum. Applied and Environmental Microbiology, 2007, 73, 750-755.	1.4	78
33	Two functional FAS-I type fatty acid synthases in Corynebacterium glutamicum. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overl	0.7	75
34	Identification of an Î±(1â†'6) mannopyranosyltransferase (MptA), involved in <i>Corynebacterium glutamicum</i> lipomanann biosynthesis, and identification of its orthologue in <i>Mycobacterium tuberculosis</i>. Molecular Microbiology, 2007, 65, 1503-1517.	1.2	73
35	Stable Expression of <i>hom-1-thrB</i> in <i>Corynebacterium glutamicum</i> and Its Effect on the Carbon Flux to Threonine and Related Amino Acids. Applied and Environmental Microbiology, 1994, 60, 126-132.	1.4	72
36	Inactivation of Corynebacterium glutamicum NCgl0452 and the Role of MgtA in the Biosynthesis of a Novel Mannosylated Glycolipid Involved in Lipomannan Biosynthesis. Journal of Biological Chemistry, 2007, 282, 4561-4572.	1.6	65

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37	Different Modes of Diaminopimelate Synthesis and Their Role in Cell Wall Integrity: a Study with <i>Corynebacterium glutamicum</i>. Journal of Bacteriology, 1998, 180, 3159-3165.	1.0	65
38	Identification of a novel Î±(1â†’6) mannopyranosyltransferase MptB from <i>Corynebacterium glutamicum</i> by deletion of a conserved gene, <i>NCgl1505</i>, affords a lipomannanâ€•and lipoarabinomannanâ€deficient mutant. Molecular Microbiology, 2008, 68, 1595-1613.	1.2	59
39	The fruits of molecular physiology: engineering the l-isoleucine biosynthesis pathway in Corynebacterium glutamicum. Journal of Biotechnology, 1997, 56, 167-182.	1.9	57
40	Strains of Corynebacterium glutamicum with Different Lysine Productivities May Have Different Lysine Excretion Systems. Applied and Environmental Microbiology, 1993, 59, 316-321.	1.4	56
41	Attenuation control of ilvBNC in Corynebacterium glutamicum: Evidence of leader peptide formation without the presence of a ribosome binding site. Journal of Bioscience and Bioengineering, 2000, 90, 501-507.	1.1	54
42	<i>Corynebacterium glutamicum</i> as a Host for Synthesis and Export of <scp>d</scp> -Amino Acids. Journal of Bacteriology, 2011, 193, 1702-1709.	1.0	53
43	The Cell Wall Barrier of Corynebacterium glutamicum and Amino Acid Efflux.. Journal of Bioscience and Bioengineering, 2001, 92, 201-213.	1.1	52
44	The E2 Domain of OdhA of Corynebacterium glutamicum Has Succinyltransferase Activity Dependent on Lipoyl Residues of the Acetyltransferase AceF. Journal of Bacteriology, 2010, 192, 5203-5211.	1.0	49
45	Citrate synthase in Corynebacterium glutamicum is encoded by two gltA transcripts which are controlled by RamA, RamB, and GlxR. Journal of Biotechnology, 2011, 154, 140-148.	1.9	48
46	Disruption of Cg-Ppm1, a Polyprenyl Monophosphomannose Synthase, and the Generation of Lipoglycan-less Mutants in Corynebacterium glutamicum. Journal of Biological Chemistry, 2003, 278, 40842-40850.	1.6	45
47	Cloning, organization and functional analysis of ilvA, ilvB and ilvC genes from Corynebacterium glutamicum. Gene, 1992, 112, 113-116.	1.0	43
48	Activity of Exporters of <i>Escherichia coli</i> in <i>Corynebacterium glutamicum</i>, and Their Use to Increase <i>L</i>-Threonine Production. Journal of Molecular Microbiology and Biotechnology, 2009, 16, 198-207.	1.0	42
49	The contest for precursors: channelling l-isoleucine synthesis in Corynebacterium glutamicum without byproduct formation. Applied Microbiology and Biotechnology, 2015, 99, 791-800.	1.7	41
50	A periplasmic, pyridoxal-5â€²-phosphate-dependent amino acid racemase in Pseudomonas taetrolens. Applied Microbiology and Biotechnology, 2009, 83, 1045-1054.	1.7	40
51	Acceptor Substrate Discrimination in Phosphatidyl-myo-inositol Mannoside Synthesis. Journal of Biological Chemistry, 2010, 285, 37741-37752.	1.6	35
52	Glucose-controlled l-isoleucine fed-batch production with recombinant strains of Corynebacterium glutamicum. Journal of Biotechnology, 1996, 50, 123-136.	1.9	34
53	The three tricarboxylate synthase activities of Corynebacterium glutamicum and increase of l-lysine synthesis. Applied Microbiology and Biotechnology, 2007, 76, 587-595.	1.7	34
54	Lipoarabinomannan biosynthesis in <i>Corynebacterineae</i>: the interplay of two Î±(1â†’2)â€mannopyranosyltransferases MptC and MptD in mannan branching. Molecular Microbiology, 2011, 80, 1241-1259.	1.2	34

