Lars Keld Nielsen

List of Publications by Year
in descending order

267	15,293	17440 63	24982 109
papers	citations	h-index	g-index

285	285	285	18602
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fermentative butanol production by clostridia. Biotechnology and Bioengineering, 2008, 101, 209-228.	3.3	909
2	Method for generation of homogeneous multicellular tumor spheroids applicable to a wide variety of cell types. Biotechnology and Bioengineering, 2003, 83, 173-180.	3.3	777
3	Genomic characterization of the uncultured Bacteroidales family S24-7 inhabiting the guts of homeothermic animals. Microbiome, 2016, 4, 36.	11.1	533
4	Functional screening in human cardiac organoids reveals a metabolic mechanism for cardiomyocyte cell cycle arrest. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8372-E8381.	7.1	361
5	AraGEM, a Genome-Scale Reconstruction of the Primary Metabolic Network in Arabidopsis Â. Plant Physiology, 2010, 152, 579-589.	4.8	319
6	MEMOTE for standardized genome-scale metabolic model testing. Nature Biotechnology, 2020, 38, 272-276.	17.5	314
7	Microbial hyaluronic acid production. Applied Microbiology and Biotechnology, 2005, 66, 341-351.	3.6	305
8	Towards quantitative metabolomics of mammalian cells: Development of a metabolite extraction protocol. Analytical Biochemistry, 2010, 404, 155-164.	2.4	289
9	Recon 2.2: from reconstruction to model of human metabolism. Metabolomics, 2016, 12, 109.	3.0	243
10	Genome-wide discovery of human splicing branchpoints. Genome Research, 2015, 25, 290-303.	5.5	222
11	OpenFLUX: efficient modelling software for 13C-based metabolic flux analysis. Microbial Cell Factories, 2009, 8, 25.	4.0	218
12	Metabolic and practical considerations on microbial electrosynthesis. Current Opinion in Biotechnology, 2011, 22, 371-377.	6.6	207
13	A Consensus Genome-scale Reconstruction of Chinese Hamster Ovary Cell Metabolism. Cell Systems, 2016, 3, 434-443.e8.	6.2	205
14	Molecular Composition of IMP1 Ribonucleoprotein Granules. Molecular and Cellular Proteomics, 2007, 6, 798-811.	3.8	201
15	C4GEM, a Genome-Scale Metabolic Model to Study C4 Plant Metabolism Â Â. Plant Physiology, 2010, 154, 1871-1885.	4.8	190
16	An environmental life cycle assessment comparing Australian sugarcane with US corn and UK sugar beet as producers of sugars for fermentation. Biomass and Bioenergy, 2008, 32, 1144-1155.	5.7	189
17	Microbial Propionic Acid Production. Fermentation, 2017, 3, 21.	3.0	185
18	Metabolic flux analysis in mammalian cell culture. Metabolic Engineering, 2010, 12, 161-171.	7.0	182

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19	Generation of Multicellular Tumor Spheroids by the Hanging-Drop Method. Methods in Molecular Medicine, 2007, 140, 141-151.	0.8	181
20	Targeted sequencing for gene discovery and quantification using RNA CaptureSeq. Nature Protocols, 2014, 9, 989-1009.	12.0	171
21	Modeling Hybridoma Cell Metabolism Using a Generic Genome-Scale Metabolic Model of Mus musculus. Biotechnology Progress, 2008, 21, 112-121.	2.6	166
22	Alleviating monoterpene toxicity using a twoâ€phase extractive fermentation for the bioproduction of jet fuel mixtures in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2012, 109, 2513-2522.	3.3	164
23	Controlling heterologous gene expression in yeast cell factories on different carbon substrates and across the diauxic shift: a comparison of yeast promoter activities. Microbial Cell Factories, 2015, 14, 91.	4.0	161
24	Hanging-drop multicellular spheroids as a model of tumour angiogenesis. Angiogenesis, 2004, 7, 97-103.	7.2	159
