Alex Toftgaard Nielsen

List of Publications by Year
in descending order

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Version: 2024-02-01

56 papers	6,148 citations	159358 30 h-index	161609 54 g-index
60 all docs	60 docs citations	60 times ranked	7783 citing authors

#	Article	IF	Citations
1	Quantification of biofilm structures by the novel computer program comstat. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overlo	0.7	1,899
2	The Vibrio cholerae chitin utilization program. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2524-2529.	3.3	485
3	Distribution of Bacterial Growth Activity in Flow-Chamber Biofilms. Applied and Environmental Microbiology, 1999, 65, 4108-4117.	1.4	267
4	[2] Molecular tools for study of biofilm physiology. Methods in Enzymology, 1999, 310, 20-42.	0.4	246
5	Identification of a Novel Group of Bacteria in Sludge from a Deteriorated Biological Phosphorus Removal Reactor. Applied and Environmental Microbiology, 1999, 65, 1251-1258.	1.4	220
6	In situ identification of polyphosphate- and polyhydroxyalkanoate-accumulating traits for microbial populations in a biological phosphorus removal process. Environmental Microbiology, 2001, 3, 110-122.	1.8	190
7	CRMAGE: CRISPR Optimized MAGE Recombineering. Scientific Reports, 2016, 6, 19452.	1.6	180
8	Role of commensal relationships on the spatial structure of a surface-attached microbial consortium. Environmental Microbiology, 2000, 2, 59-68.	1.8	175
9	Trash to treasure: production of biofuels and commodity chemicals via syngas fermenting microorganisms. Current Opinion in Biotechnology, 2014, 27, 79-87.	3.3	175
10	Accelerating genome editing in CHO cells using CRISPR Cas9 and CRISPy, a webâ€based target finding tool. Biotechnology and Bioengineering, 2014, 111, 1604-1616.	1.7	167
11	RpoS Controls the Vibrio cholerae Mucosal Escape Response. PLoS Pathogens, 2006, 2, e109.	2.1	149
12	Highly Active and Specific Tyrosine Ammonia-Lyases from Diverse Origins Enable Enhanced Production of Aromatic Compounds in Bacteria and Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2015, 81, 4458-4476.	1.4	148
13	CasEMBLR: Cas9-Facilitated Multiloci Genomic Integration of in Vivo Assembled DNA Parts in Saccharomyces cerevisiae. ACS Synthetic Biology, 2015, 4, 1226-1234.	1.9	148
14	CrEdit: CRISPR mediated multi-loci gene integration in Saccharomyces cerevisiae. Microbial Cell Factories, 2015, 14, 97.	1.9	134
15	Predictable tuning of protein expression in bacteria. Nature Methods, 2016, 13, 233-236.	9.0	116
16	Increased production of L-serine in Escherichia coli through Adaptive Laboratory Evolution. Metabolic Engineering, 2017, 39, 141-150.	3.6	116
17	Single nucleotide polymorphism genotyping using locked nucleic acid (LNAâ„¢). Expert Review of Molecular Diagnostics, 2003, 3, 27-38.	1.5	100
18	A Bistable Switch and Anatomical Site Control Vibrio cholerae Virulence Gene Expression in the Intestine. PLoS Pathogens, 2010, 6, e1001102.	2.1	94

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19	Comparative study on aptamers as recognition elements for antibiotics in a label-free all-polymer biosensor. Biosensors and Bioelectronics, 2013, 43, 315-320.	5.3	93
20	Broad-Host-Range ProUSER Vectors Enable Fast Characterization of Inducible Promoters and Optimization of p-Coumaric Acid Production in Pseudomonas putida KT2440. ACS Synthetic Biology, 2016, 5, 741-753.	1.9	82
21	Enhanced protein and biochemical production using CRISPRi-based growth switches. Metabolic Engineering, 2016, 38, 274-284.	3.6	78
22	Engineering of high yield production of Lâ€serine in Escherichia coli. Biotechnology and Bioengineering, 2016, 113, 807-816.	1.7	70
23	Genome editing of lactic acid bacteria: opportunities for food, feed, pharma and biotech. FEMS Microbiology Letters, 2019, 366, .	0.7	68
24	The Ssr protein (T1E_1405) from Pseudomonas putida DOTâ€T1E enables oligonucleotideâ€based recombineering in platform strain P. putida EM42. Biotechnology Journal, 2016, 11, 1309-1319.	1.8	65
25	Genomeâ€wide identification of tolerance mechanisms toward pâ€coumaric acid in Pseudomonas putida. Biotechnology and Bioengineering, 2018, 115, 762-774.	1.7	64
26	Lactobacilli and pediococci as versatile cell factories â€“ Evaluation of strain properties and genetic tools. Biotechnology Advances, 2017, 35, 419-442.	6.0	60
27	Genome-wide Escherichia coli stress response and improved tolerance towards industrially relevant chemicals. Microbial Cell Factories, 2016, 15, 176.	1.9	54
28	Characterization of a Feedback-Resistant Mevalonate Kinase from the Archaeon Methanosarcina mazei. Applied and Environmental Microbiology, 2011, 77, 7772-7778.	1.4	50
29	Exploiting the potential of gas fermentation. Industrial Crops and Products, 2017, 106, 21-30.	2.5	32
30	Lab-on-a-disc platform for screening of genetically modified E. coli cells via cell-free electrochemical detection of p-Coumaric acid. Sensors and Actuators B: Chemical, 2017, 253, 999-1005.	4.0	31
31	Injection molded lab-on-a-disc platform for screening of genetically modified E. coli using liquidâ€“liquid extraction and surface enhanced Raman scattering. Lab on A Chip, 2018, 18, 869-877.	3.1	31
32	vpsA-andluxO-independent biofilms ofVibrio cholerae. FEMS Microbiology Letters, 2007, 275, 199-206.	0.7	30
33	Genome-Wide CRISPRi-Based Identification of Targets for Decoupling Growth from Production. ACS Synthetic Biology, 2020, 9, 1030-1040.	1.9	29
34	A metabolic reconstruction of Lactobacillus reuteri JCM 1112 and analysis of its potential as a cell factory. Microbial Cell Factories, 2019, 18, 186.	1.9	24
35	Surface Enhanced Raman Scattering for Quantification of p-Coumaric Acid Produced by Escherichia coli. Analytical Chemistry, 2017, 89, 3981-3987.	3.2	22
36	Industrializing a Bacterial Strain for <scp>l</scp>-Serine Production through Translation Initiation Optimization. ACS Synthetic Biology, 2019, 8, 2347-2358.	1.9	21

