Michael J Betenbaugh

List of Publications by Year
in descending order

258	12,785	23500 58	35952 97
papers	citations	h-index	g-index

270	270	270	12606
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The genomic sequence of the Chinese hamster ovary (CHO)-K1 cell line. Nature Biotechnology, 2011, 29, 735-741.	9.4	699
2	A green light for engineered algae: redirecting metabolism to fuel a biotechnology revolution. Current Opinion in Biotechnology, 2008, 19, 430-436.	3.3	524
3	Sex, age, and hospitalization drive antibody responses in a COVID-19 convalescent plasma donor population. Journal of Clinical Investigation, 2020, 130, 6141-6150.	3.9	375
4	Genomic landscapes of Chinese hamster ovary cell lines as revealed by the Cricetulus griseus draft genome. Nature Biotechnology, 2013, 31, 759-765.	9.4	340
5	The effect of mixotrophy on microalgal growth, lipid content, and expression levels of three pathway genes in Chlorella sorokiniana. Applied Microbiology and Biotechnology, 2011, 91, 835-844.	1.7	248
6	A critical analysis of paddlewheel-driven raceway ponds for algal biofuel production at commercial scales. Algal Research, 2014, 4, 76-88.	2.4	234
7	Life and death in mammalian cell culture: strategies for apoptosis inhibition. Trends in Biotechnology, 2004, 22, 174-180.	4.9	205
8	A Consensus Genome-scale Reconstruction of Chinese Hamster Ovary Cell Metabolism. Cell Systems, 2016, 3, 434-443.e8.	2.9	205
9	COVID-19 Serology at Population Scale: SARS-CoV-2-Specific Antibody Responses in Saliva. Journal of Clinical Microbiology, 2020, 59, .	1.8	193
10	Determination of Nucleotides and Sugar Nucleotides Involved in Protein Glycosylation by High-Performance Anion-Exchange Chromatography: Sugar Nucleotide Contents in Cultured Insect Cells and Mammalian Cells. Analytical Biochemistry, 2001, 293, 129-137.	1.1	192
11	Proteomic Analysis of Chinese Hamster Ovary Cells. Journal of Proteome Research, 2012, 11, 5265-5276.	1.8	168
12	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
13	A mathematical model of N-linked glycosylation. Biotechnology and Bioengineering, 2005, 92, 711-728.	1.7	163
14	The emerging CHO systems biology era: harnessing the â€˜omics revolution for biotechnology. Current Opinion in Biotechnology, 2013, 24, 1102-1107.	3.3	159
15	Controlling -linked glycan site occupancy. Biochimica Et Biophysica Acta - General Subjects, 2005, 1726, 121-137.	1.1	149
16	Design and Production of Bispecific Antibodies. Antibodies, 2019, 8, 43.	1.2	146
17	Transcriptome and proteome analysis of Chinese hamster ovary cells under low temperature and butyrate treatment. Journal of Biotechnology, 2010, 145, 143-159.	1.9	137
18	The effects of alternative pretreatment strategies on anaerobic digestion and methane production from different algal strains. Bioresource Technology, 2014, 155, 366-372.	4.8	132

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19	Comparing N-glycan processing in mammalian cell lines to native and engineered lepidopteran insect cell lines. Glycoconjugate Journal, 2004, 21, 343-360.	1.4	131
20	Microalgal biomass production and carbon dioxide sequestration from an integrated ethanol biorefinery in Iowa: A technical appraisal and economic feasibility evaluation. Biomass and Bioenergy, 2011, 35, 3865-3876.	2.9	128
21	An In Vitro Uniaxial Stretch Model for Axonal Injury. Annals of Biomedical Engineering, 2003, 31, 589-598.	1.3	112
22	Comparative Analyses of Three Chlorella Species in Response to Light and Sugar Reveal Distinctive Lipid Accumulation Patterns in the Microalga C. sorokiniana. PLoS ONE, 2014, 9, e92460.	1.1	110