25	The genome sequence of E. coli W (ATCC 9637): comparative genome analysis and an improved genome-scale reconstruction of E. coli. BMC Genomics, 2011, 12, 9.	2.8	159
26	Quantitative gene profiling of long noncoding RNAs with targeted RNA sequencing. Nature Methods, 2015, 12, 339-342.	19.0	155
27	Low carbon fuels and commodity chemicals from waste gases â€“ systematic approach to understand energy metabolism in a model acetogen. Green Chemistry, 2016, 18, 3020-3028.	9.0	143
28	Maintenance of ATP Homeostasis Triggers Metabolic Shifts in Gas-Fermenting Acetogens. Cell Systems, 2017, 4, 505-515.e5.	6.2	128
29	Formulation, construction and analysis of kinetic models of metabolism: A review of modelling frameworks. Biotechnology Advances, 2017, 35, 981-1003.	11.7	128
30	Design of Artificial Myocardial Microtissues. Tissue Engineering, 2004, 10, 201-214.	4.6	125
31	Spliced synthetic genes as internal controls in RNA sequencing experiments. Nature Methods, 2016, 13, 792-798.	19.0	123
32	Quorum-sensing linked RNA interference for dynamic metabolic pathway control in Saccharomyces cerevisiae. Metabolic Engineering, 2015, 29, 124-134.	7.0	118
33	Technoeconomic analysis of renewable aviation fuel from microalgae, Pongamia pinnata, and sugarcane. Biofuels, Bioproducts and Biorefining, 2013, 7, 416-428.	3.7	112
34	DNase Iâ€hypersensitive exons colocalize with promoters and distal regulatory elements. Nature Genetics, 2013, 45, 852-859.	21.4	112
35	Universal Alternative Splicing of Noncoding Exons. Cell Systems, 2018, 6, 245-255.e5.	6.2	110
36	AlgaGEM â€“ a genome-scale metabolic reconstruction of algae based on the Chlamydomonas reinhardtii genome. BMC Genomics, 2011, 12, S5.	2.8	109

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37	Flux balance analysis of CHO cells before and after a metabolic switch from lactate production to consumption. Biotechnology and Bioengineering, 2013, 110, 660-666.	3.3	106
38	H2 drives metabolic rearrangements in gas-fermenting Clostridium autoethanogenum. Biotechnology for Biofuels, 2018, 11, 55.	6.2	103
39	Spatio-temporal characterization of polyhydroxybutyrate accumulation in sugarcane. Plant Biotechnology Journal, 2007, 5, 173-184.	8.3	102
40	Modeling and optimization of the baculovirus expression vector system in batch suspension culture. Biotechnology and Bioengineering, 1994, 44, 710-719.	3.3	101
41	A Multi-Omics Analysis of Recombinant Protein Production in Hek293 Cells. PLoS ONE, 2012, 7, e43394.	2.5	99
42	Metabolite profiling of CHO cells with different growth characteristics. Biotechnology and Bioengineering, 2012, 109, 1404-1414.	3.3	98
43	Arginine deiminase pathway provides ATP and boosts growth of the gas-fermenting acetogen Clostridium autoethanogenum. Metabolic Engineering, 2017, 41, 202-211.	7.0	96
44	Production of polyhydroxybutyrate in sugarcane. Plant Biotechnology Journal, 2007, 5, 162-172.	8.3	94
45	A multi-tissue genome-scale metabolic modeling framework for the analysis of whole plant systems. Frontiers in Plant Science, 2015, 6, 4.	3.6	94
46	A squalene synthase protein degradation method for improved sesquiterpene production in Saccharomyces cerevisiae. Metabolic Engineering, 2017, 39, 209-219.	7.0	91
47	Bioreactors for Hematopoietic Cell Culture. Annual Review of Biomedical Engineering, 1999, 1, 129-152.	12.3	90
48	Engineered protein degradation of farnesyl pyrophosphate synthase is an effective regulatory mechanism to increase monoterpene production in Saccharomyces cerevisiae. Metabolic Engineering, 2018, 47, 83-93.	7.0	89
