Julia Frunzke

List of Publications by Year
in descending order

65 papers	3,225 citations	136885 32 h-index	155592 55 g-index
77 all docs	77 docs citations	77 times ranked	2769 citing authors

#	Article	IF	Citations
1	Impact of Spontaneous Prophage Induction on the Fitness of Bacterial Populations and Host-Microbe Interactions. Journal of Bacteriology, 2015, 197, 410-419.	1.0	232
2	The development and application of a single-cell biosensor for the detection of l-methionine and branched-chain amino acids. Metabolic Engineering, 2012, 14, 449-457.	3.6	200
3	Transcription factor-based biosensors in biotechnology: current state and future prospects. Applied Microbiology and Biotechnology, 2016, 100, 79-90.	1.7	178
4	Coâ€ordinated regulation of gluconate catabolism and glucose uptake in Corynebacterium glutamicum by two functionally equivalent transcriptional regulators, GntR1 and GntR2. Molecular Microbiology, 2008, 67, 305-322.	1.2	145
5	Biosensor-driven adaptive laboratory evolution of l-valine production in Corynebacterium glutamicum. Metabolic Engineering, 2015, 32, 184-194.	3.6	145
6	Construction of a Prophage-Free Variant of Corynebacterium glutamicum ATCC 13032 for Use as a Platform Strain for Basic Research and Industrial Biotechnology. Applied and Environmental Microbiology, 2013, 79, 6006-6015.	1.4	142
7	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
8	Sigma factor mimicry involved in regulation of general stress response. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3467-3472.	3.3	121
9	The DtxR Regulon of Corynebacterium glutamicum. Journal of Bacteriology, 2006, 188, 2907-2918.	1.0	104
10	The PhyRâ€ï‚f ^{EcfG} signalling cascade is involved in stress response and symbiotic efficiency in Bradyrhizobium japonicum. Molecular Microbiology, 2009, 73, 291-305.	1.2	103
11	Chassis organism from Corynebacterium glutamicum â€“ a topâ€down approach to identify and delete irrelevant gene clusters. Biotechnology Journal, 2015, 10, 290-301.	1.8	102
12	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
13	The AraC-type Regulator RipA Represses Aconitase and Other Iron Proteins from Corynebacterium under Iron Limitation and Is Itself Repressed by DtxR. Journal of Biological Chemistry, 2005, 280, 40500-40508.	1.6	98
14	Spatiotemporal microbial singleâ€cell analysis using a highâ€throughput microfluidics cultivation platform. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 1101-1115.	1.1	88
15	Lrp of Corynebacterium glutamicum controls expression of the brnFE operon encoding the export system for l-methionine and branched-chain amino acids. Journal of Biotechnology, 2012, 158, 231-241.	1.9	78
16	The general stress response in Alphaproteobacteria. Trends in Microbiology, 2015, 23, 164-171.	3.5	65
17	Analysis of SOS-Induced Spontaneous Prophage Induction in Corynebacterium glutamicum at the Single-Cell Level. Journal of Bacteriology, 2014, 196, 180-188.	1.0	64
18	Corynebacterium glutamicum Chassis C1*: Building and Testing a Novel Platform Host for Synthetic Biology and Industrial Biotechnology. ACS Synthetic Biology, 2018, 7, 132-144.	1.9	63