23	Bioprospecting of microalgae for integrated biomass production and phytoremediation of unsterilized wastewater and anaerobic digestion centrate. Applied Microbiology and Biotechnology, 2015, 99, 6139-6154.	1.7	107
24	Differential N-Glycan Patterns of Secreted and Intracellular IgG Produced in Trichoplusia ni Cells. Journal of Biological Chemistry, 1997, 272, 9062-9070.	1.6	106
25	Modifying secretion and post-translational processing in insect cells. Current Opinion in Biotechnology, 1999, 10, 142-145.	3.3	99
26	Part II. Overexpression ofbcl-2 family members enhances survival of mammalian cells in response to various culture insults. , 2000, 67, 555-564.		99
27	Overcoming apoptosis: new methods for improving protein-expression systems. Trends in Biotechnology, 1998, 16, 88-95.	4.9	97
28	Quantification of cell culture factors affecting recombinant protein yields in baculovirus-infected insect cells. Biotechnology and Bioengineering, 1992, 39, 614-618.	1.7	96
29	A reference genome of the Chinese hamster based on a hybrid assembly strategy. Biotechnology and Bioengineering, 2018, 115, 2087-2100.	1.7	95
30	Expression of antiâ€apoptosis genes alters lactate metabolism of Chinese Hamster Ovary cells in culture. Biotechnology and Bioengineering, 2009, 103, 592-608.	1.7	92
31	Enhanced cell culture performance using inducible anti-apoptotic genes E1B-19K and Aven in the production of a monoclonal antibody with Chinese hamster ovary cells. Biotechnology and Bioengineering, 2007, 97, 877-892.	1.7	90
32	A mathematical model to derive N-glycan structures and cellular enzyme activities from mass spectrometric data. Glycobiology, 2009, 19, 1163-1175.	1.3	90
33	Inhibiting apoptosis in mammalian cell culture using the caspase inhibitor XIAP and deletion mutants. Biotechnology and Bioengineering, 2002, 77, 704-716.	1.7	88
34	Glucose depletion activates mmu-miR-466h-5p expression through oxidative stress and inhibition of histone deacetylation. Nucleic Acids Research, 2012, 40, 7291-7302.	6.5	87
35	Cloning and Expression of the HumanN-Acetylneuraminic Acid Phosphate Synthase Gene with 2-Keto-3-deoxy-d-glycero- d-galacto-nononic Acid Biosynthetic Ability. Journal of Biological Chemistry, 2000, 275, 17869-17877.	1.6	86
36	A novel microRNA mmuâ€miRâ€466h affects apoptosis regulation in mammalian cells. Biotechnology and Bioengineering, 2011, 108, 1651-1661.	1.7	86

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37	Genome-Scale Metabolic Model for the Green Alga Chlorella vulgaris UTEX 395 Accurately Predicts Phenotypes under Autotrophic, Heterotrophic, and Mixotrophic Growth Conditions. Plant Physiology, 2016, 172, 589-602.	2.3	86
38	N-glycan patterns of human transferrin produced in Trichoplusia ni insect cells: effects of mammalian galactosyltransferase. Glycobiology, 2000, 10, 837-847.	1.3	83
39	Aven and Bcl-xL enhance protection against apoptosis for mammalian cells exposed to various culture conditions. Biotechnology and Bioengineering, 2004, 85, 589-600.	1.7	82
40	Molecular Chaperones Stimulate the Functional Expression of the Cocaine-sensitive Serotonin Transporter. Journal of Biological Chemistry, 1999, 274, 17551-17558.	1.6	81
41	Links between metabolism and apoptosis in mammalian cells: Applications for anti-apoptosis engineering. Metabolic Engineering, 2007, 9, 317-326.	3.6	80
42	Part I. Bcl-2 and bcl-xL limit apoptosis upon infection with alphavirus vectors. Biotechnology and Bioengineering, 2000, 67, 544-554.	1.7	79
43	A perspective on microarrays: current applications, pitfalls, and potential uses. Microbial Cell Factories, 2007, 6, 4.	1.9	77