49	Low multiplicity infection of insect cells with a recombinant baculovirus: The cell yield concept. , 2000, 49, 659-666.		85
50	Physiological and Transcriptional Responses of Saccharomyces cerevisiae to d -Limonene Show Changes to the Cell Wall but Not to the Plasma Membrane. Applied and Environmental Microbiology, 2013, 79, 3590-3600.	3.1	84
51	Hyaluronan Molecular Weight Is Controlled by UDP-N-acetylglucosamine Concentration in Streptococcus zooepidemicus. Journal of Biological Chemistry, 2009, 284, 18007-18014.	3.4	83
52	Deep sequencing-based transcriptome analysis of Plutella xylostella larvae parasitized by Diadegma semiclausum. BMC Genomics, 2011, 12, 446.	2.8	82
53	Synthetic microbe communities provide internal reference standards for metagenome sequencing and analysis. Nature Communications, 2018, 9, 3096.	12.8	81
54	Ultra-High-Yield Manufacture of Red Blood Cells from Hematopoietic Stem Cells. Tissue Engineering - Part C: Methods, 2011, 17, 1131-1137.	2.1	79

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55	Enhancing CO2-Valorization Using Clostridium autoethanogenum for Sustainable Fuel and Chemicals Production. Frontiers in Bioengineering and Biotechnology, 2020, 8, 204.	4.1	79
56	Stoichiometric modeling of Clostridium acetobutylicum fermentations with non-linear constraints. Journal of Biotechnology, 1999, 71, 191-205.	3.8	76
57	Functional proteomic analysis of GS-NS0 murine myeloma cell lines with varying recombinant monoclonal antibody production rate. Biotechnology and Bioengineering, 2006, 94, 830-841.	3.3	76
58	Molecular Control of Sucrose Utilization in Escherichia coli W, an Efficient Sucrose-Utilizing Strain. Applied and Environmental Microbiology, 2013, 79, 478-487.	3.1	76
59	Hemacytometer Cell Count Distributions: Implications of Non-Poisson Behavior. Biotechnology Progress, 1991, 7, 560-563.	2.6	74
60	Knock-in/Knock-out (KIKO) vectors for rapid integration of large DNA sequences, including whole metabolic pathways, onto the Escherichia coli chromosome at well-characterised loci. Microbial Cell Factories, 2013, 12, 60.	4.0	74
61	Construction of feasible and accurate kinetic models of metabolism: A Bayesian approach. Scientific Reports, 2016, 6, 29635.	3.3	72
62	Plant genome-scale metabolic reconstruction and modelling. Current Opinion in Biotechnology, 2013, 24, 271-277.	6.6	71
63	Characterization of Hematopoietic Cell Expansion, Oxygen Uptake, and Glycolysis in a Controlled, Stirred-Tank Bioreactor System. Biotechnology Progress, 1998, 14, 466-472.	2.6	68
64	Do genomeâ€scale models need exact solvers or clearer standards?. Molecular Systems Biology, 2015, 11, 831.	7.2	68
65	Blood cell manufacture: current methods and future challenges. Trends in Biotechnology, 2009, 27, 415-422.	9.3	67
66	Engineering and adaptive evolution of Escherichia coli for d-lactate fermentation reveals GatC as a xylose transporter. Metabolic Engineering, 2012, 14, 469-476.	7.0	65
67	Revisiting the Evolution and Taxonomy of Clostridia, a Phylogenomic Update. Genome Biology and Evolution, 2019, 11, 2035-2044.	2.5	65
68	Development of chemically defined medium for Mannheimia succiniciproducens based on its genome sequence. Applied Microbiology and Biotechnology, 2008, 79, 263-272.	3.6	63
69	Engineered Quorum Sensing Using Pheromone-Mediated Cell-to-Cell Communication in Saccharomyces cerevisiae. ACS Synthetic Biology, 2013, 2, 136-149.	3.8	62
70	Aerobic cultivation of Streptococcus zooepidemicus and the role of NADH oxidase. Biochemical Engineering Journal, 2003, 16, 153-162.	3.6	61