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19	Population Heterogeneity inCorynebacterium glutamicumATCC 13032 Caused by Prophage CGP3. Journal of Bacteriology, 2008, 190, 5111-5119.	1.0	54
20	Adaptive laboratory evolution of Corynebacterium glutamicum towards higher growth rates on glucose minimal medium. Scientific Reports, 2017, 7, 16780.	1.6	50
21	Microfluidic Picoliter Bioreactor for Microbial Single-cell Analysis: Fabrication, System Setup, and Operation. Journal of Visualized Experiments, 2013, , 50560.	0.2	49
22	Control of Heme Homeostasis in Corynebacterium glutamicum by the Two-Component System HrrSA. Journal of Bacteriology, 2011, 193, 1212-1221.	1.0	47
23	Evolutionary engineering of Corynebacterium glutamicum. Biotechnology Journal, 2019, 14, e1800444.	1.8	46
24	RamB, the Transcriptional Regulator of Acetate Metabolism in Corynebacterium glutamicum , Is Subject to Regulation by RamA and RamB. Journal of Bacteriology, 2007, 189, 1145-1149.	1.0	45
25	Screening of an Escherichia coli promoter library for a phenylalanine biosensor. Applied Microbiology and Biotechnology, 2016, 100, 6739-6753.	1.7	42
26	Monitoring of population dynamics of <scp>C</scp>orynebacterium glutamicum by multiparameter flow cytometry. Microbial Biotechnology, 2013, 6, 157-167.	2.0	41
27	Live cell imaging of <scp>SOS</scp> and prophage dynamics in isogenic bacterial populations. Molecular Microbiology, 2015, 98, 636-650.	1.2	41
28	Construction of Recombinant Pdu Metabolosome Shells for Small Molecule Production in Corynebacterium glutamicum. ACS Synthetic Biology, 2017, 6, 2145-2156.	1.9	41
29	Light-Controlled Cell Factories: Employing Photocaged Isopropyl-Î²- <scp>d</scp> -Thiogalactopyranoside for Light-Mediated Optimization of lac Promoter-Based Gene Expression and (+)-Valencene Biosynthesis in Corynebacterium glutamicum. Applied and Environmental Microbiology, 2016, 82, 6141-6149.	1.4	40
30	Heterologous expression of the Halothiobacillus neapolitanus carboxysomal gene cluster in Corynebacterium glutamicum. Journal of Biotechnology, 2017, 258, 126-135.	1.9	40
31	IpsA, a novel LacI-type regulator, is required for inositol-derived lipid formation in Corynebacteria and Mycobacteria. BMC Biology, 2013, 11, 122.	1.7	38
32	Destabilized <scp>eYFP</scp> variants for dynamic gene expression studies in <scp>C</scp>orynebacterium glutamicum. Microbial Biotechnology, 2013, 6, 196-201.	2.0	37
33	Silencing of cryptic prophages inCorynebacterium glutamicum. Nucleic Acids Research, 2016, 44, gkw692.	6.5	35
34	Impact of Xenogeneic Silencing on Phageâ€“Host Interactions. Journal of Molecular Biology, 2019, 431, 4670-4683.	2.0	34
35	Aminoglycoside Antibiotics Inhibit Phage Infection by Blocking an Early Step of the Infection Cycle. MBio, 2022, 13, e0078322.	1.8	33
36	A prophage-encoded actin-like protein required for efficient viral DNA replication in bacteria. Nucleic Acids Research, 2015, 43, 5002-5016.	6.5	31