44	Antibody glycoengineering strategies in mammalian cells. Biotechnology and Bioengineering, 2018, 115, 1378-1393.	1.7	76
45	Durable SARS-CoV-2 B cell immunity after mild or severe disease. Journal of Clinical Investigation, 2021, 131, .	3.9	76
46	Glycoengineering of Chinese hamster ovary cells for enhanced erythropoietin Nâ€glycan branching and sialylation. Biotechnology and Bioengineering, 2015, 112, 2343-2351.	1.7	75
47	Sequencing the CHO DXB11 genome reveals regional variations in genomic stability and haploidy. BMC Genomics, 2015, 16, 160.	1.2	75
48	Coexpression of Molecular Chaperone BiP Improves Immunoglobulin Solubility and IgG Secretion from Trichoplusia ni Insect Cells. Biotechnology Progress, 1997, 13, 96-104.	1.3	74
49	Chinese hamster genome database: An online resource for the CHO community at www.CHOgenome.org. Biotechnology and Bioengineering, 2012, 109, 1353-1356.	1.7	74
50	Genome-scale reconstructions of the mammalian secretory pathway predict metabolic costs and limitations of protein secretion. Nature Communications, 2020, 11, 68.	5.8	74
51	The effect of iron on growth, lipid accumulation, and gene expression profile of the freshwater microalga Chlorella sorokiniana. Applied Microbiology and Biotechnology, 2014, 98, 9473-9481.	1.7	72
52	Structure and synthesis of polyisoprenoids used in N-glycosylation across the three domains of life. Biochimica Et Biophysica Acta - General Subjects, 2009, 1790, 485-494.	1.1	71
53	SnapShot: N-Glycosylation Processing Pathways across Kingdoms. Cell, 2017, 171, 258-258.e1.	13.5	71
54	Stable inhibition of mmu-miR-466h-5p improves apoptosis resistance and protein production in CHO cells. Metabolic Engineering, 2013, 16, 87-94.	3.6	70

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55	Sex Differences in Lung Imaging and SARS-CoV-2 Antibody Responses in a COVID-19 Golden Syrian Hamster Model. MBio, 2021, 12, e0097421.	1.8	69
56	Study of caspase inhibitors for limiting death in mammalian cell culture. Biotechnology and Bioengineering, 2003, 81, 329-340.	1.7	68
57	Karyotype variation of CHO host cell lines over time in culture characterized by chromosome counting and chromosome painting. Biotechnology and Bioengineering, 2018, 115, 165-173.	1.7	67
58	Overexpression of a cytosolic chaperone to improve solubility and secretion of a recombinant IgG protein in insect cells. Biotechnology and Bioengineering, 1998, 58, 196-203.	1.7	66
59	Conversion of MDCK cell line to suspension culture by transfecting with human siat7e gene and its application for influenza virus production. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14802-14807.	3.3	66
60	QUANTITY: An Isobaric Tag for Quantitative Glycomics. Scientific Reports, 2015, 5, 17585.	1.6	65
61	Anaerobic digestion of lipid-extracted Auxenochlorella protothecoides biomass for methane generation and nutrient recovery. Bioresource Technology, 2015, 183, 229-239.	4.8	65
62	Mimicking lichens: incorporation of yeast strains together with sucrose-secreting cyanobacteria improves survival, growth, ROS removal, and lipid production in a stable mutualistic co-culture production platform. Biotechnology for Biofuels, 2017, 10, 55.	6.2	65
63	Recombinant Antibody Production in CHO and NS0 Cells: Differences and Similarities. BioDrugs, 2018, 32, 571-584.	2.2	65
64	Biosynthesis of human-type N-glycans in heterologous systems. Current Opinion in Structural Biology, 2004, 14, 601-606.	2.6	64
65	Early prediction of instability of chinese hamster ovary cell lines expressing recombinant antibodies and antibodyâ€fusion proteins. Biotechnology and Bioengineering, 2012, 109, 1016-1030.	1.7	64