71	Amplifying the cellular reduction potential of. Journal of Biotechnology, 2003, 100, 33-41.	3.8	61
72	Cyclicâ€diâ€<scp>AMP</scp> synthesis by the diadenylate cyclase <scp>CdaA</scp> is modulated by the peptidoglycan biosynthesis enzyme <scp>GlmM</scp> in <scp>L</scp>actococcus lactis. Molecular Microbiology, 2016, 99, 1015-1027.	2.5	61

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73	High-Antibody-Producing Chinese Hamster Ovary Cells Up-Regulate Intracellular Protein Transport and Glutathione Synthesis. Journal of Proteome Research, 2015, 14, 609-618.	3.7	60
74	Relationship between oxygen uptake rate and time of infection of Sf9 insect cells infected with a recombinant baculovirus. Cytotechnology, 1994, 15, 157-167.	1.6	58
75	Evolution of the Hyaluronic Acid Synthesis (has) Operon in Streptococcus zooepidemicus and Other Pathogenic Streptococci. Journal of Molecular Evolution, 2008, 67, 13-22.	1.8	58
76	Systems-level engineering and characterisation of Clostridium autoethanogenum through heterologous production of poly-3-hydroxybutyrate (PHB). Metabolic Engineering, 2019, 53, 14-23.	7.0	57
77	Stable production of hyaluronic acid inStreptococcus zooepidemicus chemostats operated at high dilution rate. Biotechnology and Bioengineering, 2005, 90, 685-693.	3.3	55
78	Reducing Recon 2 for steady-state flux analysis of HEK cell culture. Journal of Biotechnology, 2014, 184, 172-178.	3.8	54
79	Dynamic metabolic flux analysis using B-splines to study the effects of temperature shift on CHO cell metabolism. Metabolic Engineering Communications, 2015, 2, 46-57.	3.6	54
80	Redox controls metabolic robustness in the gas-fermenting acetogen Clostridium autoethanogenum. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13168-13175.	7.1	54
81	Coupling gene regulatory patterns to bioprocess conditions to optimize synthetic metabolic modules for improved sesquiterpene production in yeast. Biotechnology for Biofuels, 2017, 10, 43.	6.2	53
82	Minimizing Clonal Variation during Mammalian Cell Line Engineering for Improved Systems Biology Data Generation. ACS Synthetic Biology, 2018, 7, 2148-2159.	3.8	51
83	The hematopoietic stem cell niche: what are we trying to replicate?. Journal of Chemical Technology and Biotechnology, 2008, 83, 421-443.	3.2	50
84	2,2-Diphenyl-1-picrylhydrazyl as a screening tool for recombinant monoterpene biosynthesis. Microbial Cell Factories, 2013, 12, 76.	4.0	48
85	Kinetics of baculovirus replication and release using real-time quantitative polymerase chain reaction. Biotechnology and Bioengineering, 2002, 77, 476-480.	3.3	47
86	Accuracy of the endpoint assay for virus titration. Cytotechnology, 1992, 8, 231-236.	1.6	46
87	Development of sucrose-utilizing Escherichia coli K-12 strain by cloning Î²-fructofuranosidases and its application for l-threonine production. Applied Microbiology and Biotechnology, 2010, 88, 905-913.	3.6	46
88	HR Index-A Simple Method for the Prediction of Oxygen Uptake. Medicine and Science in Sports and Exercise, 2011, 43, 2005-2012.	0.4	46
89	Enhanced polyhydroxybutyrate production in transgenic sugarcane. Plant Biotechnology Journal, 2012, 10, 569-578.	8.3	46
90	Improving culture performance and antibody production in CHO cell culture processes by reducing the Warburg effect. Biotechnology and Bioengineering, 2018, 115, 2315-2327.	3.3	46

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91	What CHO is made of: Variations in the biomass composition of Chinese hamster ovary cell lines. Metabolic Engineering, 2020, 61, 288-300.	7.0	46