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55	Threonine dehydratases of Corynebacterium glutamicum with altered allosteric control: their generation and biochemical and structural analysis. Molecular Microbiology, 1994, 13, 833-842.	1.2	32
56	The TetRâ€type transcriptional regulator FasR of <i>Corynebacterium glutamicum</i> controls genes of lipid synthesis during growth on acetate. Molecular Microbiology, 2010, 78, 253-265.	1.2	31
57	The ubiquitous ThrE family of putative transmembrane amino acid efflux transporters. Research in Microbiology, 2002, 153, 19-25.	1.0	29
58	Characterization of the<i>Corynebacterium glutamicum</i>Î”<i>pimB</i>â€² Î”<i>mgtA</i>Double Deletion Mutant and the Role of<i>Mycobacterium tuberculosis</i>Orthologues Rv2188c and Rv0557 in Glycolipid Biosynthesis. Journal of Bacteriology, 2009, 191, 4465-4472.	1.0	29
59	Structural characterization and functional properties of a novel lipomannan variant isolated from a Corynebacterium glutamicum pimBâ€² mutant. Antonie Van Leeuwenhoek, 2008, 94, 277-287.	0.7	28
60	Interaction of 2-oxoglutarate dehydrogenase OdhA with its inhibitor OdhI in Corynebacterium glutamicum: Mutants and a model. Journal of Biotechnology, 2014, 191, 99-105.	1.9	26
61	The serine hydroxymethyltransferase gene glyA in Corynebacterium glutamicum is controlled by GlyR. Journal of Biotechnology, 2009, 139, 214-221.	1.9	25
62	Deletion of manC in Corynebacterium glutamicum results in a phospho-myo-inositol mannoside- and lipoglycan-deficient mutant. Microbiology (United Kingdom), 2012, 158, 1908-1917.	0.7	25
63	Corynebacterium glutamicum harbours a molybdenum cofactor-dependent formate dehydrogenase which alleviates growth inhibition in the presence of formate. Microbiology (United Kingdom), 2012, 158, 2428-2439.	0.7	22
64	CRISPR/Cas12a Mediated Genome Editing To Introduce Amino Acid Substitutions into the Mechanosensitive Channel MscCG of <i>Corynebacterium glutamicum</i>. ACS Synthetic Biology, 2019, 8, 2726-2734.	1.9	22
65	Acyl-CoA sensing by FasR to adjust fatty acid synthesis in Corynebacterium glutamicum. Journal of Biotechnology, 2014, 192, 96-101.	1.9	20
66	Formation of xylitol and xylitol-5-phosphate and its impact on growth of d-xylose-utilizing Corynebacterium glutamicum strains. Journal of Biotechnology, 2016, 231, 160-166.	1.9	15
67	AftD functions as an Î±1â€¯â†’â€¯5 arabinofuranosyltransferase involved in the biosynthesis of the mycobacterial cell wall core. Cell Surface, 2018, 1, 2-14.	1.5	14
68	Exporters for Production of Amino Acids and Other Small Molecules. Advances in Biochemical Engineering/Biotechnology, 2016, 159, 199-225.	0.6	12
69	Visualization of Imbalances in Sulfur Assimilation and Synthesis of Sulfur-Containing Amino Acids at the Single-Cell Level. Applied and Environmental Microbiology, 2013, 79, 6730-6736.	1.4	10
70	Mutations in MurE, the essential UDP-N-acetylmuramoylalanyl-d-glutamate 2,6-diaminopimelate ligase of Corynebacterium glutamicum: effect on l-lysine formation and analysis of systemic consequences. Biotechnology Letters, 2017, 39, 283-288.	1.1	8
71	The singular Corynebacterium glutamicum Emb arabinofuranosyltransferase polymerises the Î±(1â€¯â†’â€¯5) arabinan backbone in the early stages of cell wall arabinan biosynthesis. Cell Surface, 2018, 2, 38-53.	1.5	8
72	Proline addition increases the efficiency of lâ€lysine production by <i><scp>C</scp>orynebacterium glutamicum</i>. Engineering in Life Sciences, 2013, 13, 393-398.	2.0	3

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73	Novel Technologies for Optimal Strain Breeding. Advances in Biochemical Engineering/Biotechnology, 2016, 159, 227-254.	0.6	3
74	Lysine Industrial Uses and Production. , 2017, , 572-586.		1
75	Optische Nanosensoren fÃ¼r Metabolit-Monitoring in der mikrobiellen Biotechnologie. Chemie-Ingenieur-Technik, 2012, 84, 1337-1337.	0.4	0