66	Physiological evaluation of a new Chlorella sorokiniana isolate for its biomass production and lipid accumulation in photoautotrophic and heterotrophic cultures. Biotechnology and Bioengineering, 2012, 109, 1958-1964.	1.7	62
67	Integration of the Transcriptome and Glycome for Identification of Glycan Cell Signatures. PLoS Computational Biology, 2013, 9, e1002813.	1.5	61
68	Effects of Co-Expressing Chaperone BiP on Functional Antibody Production in the Baculovirus System. Protein Expression and Purification, 1994, 5, 595-603.	0.6	60
69	Production andN-glycan analysis of secreted human erythropoietin glycoprotein in stably transfectedDrosophila S2 cells. Biotechnology and Bioengineering, 2005, 92, 452-461.	1.7	60
70	Cloning and expression of human sialic acid pathway genes to generate CMP-sialic acids in insect cells. Glycoconjugate Journal, 2001, 18, 205-213.	1.4	58
71	Expression of a functional Drosophila melanogasterN-acetylneuraminic acid (Neu5Ac) phosphate synthase gene: evidence for endogenous sialic acid biosynthetic ability in insects. Glycobiology, 2002, 12, 73-83.	1.3	58
72	Enhancement of transient gene expression and culture viability using Chinese hamster ovary cells overexpressing Bclâ€x_L. Biotechnology and Bioengineering, 2008, 101, 567-578.	1.7	58

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73	Effects of dissolved oxygen shock on the stability of recombinantEscherichia coli containing plasmid pKN401. Biotechnology and Bioengineering, 1987, 29, 85-91.	1.7	56
74	Engineering Sialic Acid Synthetic Ability into Insect Cells:Â Identifying Metabolic Bottlenecks and Devising Strategies To Overcome Themâ€. Biochemistry, 2003, 42, 15215-15225.	1.2	56
75	I. Study of protein aggregation due to heat denaturation: A structural approach using circular dichroism spectroscopy, nuclear magnetic resonance, and static light scattering. , 1998, 59, 273-280.		55
76	Synthetic microbial communities of heterotrophs and phototrophs facilitate sustainable growth. Nature Communications, 2020, 11, 3803.	5.8	55
77	Humanization of Lepidopteran Insect-Cell-Produced Glycoproteins. Accounts of Chemical Research, 2003, 36, 613-620.	7.6	54
78	A multiâ€pronged investigation into the effect of glucose starvation and culture duration on fedâ€batch CHO cell culture. Biotechnology and Bioengineering, 2015, 112, 2172-2184.	1.7	54
79	Phytoremediation of agriculture runoff by filamentous algae poly-culture for biomethane production, and nutrient recovery for secondary cultivation of lipid generating microalgae. Bioresource Technology, 2016, 222, 294-308.	4.8	54
80	Environmental stimuli drive a transition from cooperation to competition in synthetic phototrophic communities. Nature Microbiology, 2019, 4, 2184-2191.	5.9	54
81	Mclâ€1 overexpression leads to higher viabilities and increased production of humanized monoclonal antibody in Chinese hamster ovary cells. Biotechnology Progress, 2009, 25, 1161-1168.	1.3	53
82	Nucleocapsid- and virus-like particles assemble in cells infected with recombinant baculoviruses or vaccinia viruses expressing the M and the S segments of Hantaan virus. Virus Research, 1995, 38, 111-124.	1.1	52
83	Engineering cells to improve protein expression. Current Opinion in Structural Biology, 2014, 26, 32-38.	2.6	52
84	Bcl-2 family in inter-organelle modulation of calcium signaling; roles in bioenergetics and cell survival. Journal of Bioenergetics and Biomembranes, 2014, 46, 1-15.	1.0	52
85	Combining caspase and mitochondrial dysfunction inhibitors of apoptosis to limit cell death in mammalian cell cultures. Biotechnology and Bioengineering, 2006, 94, 362-372.	1.7	51