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37	Genetic toolbox for controlled expression of functional proteins in Geobacillus spp.. PLoS ONE, 2017, 12, e0171313.	1.1	21
38	Increasing production yield of tyrosine and mevalonate through inhibition of biomass formation. Process Biochemistry, 2016, 51, 1992-2000.	1.8	20
39	Genome-wide systematic identification of methyltransferase recognition and modification patterns. Nature Communications, 2019, 10, 3311.	5.8	18
40	Application of the thermostable Î²-galactosidase, BgaB, from Geobacillus stearothermophilus as a versatile reporter under anaerobic and aerobic conditions. AMB Express, 2017, 7, 169.	1.4	16
41	Extraction, Enrichment, and in situ Electrochemical Detection on Lab-on-a-Disc: Monitoring the Production of a Bacterial Secondary Metabolite. ACS Sensors, 2019, 4, 398-405.	4.0	16
42	Quantification of a bacterial secondary metabolite by SERS combined with SLM extraction for bioprocess monitoring. Analyst, The, 2017, 142, 4553-4559.	1.7	15
43	CRISPR/Cas9-based genome editing for simultaneous interference with gene expression and protein stability. Nucleic Acids Research, 2017, 45, e171-e171.	6.5	15
44	Production of zosteric acid and other sulfated phenolic biochemicals in microbial cell factories. Nature Communications, 2019, 10, 4071.	5.8	15
45	Genome-scale metabolic modeling of P. thermoglucosidasius NCIMB 11955 reveals metabolic bottlenecks in anaerobic metabolism. Metabolic Engineering, 2021, 65, 123-134.	3.6	14
46	CRISPR interference of nucleotide biosynthesis improves production of a singleâ€domain antibody in Escherichia coli. Biotechnology and Bioengineering, 2020, 117, 3835-3848.	1.7	13
47	Synergistic stabilization of a double mutant in chymotrypsin inhibitor 2 from a library screen in E. coli. Communications Biology, 2021, 4, 980.	2.0	13
48	A dual-reporter system for investigating and optimizing protein translation and folding in E. coli. Nature Communications, 2021, 12, 6093.	5.8	12
49	Catalytic production of long-chain hydrocarbons suitable for jet-fuel use from fermentation-derived oxygenates. Green Chemistry, 2022, 24, 3461-3474.	4.6	12
50	Simultaneous quantification of multiple bacterial metabolites using surface-enhanced Raman scattering. Analyst, The, 2019, 144, 1600-1607.	1.7	7
51	Highâ€throughput colorimetric assays optimized for detection of ketones and aldehydes produced by microbial cell factories. Microbial Biotechnology, 2022, 15, 2426-2438.	2.0	6
52	Editorial overview: Chemical biotechnology: Interdisciplinary concepts for modern biotechnological production of biochemicals and biofuels. Current Opinion in Biotechnology, 2015, 35, 133-134.	3.3	5
53	An autoinducible trpâ€T7 expression system for production of proteins and biochemicals in Escherichia coli. Biotechnology and Bioengineering, 2020, 117, 1513-1524.	1.7	5
54	The ProUSER2.0 Toolbox: Genetic Parts and Highly Customizable Plasmids for Synthetic Biology in Bacillus subtilis. ACS Synthetic Biology, 2021, , .	1.9	4

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55	Towards Improved Biophysical Calculations to Identify Disease-Causing Mutations. Biophysical Journal, 2018, 114, 199a.	0.2	0
56	Genome editing of lactic acid bacteria: opportunities for food, feed, pharma and biotech. FEMS Microbiology Letters, 2019, 366, i30-i41.	0.7	0