92	Dual gene expression cassette vectors with antibiotic selection markers for engineering in Saccharomyces cerevisiae. Microbial Cell Factories, 2013, 12, 96.	4.0	45
93	Clinical scale ex vivo manufacture of neutrophils from hematopoietic progenitor cells. Biotechnology and Bioengineering, 2009, 104, 832-840.	3.3	44
94	Genome Scale Transcriptomics of Baculovirus-Insect Interactions. Viruses, 2013, 5, 2721-2747.	3.3	44
95	Evolutionary Engineering Improves Tolerance for Replacement Jet Fuels in Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2015, 81, 3316-3325.	3.1	44
96	Surface-bound stem cell factor and the promotion of hematopoietic cell expansion. Biomaterials, 2009, 30, 4047-4052.	11.4	43
97	Insight into hyaluronic acid molecular weight control. Applied Microbiology and Biotechnology, 2014, 98, 6947-6956.	3.6	43
98	Hemin Reconstitutes Proton Extrusion in an H + -ATPase-Negative Mutant of Lactococcus lactis. Journal of Bacteriology, 2001, 183, 6707-6709.	2.2	42
99	Mammalian cells as biopharmaceutical production hosts in the age of omics. Biotechnology Journal, 2012, 7, 75-89.	3.5	42
100	Dynamic Balancing of Isoprene Carbon Sources Reflects Photosynthetic and Photorespiratory Responses to Temperature Stress. Plant Physiology, 2014, 166, 2051-2064.	4.8	41
101	Model-guided dynamic control of essential metabolic nodes boosts acetyl-coenzyme Aâ€“dependent bioproduction in rewired Pseudomonas putida. Metabolic Engineering, 2021, 67, 373-386.	7.0	41
102	Generation and Maturation of Dendritic Cells for Clinical Application Under Serum-Free Conditions. Journal of Immunotherapy, 2005, 28, 599-609.	2.4	40
103	Increased biomass yield of Lactococcus lactis during energetically limited growth and respiratory conditions. Biotechnology and Applied Biochemistry, 2008, 50, 25-33.	3.1	39
104	Toward industrial production of isoprenoids in Escherichia coli: Lessons learned from CRISPRâ€Cas9 based optimization of a chromosomally integrated mevalonate pathway. Biotechnology and Bioengineering, 2018, 115, 1000-1013.	3.3	39
105	Multicopy Targeted Integration for Accelerated Development of High-Producing Chinese Hamster Ovary Cells. ACS Synthetic Biology, 2020, 9, 2546-2561.	3.8	39
106	Metabolic Profiling and Flux Analysis of MEL-2 Human Embryonic Stem Cells during Exponential Growth at Physiological and Atmospheric Oxygen Concentrations. PLoS ONE, 2014, 9, e112757.	2.5	38
107	Representing genetic variation with synthetic DNA standards. Nature Methods, 2016, 13, 784-791.	19.0	37
108	Ammonia inhibition of hybridomas propagated in batch, fed-batch, and continuous culture. Biotechnology and Bioengineering, 1994, 43, 434-438.	3.3	36

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109	ll-ACHRB: a scalable algorithm for sampling the feasible solution space of metabolic networks. Bioinformatics, 2016, 32, 2330-2337.	4.1	36
110	Deletion of cscR in Escherichia coli W improves growth and poly-3-hydroxybutyrate (PHB) production from sucrose in fed batch culture. Journal of Biotechnology, 2011, 156, 275-278.	3.8	35
111	Reconstruction of the Saccharopolyspora erythraea genome-scale model and its use for enhancing erythromycin production. Antonie Van Leeuwenhoek, 2012, 102, 493-502.	1.7	35
112	An Expanded Heterologous GAL Promoter Collection for Diauxie-Inducible Expression in Saccharomyces cerevisiae. ACS Synthetic Biology, 2018, 7, 748-751.	3.8	35
113	Modelling the growth and protein production by insect cells following infection by a recombinant baculovirus in suspension culture. Cytotechnology, 1992, 9, 149-155.	1.6	33