86	Rescue of Immunoglobulins from Insolubility Is Facilitated by PDI in the Baculovirus Expression System. Protein Expression and Purification, 1996, 7, 281-288.	0.6	50
87	Comparison of Bcl-2 to a Bcl-2 deletion mutant for mammalian cells exposed to culture insults. Biotechnology and Bioengineering, 2001, 73, 211-222.	1.7	49
88	Enhancement of cell proliferation in various mammalian cell lines by gene insertion of a cyclin-dependent kinase homolog. BMC Biotechnology, 2007, 7, 71.	1.7	49
89	Predicting Dynamic Metabolic Demands in the Photosynthetic Eukaryote Chlorella vulgaris. Plant Physiology, 2018, 176, 450-462.	2.3	49
90	Purification, Characterization, and Cloning of a Spodoptera frugiperda Sf9 Î²-N-Acetylhexosaminidase That Hydrolyzes Terminal N-Acetylglucosamine on the N-Glycan Core. Journal of Biological Chemistry, 2006, 281, 19545-19560.	1.6	48

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91	The impact of anti-apoptotic gene Bcl-2âˆ† expression on CHO central metabolism. Metabolic Engineering, 2014, 25, 92-102.	3.6	48
92	Physiologic and pathophysiologic consequences of altered sialylation and glycosylation on ion channel function. Biochemical and Biophysical Research Communications, 2014, 453, 243-253.	1.0	48
93	Synergistic co-digestion of wastewater grown algae-bacteria polyculture biomass and cellulose to optimize carbon-to-nitrogen ratio and application of kinetic models to predict anaerobic digestion energy balance. Bioresource Technology, 2018, 269, 210-220.	4.8	48
94	A comparison of the properties of a Bcl-xL variant to the wild-type anti-apoptosis inhibitor in mammalian cell cultures. Metabolic Engineering, 2003, 5, 230-245.	3.6	46
95	Highâ€throughput screening and selection of mammalian cells for enhanced protein production. Biotechnology Journal, 2016, 11, 853-865.	1.8	45
96	N-Glycosylation of IgG and IgG-Like Recombinant Therapeutic Proteins: Why Is It Important and How Can We Control It?. Annual Review of Chemical and Biomolecular Engineering, 2020, 11, 311-338.	3.3	45
97	An improved colony PCR procedure for genetic screening of Chlorella and related microalgae. Biotechnology Letters, 2011, 33, 1615-1619.	1.1	44
98	Cellular Trafficking and Photochemical Internalization of Cell Penetrating Peptide Linked Cargo Proteins: A Dual Fluorescent Labeling Study. Bioconjugate Chemistry, 2011, 22, 556-566.	1.8	43
99	Application of 13C flux analysis to identify high-productivity CHO metabolic phenotypes. Metabolic Engineering, 2017, 43, 218-225.	3.6	43
100	Comprehensive Glycoproteomic Analysis of Chinese Hamster Ovary Cells. Analytical Chemistry, 2018, 90, 14294-14302.	3.2	42
101	Effects of plasmid amplification and recombinant gene expression on the growth kinetics of recombinantE. coli. Biotechnology and Bioengineering, 1989, 33, 1425-1436.	1.7	41
102	Antiapoptosis chemicals prolong productive lifetimes of mammalian cells upon Sindbis virus vector infection. Biotechnology and Bioengineering, 1999, 65, 298-305.	1.7	41
103	Complex-type biantennary N-glycans of recombinant human transferrin from Trichoplusia ni insect cells expressing mammalian beta-1,4-galactosyltransferase and beta-1,2-N-acetylglucosaminyltransferase II. Glycobiology, 2003, 13, 23-34.	1.3	41
104	Large-scale screening identifies a novel microRNA, miR-15a-3p, which induces apoptosis in human cancer cell lines. RNA Biology, 2013, 10, 287-300.	1.5	41
105	The non-apoptotic action of Bcl-xL: regulating Ca2+ signaling and bioenergetics at the ER-mitochondrion interface. Journal of Bioenergetics and Biomembranes, 2016, 48, 211-225.	1.0	41