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37	Generation of a Prophage-Free Variant of the Fast-Growing Bacterium Vibrio natriegens. Applied and Environmental Microbiology, 2019, 85, .	1.4	31
38	Impact of LytR-CpsA-Psr Proteins on Cell Wall Biosynthesis in Corynebacterium glutamicum. Journal of Bacteriology, 2016, 198, 3045-3059.	1.0	30
39	The two-component system ChrSA is crucial for haem tolerance and interferes with HrrSA in haem-dependent gene regulation in Corynebacterium glutamicum. Microbiology (United Kingdom), 2012, 158, 3020-3031.	0.7	25
40	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
41	Phosphatase activity of the histidine kinases ensures pathway specificity of the <scp>ChrSA</scp> and <scp>HrrSA</scp> twoâ€component systems in <scp>C</scp>orynebacterium glutamicum. Molecular Microbiology, 2014, 92, 1326-1342.	1.2	20
42	Automated Rational Strain Construction Based on High-Throughput Conjugation. ACS Synthetic Biology, 2021, 10, 589-599.	1.9	18
43	Genome Sequence and Characterization of Five Bacteriophages Infecting Streptomyces coelicolor and Streptomyces venezuelae: Alderaan, Coruscant, Dagobah, Endor1 and Endor2. Viruses, 2020, 12, 1065.	1.5	17
44	Deciphering the Rules Underlying Xenogeneic Silencing and Counter-Silencing of Lsr2-like Proteins Using CgpS of Corynebacterium glutamicum as a Model. MBio, 2020, 11, .	1.8	15
45	Cytometry meets next-generation sequencing â€“ RNA-Seq of sorted subpopulations reveals regional replication and iron-triggered prophage induction in Corynebacterium glutamicum. Scientific Reports, 2018, 8, 14856.	1.6	14
46	Membrane Topology and Heme Binding of the Histidine Kinases HrrS and ChrS in Corynebacterium glutamicum. Frontiers in Microbiology, 2018, 9, 183.	1.5	14
47	The MarR-Type Regulator MalR Is Involved in Stress-Responsive Cell Envelope Remodeling in Corynebacterium glutamicum. Frontiers in Microbiology, 2019, 10, 1039.	1.5	14
48	Multiple ÏƒEcfG and NepR Proteins Are Involved in the General Stress Response in Methylobacterium extorquens. PLoS ONE, 2016, 11, e0152519.	1.1	12
49	The manganese-responsive regulator MntR represses transcription of a predicted ZIP family metal ion transporter in Corynebacterium glutamicum. FEMS Microbiology Letters, 2015, 362, 1-10.	0.7	11
50	Biosensor-based growth-coupling and spatial separation as an evolution strategy to improve small molecule production of Corynebacterium glutamicum. Metabolic Engineering, 2021, 68, 162-173.	3.6	11
51	HrrSA orchestrates a systemic response to heme and determines prioritization of terminal cytochrome oxidase expression. Nucleic Acids Research, 2020, 48, 6547-6562.	6.5	10
52	Toxic but tasty â€“ temporal dynamics and network architecture of hemeâ€responsive twoâ€component signaling in Corynebacterium glutamicum. Molecular Microbiology, 2019, 111, 1367-1381.	1.2	9
53	Inducible Expression Systems Based on Xenogeneic Silencing and Counter-Silencing and Design of a Metabolic Toggle Switch. ACS Synthetic Biology, 2020, 9, 2023-2038.	1.9	8
54	The diversity of heme sensor systems â€“ heme-responsive transcriptional regulation mediated by transient heme protein interactions. FEMS Microbiology Reviews, 2022, 46, .	3.9	7

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55	Isolation of Novel Xanthomonas Phages Infecting the Plant Pathogens X. translucens and X. campestris. Viruses, 2022, 14, 1449.	1.5	6
56	Phylogenetic Distribution of WhiB- and Lsr2-Type Regulators in Actinobacteriophage Genomes. Microbiology Spectrum, 2021, 9, e0072721.	1.2	5
57	Biosensor-based isolation of amino acid-producing Vibrio natriegens strains. Metabolic Engineering Communications, 2021, 13, e00187.	1.9	5
58	Impact of CO ₂ /HCO ₃ ^{â€“} Availability on Anaplerotic Flux in Pyruvate Dehydrogenase Complex-Deficient Corynebacterium glutamicum Strains. Journal of Bacteriology, 2019, 201, .	1.0	3
59	Genome Sequence of the Bacteriophage CL31 and Interaction with the Host Strain Corynebacterium glutamicum ATCC 13032. Viruses, 2021, 13, 495.	1.5	3
60	Identification of Gip as a novel phageâ€encoded gyrase inhibitor protein of Corynebacterium glutamicum. Molecular Microbiology, 2021, 116, 1268-1280.	1.2	3
61	Genetically-encoded Biosensors for Strain Development and Single Cell Analysis of Corynebacterium glutamicum. , 2015, , 179-196.		2
62	The General Stress Response in Alphaproteobacteria. , 0, , 291-300.		1
63	Chassis organism from Corynebacterium glutamicum â€“ Genome reduction as a tool toward improved strains for synthetic biology and industrial biotechnology. New Biotechnology, 2016, 33, S25.	2.4	1
64	Establishment of synthetic microcompartments in Corynebacterium glutamicum. New Biotechnology, 2016, 33, S184.	2.4	0
65	Lichtblicke in der mikrobiellen Stammentwicklung. Nachrichten Aus Der Chemie, 2018, 66, 589-592.	0.0	0