114	A transferable sucrose utilization approach for non-sucrose-utilizing Escherichia coli strains. Biotechnology Advances, 2012, 30, 1001-1010.	11.7	33
115	Saccharopolyspora erythraeaâ€™sgenome is organised in high-order transcriptional regions mediated by targeted degradation at the metabolic switch. BMC Genomics, 2013, 14, 15.	2.8	33
116	A General Framework for Thermodynamically Consistent Parameterization and Efficient Sampling of Enzymatic Reactions. PLoS Computational Biology, 2015, 11, e1004195.	3.2	33
117	Method for the generation and cultivation of functional three-dimensional mammary constructs without exogenous extracellular matrix. Cell and Tissue Research, 2005, 320, 207-210.	2.9	32
118	IL10 and IL12B polymorphisms each influence ILâ€12p70 secretion by dendritic cells in response to LPS. Immunology and Cell Biology, 2006, 84, 227-232.	2.3	32
119	Altered Fatty Acid Metabolism in Long Duration Road Transport: An NMR-based Metabonomics Study in Sheep. Journal of Proteome Research, 2011, 10, 1073-1087.	3.7	32
120	Network Thermodynamic Curation of Human and Yeast Genome-Scale Metabolic Models. Biophysical Journal, 2014, 107, 493-503.	0.5	32
121	Multicenter European Prevalence Study of Neurocognitive Impairment and Associated Factors in HIV Positive Patients. AIDS and Behavior, 2018, 22, 1573-1583.	2.7	32
122	Plant genome-scale reconstruction: from single cell to multi-tissue modelling and omics analyses. Current Opinion in Biotechnology, 2018, 49, 42-48.	6.6	32
123	Attenuating apoptosis in Chinese hamster ovary cells for improved biopharmaceutical production. Biotechnology and Bioengineering, 2020, 117, 1187-1203.	3.3	31
124	On the reconstruction of the Mus musculus genome-scale metabolic network model. Genome Informatics, 2008, 21, 89-100.	0.4	31
125	Tissue transplantation by stealthâ€”Coherent alginate microcapsules for immunoisolation. Biochemical Engineering Journal, 2010, 48, 337-347.	3.6	30
126	Emulsion strategies in the microencapsulation of cells: Pathways to thin coherent membranes. Biotechnology and Bioengineering, 2005, 92, 45-53.	3.3	29

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127	ON THE RECONSTRUCTION OF THE MUS MUSCULUS GENOME-SCALE METABOLIC NETWORK MODEL. , 2008, , .		29
128	Quantitative analysis of intracellular sugar phosphates and sugar nucleotides in encapsulated streptococci using HPAECâ€PAD. Biotechnology Journal, 2009, 4, 58-63.	3.5	29
129	The ascorbic acid paradox. Biochemical and Biophysical Research Communications, 2010, 400, 466-470.	2.1	29
130	Advances in analytical tools for high throughput strain engineering. Current Opinion in Biotechnology, 2018, 54, 33-40.	6.6	29
131	Shedding light: The importance of reverse transcription efficiency standards in data interpretation. Biomolecular Detection and Quantification, 2019, 17, 100077.	7.0	29
132	Dynamic regulation of gene expression using sucrose responsive promoters and RNA interference in Saccharomyces cerevisiae. Microbial Cell Factories, 2015, 14, 43.	4.0	28
133	RNAâ€Seq Highlights High Clonal Variation in Monoclonal Antibody Producing CHO Cells. Biotechnology Journal, 2018, 13, e1700231.	3.5	28
134	Transcriptome Sequencing of and Microarray Development for a Helicoverpa zea Cell Line to Investigate In Vitro Insect Cell-Baculovirus Interactions. PLoS ONE, 2012, 7, e36324.	2.5	28
135	Synthesis and characterization of alginate/poly-L-ornithine/alginate microcapsules for local immunosuppression. Journal of Microencapsulation, 2008, 25, 387-398.	2.8	27