106	Mixed Trophic State Production Process for Microalgal Biomass with High Lipid Content for Generating Biodiesel and Biogas. Bioenergy Research, 2014, 7, 1174-1185.	2.2	40
107	Systems Glycobiology: Integrating Glycogenomics, Glycoproteomics, Glycomics, and Other â€˜Omics Data Sets to Characterize Cellular Glycosylation Processes. Journal of Molecular Biology, 2016, 428, 3337-3352.	2.0	39
108	Model-based analysis of N-glycosylation in Chinese hamster ovary cells. PLoS ONE, 2017, 12, e0175376.	1.1	39

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109	Integrated Genome and Protein Editing Swaps Î±â€2,6 Sialylation for Î±â€2,3 Sialic Acid on Recombinant Antibodies from CHO. Biotechnology Journal, 2017, 12, 1600502.	1.8	38
110	II. Electrostatic effect in the aggregation of heat-denatured RNase A and implications for protein additive design. , 1998, 59, 281-285.		37
111	Anti-apoptotic genes Aven and E1B-19K enhance performance of BHK cells engineered to express recombinant factor VIII in batch and low perfusion cell culture. Biotechnology and Bioengineering, 2007, 98, 825-841.	1.7	37
112	Improvement of product yields by temperature-shifting ofEscherichia coli cultures containing plasmid pOU140. Biotechnology and Bioengineering, 1987, 29, 513-519.	1.7	36
113	Optimization of tetracyclineâ€responsive recombinant protein production and effect on cell growth and ER stress in mammalian cells. Biotechnology and Bioengineering, 2005, 91, 722-732.	1.7	36
114	False positive reactivity of recombinant, diagnostic, glycoproteins produced in High Fiveâ„¢ insect cells: Effect of glycosylation. Journal of Immunological Methods, 2008, 330, 130-136.	0.6	36
115	Expression of a Functional Drosophila melanogaster CMP-sialic Acid Synthetase. Journal of Biological Chemistry, 2006, 281, 15929-15940.	1.6	35
116	Elucidation of the CHO Super-Ome (CHO-SO) by Proteoinformatics. Journal of Proteome Research, 2015, 14, 4687-4703.	1.8	35
117	Characterization of N-acetylneuraminic acid synthase isoenzyme 1 from Campylobacter jejuni. Biochemical Journal, 2004, 383, 83-89.	1.7	34
118	Assessment of the coordinated role of ST3GAL3, ST3GAL4 and ST3GAL6 on the Î±2,3 sialylation linkage of mammalian glycoproteins. Biochemical and Biophysical Research Communications, 2015, 463, 211-215.	1.0	34
119	Feast or famine: autophagy control and engineering in eukaryotic cell culture. Current Opinion in Biotechnology, 2008, 19, 518-526.	3.3	32
120	A novel sugar analog enhances sialic acid production and biotherapeutic sialylation in CHO cells. Biotechnology and Bioengineering, 2017, 114, 1899-1902.	1.7	32
121	Combinatorial genome and protein engineering yields monoclonal antibodies with hypergalactosylation from CHO cells. Biotechnology and Bioengineering, 2017, 114, 2848-2856.	1.7	32
122	Production of lipid-containing algal-bacterial polyculture in wastewater and biomethanation of lipid extracted residues: Enhancing methane yield through hydrothermal pretreatment and relieving solvent toxicity through co-digestion. Science of the Total Environment, 2019, 653, 1377-1394.	3.9	32
123	E2F-1 overexpression increases viable cell density in batch cultures of Chinese hamster ovary cells. Journal of Biotechnology, 2008, 138, 103-106.	1.9	31
124	Efficient lipid extraction and quantification of fatty acids from algal biomass using accelerated solvent extraction (ASE). RSC Advances, 2016, 6, 29127-29134.	1.7	31
125	High-Throughput Lipidomic and Transcriptomic Analysis To Compare SP2/0, CHO, and HEK-293 Mammalian Cell Lines. Analytical Chemistry, 2017, 89, 1477-1485.	3.2	31
126	An unconventional uptake rate objective function approach enhances applicability of genome-scale models for mammalian cells. Npj Systems Biology and Applications, 2019, 5, 25.	1.4	30

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127	Inhibiting the apoptosis pathway using MDM2 in mammalian cell cultures. Biotechnology and Bioengineering, 2007, 97, 601-614.	1.7	29
128	GlycoFly: A Database of Drosophila N-linked Glycoproteins Identified Using SPEGâ€“MS Techniques. Journal of Proteome Research, 2011, 10, 2777-2784.	1.8	29
129	A comparison of mathematical model predictions to experimental measurements for growth and recombinant protein production in induced cultures ofEscherichia coli. Biotechnology and Bioengineering, 1990, 36, 124-134.	1.7	28
130	A Bacterial Signal Peptidase Enhances Processing of a Recombinant Single Chain Antibody Fragment in Insect Cells. Biochemical and Biophysical Research Communications, 1999, 255, 444-450.	1.0	28
131	Mineral and non-carbon nutrient utilization and recovery during sequential phototrophic-heterotrophic growth of lipid-rich algae. Applied Microbiology and Biotechnology, 2014, 98, 5261-5273.	1.7	28
132	N-glycan structures of human transferrin produced by Lymantria dispar (gypsy moth) cells using the LdMNPV expression system. Glycobiology, 2003, 13, 539-548.	1.3	27
133	An HPLC-MALDI MS method for N-glycan analyses using smaller size samples: Application to monitor glycan modulation by medium conditions. Glycoconjugate Journal, 2009, 26, 1135-1149.	1.4	27
134	Enhanced transient recombinant protein production in CHO cells through the coâ€transfection of the product gene with Bclâ€x_L. Biotechnology Journal, 2014, 9, 1164-1174.	1.8	27
135	Î²-(1â†’4)-Galactosyltransferase activity in native and engineered insect cells measured with time-resolved europium fluorescence. Carbohydrate Research, 2002, 337, 2181-2186.	1.1	26
136	Molecular Cloning and Characterization of a NovelÎ±-Amylase from Antarctic Sea Ice BacteriumPseudoalteromonassp. M175 and Its Primary Application in Detergent. BioMed Research International, 2018, 2018, 1-16.	0.9	26
137	Thioredoxin Domain Non-equivalence and Anti-chaperone Activity of Protein Disulfide Isomerase Mutants in Vivo. Journal of Biological Chemistry, 1997, 272, 22556-22563.	1.6	25
138	Regulating apoptosis in mammalian cell cultures. Cytotechnology, 2006, 50, 77-92.	0.7	25
139	The beta-3 adrenergic agonist (CL-316,243) restores the expression of down-regulated fatty acid oxidation genes in type 2 diabetic mice. Nutrition and Metabolism, 2015, 12, 8.	1.3	25
140	Production of recombinant proteins by baculovirus-infected gypsy moth cells. Biotechnology Progress, 1991, 7, 462-467.	1.3	24
141	Bcl-2 inhibits apoptosis and extends recombinant protein production in cells infected with Sindbis viral vectors. Cytotechnology, 1996, 22, 169-178.	0.7	24
142	Application of microarrays to identify and characterize genes involved in attachment dependence in HeLa cells. Metabolic Engineering, 2007, 9, 241-251.	3.6	24
143	GlycoFish: A Database of Zebrafish N-linked Glycoproteins Identified Using SPEG Method Coupled with LC/MS. Analytical Chemistry, 2011, 83, 5296-5303.	3.2	24
144	Butyrated ManNAc analog improves protein expression in Chinese hamster ovary cells. Biotechnology and Bioengineering, 2018, 115, 1531-1541.	1.7	24

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145	Impact of nucleotide sugar metabolism on protein N-glycosylation in Chinese Hamster Ovary (CHO) cell culture. Current Opinion in Chemical Engineering, 2018, 22, 167-176.	3.8	24