136	In vitro production of Helicoverpa baculovirus biopesticidesâ€"Automated selection of insect cell clones for manufacturing and systems biology studies. Journal of Virological Methods, 2011, 175, 197-205.	2.1	27
137	Escherichia coli W shows fast, highly oxidative sucrose metabolism and low acetate formation. Applied Microbiology and Biotechnology, 2014, 98, 9033-9044.	3.6	27
138	The Role of Hyaluronic Acid Precursor Concentrations in Molecular Weight Control in Streptococcus zooepidemicus. Molecular Biotechnology, 2014, 56, 147-156.	2.4	26
139	A depth-first search algorithm to compute elementary flux modes by linear programming. BMC Systems Biology, 2014, 8, 94.	3.0	26
140	Real-time method for determining the colony-forming cell content of human hematopoietic cell cultures. , 1997, 55, 693-700.		25
141	Engineering a mammalian super producer. Journal of Chemical Technology and Biotechnology, 2011, 86, 905-914.	3.2	25
142	Genome scale analysis of differential mRNA expression of Helicoverpa zea insect cells infected with a H. armigera baculovirus. Virology, 2013, 444, 158-170.	2.4	25
143	Toward Synthetic Biology Strategies for Adipic Acid Production: AnÂin Silico Tool for Combined Thermodynamics and Stoichiometric Analysis of Metabolic Networks. ACS Synthetic Biology, 2018, 7, 490-509.	3.8	25
144	Systems analysis of methylerythritol-phosphate pathway flux in E. coli: insights into the role of oxidative stress and the validity of lycopene as an isoprenoid reporter metabolite. Microbial Cell Factories, 2015, 14, 193.	4.0	24

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145	Metabolic Reconstruction of Setaria italica: A Systems Biology Approach for Integrating Tissue-Specific Omics and Pathway Analysis of Bioenergy Grasses. Frontiers in Plant Science, 2016, 7, 1138.	3.6	24
146	Monocyte-derived DC Primed With TLR Agonists Secrete IL-12p70 in a CD40-dependent Manner Under Hyperthermic Conditions. Journal of Immunotherapy, 2006, 29, 606-615.	2.4	23
147	Manufactured RBC â€" Rivers of blood, or an oasis in the desert?. Biotechnology Advances, 2011, 29, 661-666.	11.7	23
148	Improved production of propionic acid using genome shuffling. Biotechnology Journal, 2017, 12, 1600120.	3.5	23
149	SmartPeak Automates Targeted and Quantitative Metabolomics Data Processing. Analytical Chemistry, 2020, 92, 15968-15974.	6.5	23
150	Temporal Dynamics of the Saccharopolyspora erythraea Phosphoproteome. Molecular and Cellular Proteomics, 2014, 13, 1219-1230.	3.8	22
151	Cell cycle model to describe animal cell size variation and lag between cell number and biomass dynamics. , 1997, 56, 372-379.		21
152	Lactic acid enrichment with inorganic nanofiltration and molecular sieving membranes by pervaporation. Food and Bioproducts Processing, 2008, 86, 290-295.	3.6	21
153	Re-annotation of the Saccharopolyspora erythraea genome using a systems biology approach. BMC Genomics, 2013, 14, 699.	2.8	21
154	The use of an acetoacetylâ€Co<scp>A</scp> synthase in place of a Î²â€ketothiolase enhances polyâ€3â€hydroxybutyrate production in sugarcane mesophyll cells. Plant Biotechnology Journal, 2015, 13, 700-707.	8.3	21
155	Overexpression of the regulatory subunit of glutamateâ€cysteine ligase enhances monoclonal antibody production in CHO cells. Biotechnology and Bioengineering, 2017, 114, 1825-1836.	3.3	21
156	Control of chitin and N-acetylglucosamine utilization in Saccharopolyspora erythraea. Microbiology (United Kingdom), 2014, 160, 1914-1928.	1.8	20
157	Production of Industrially Relevant Isoprenoid Compounds in Engineered Microbes. Microbiology Monographs, 2015, , 303-334.	0.6	20