146	Creating a synthetic lichen: Mutualistic co-culture of fungi and extracellular polysaccharide-secreting cyanobacterium Nostoc PCC 7413. Algal Research, 2020, 45, 101755.	2.4	24
147	Combining highâ€throughput screening of caspase activity with antiâ€apoptosis genes for development of robust CHO production cell lines. Biotechnology Progress, 2010, 26, 1367-1381.	1.3	23
148	Combining Butyrated ManNAc with Glycoengineered CHO Cells Improves EPO Glycan Quality and Production. Biotechnology Journal, 2019, 14, 1800186.	1.8	23
149	Engineering Intracellular CMP-Sialic Acid Metabolism into Insect Cells and Methods to Enhance Its Generationâ€. Biochemistry, 2005, 44, 7526-7534.	1.2	22
150	A peptide-linked recombinant glucocerebrosidase for targeted neuronal delivery: Design, production, and assessment. Journal of Biotechnology, 2016, 221, 1-12.	1.9	22
151	Ultra-deep next generation mitochondrial genome sequencing reveals widespread heteroplasmy in Chinese hamster ovary cells. Metabolic Engineering, 2017, 41, 11-22.	3.6	22
152	Glycoengineering of CHO Cells to Improve Product Quality. Methods in Molecular Biology, 2017, 1603, 25-44.	0.4	22
153	Modeling assembly, aggregation, and chaperoning of immunoglobulin G production in insect cells. , 1997, 56, 106-116.		21
154	Proliferation and Pluripotency of Human Embryonic Stem Cells Maintained on Type I Collagen. Stem Cells and Development, 2010, 19, 1923-1935.	1.1	21
155	Strategies for Engineering Protein N-Glycosylation Pathways in Mammalian Cells. Methods in Molecular Biology, 2015, 1321, 287-305.	0.4	21
156	Genome Sequence of the Oleaginous Green Alga, Chlorella vulgaris UTEX 395. Frontiers in Bioengineering and Biotechnology, 2018, 6, 37.	2.0	21
157	Utilizing genome-scale models to optimize nutrient supply for sustained algal growth and lipid productivity. Npj Systems Biology and Applications, 2019, 5, 33.	1.4	21
158	Antigen retrieval to improve the immunocytochemistry detection of sigma-1 receptors and ER chaperones. Histochemistry and Cell Biology, 2011, 135, 627-637.	0.8	20
159	Glycoproteomic and glycomic databases. Clinical Proteomics, 2014, 11, 15.	1.1	20
160	Microalgae as a Feedstock for Biofuel Precursors and Value-Added Products: Green Fuels and Golden Opportunities. BioResources, 2015, 11, .	0.5	20
161	Growth kinetics ofEschericia coli containing temperature-sensitive plasmid pOU140. Biotechnology and Bioengineering, 1987, 29, 1164-1172.	1.7	19
162	Chemical Caspase Inhibitors Enhance Cell Culture Viabilities and Protein Titer. Biotechnology Progress, 2007, 23, 506-511.	1.3	19

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163	MiRNA mimic screen for improved expression of functional neurotensin receptor from HEK 293 cells. Biotechnology and Bioengineering, 2015, 112, 1632-1643.	1.7	19
164	Redistribution of metabolic fluxes in Chlorella protothecoides by variation of media nitrogen concentration. Metabolic Engineering Communications, 2015, 2, 124-131.	1.9	18
165	Coupling enrichment methods with proteomics for understanding and treating disease. Proteomics - Clinical Applications, 2015, 9, 33-47.	0.8	18
166	Engineering the Assembly Pathway of the Baculovirus-Insect Cell Expression Systema. Annals of the New York Academy of Sciences, 1994, 721, 208-217.	1.8	17
167	Chaperone and foldase coexpression in the baculovirus-insect cell expression system. Cytotechnology, 1996, 20, 149-159.	0.7	17
168	Genomeâ€scale RNA interference screen identifies antizyme 1 (OAZ1) as a target for improvement of recombinant protein production in mammalian cells. Biotechnology and Bioengineering, 2016, 113, 2403-2415.	1.7	17
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