158	Engineering Escherichia coli for propionic acid production through the Woodâ€"Werkman cycle. Biotechnology and Bioengineering, 2020, 117, 167-183.	3.3	20
159	Enhanced Gametocyte Formation in Erythrocyte Progenitor Cells: A Site-Specific Adaptation by Plasmodium falciparum. Journal of Infectious Diseases, 2013, 208, 1170-1174.	4.0	19
160	Adaptation of hydroxymethylbutenyl diphosphate reductase enables volatile isoprenoid production. ELife, 2020, 9, .	6.0	19
161	Irritable bowel syndrome and microbiome; Switching from conventional diagnosis and therapies to personalized interventions. Journal of Translational Medicine, 2022, 20, 173.	4.4	19
162	Understanding plasmid effect on hyaluronic acid molecular weight produced by Streptococcus equi subsp. zooepidemicus. Metabolic Engineering, 2010, 12, 62-69.	7.0	18

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163	Factors affecting polyhydroxybutyrate accumulation in mesophyll cells of sugarcane and switchgrass. BMC Biotechnology, 2014, 14, 83.	3.3	18
164	Global dynamics of Escherichia coli phosphoproteome in central carbon metabolism under changing culture conditions. Journal of Proteomics, 2015, 126, 24-33.	2.4	18
165	The Saccharomyces cerevisiae pheromone-response is a metabolically active stationary phase for bio-production. Metabolic Engineering Communications, 2016, 3, 142-152.	3.6	18
166	A Pan-Genome Guided Metabolic Network Reconstruction of Five Propionibacterium Species Reveals Extensive Metabolic Diversity. Genes, 2020, 11, 1115.	2.4	18
167	Synthesis of Short-Chain-Length/Medium-Chain Length Polyhydroxyalkanoate (PHA) Copolymers in Peroxisomes of Transgenic Sugarcane Plants. Tropical Plant Biology, 2011, 4, 170-184.	1.9	17
168	Chemical inhibition of acetyl coenzyme <scp>A</scp> carboxylase as a strategy to increase polyhydroxybutyrate yields in transgenic sugarcane. Plant Biotechnology Journal, 2013, 11, 1146-1151.	8.3	17
169	Systems biology and metabolic modelling unveils limitations to polyhydroxybutyrate accumulation in sugarcane leaves; lessons for <scp>C</scp>₄ engineering. Plant Biotechnology Journal, 2016, 14, 567-580.	8.3	17
170	Modelling baculovirus infection of insect cells in culture. Cytotechnology, 1996, 20, 209-219.	1.6	16
171	Short-term exposure of umbilical cord blood CD34+ cells to granulocyteâ€“macrophage colony-stimulating factor early in culture improves ex vivo expansion of neutrophils. Cytotherapy, 2011, 13, 366-377.	0.7	16
172	Kinetic characterization of the group II helicoverpa armigera nucleopolyhedrovirus propagated in suspension cell cultures: Implications for development of a biopesticides production process. Biotechnology Progress, 2011, 27, 614-624.	2.6	16
173	Development of quenching and washing protocols for quantitative intracellular metabolite analysis of uninfected and baculovirus-infected insect cells. Methods, 2012, 56, 396-407.	3.8	16
174	Concise Review: Next-Generation Cell Therapies to Prevent Infections in Neutropenic Patients. Stem Cells Translational Medicine, 2014, 3, 541-548.	3.3	16
175	Recycling carbon for sustainable protein production using gas fermentation. Current Opinion in Biotechnology, 2022, 76, 102723.	6.6	16
176	The kinetics of baculovirus adsorption to insect cells in suspension culture. Cytotechnology, 1996, 21, 155-163.	1.6	15
177	Importance of virusâ€“medium interactions on the biological activity of wild-type Heliothine nucleopolyhedroviruses propagated via suspension insect cell cultures. Journal of Virological Methods, 2006, 136, 267-272.	2.1	15
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