

Michael Butler

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4744813/publications.pdf>

Version: 2024-02-01

129
papers

5,385
citations

76196

40
h-index

95083

68
g-index

134
all docs

134
docs citations

134
times ranked

4144
citing authors

#	ARTICLE	IF	CITATIONS
1	Cell Free Remodeling of Glycosylation of Antibodies. <i>Methods in Molecular Biology</i> , 2022, 2370, 117-146.	0.4	2
2	HDX-MS and MD Simulations Provide Evidence for Stabilization of the IgG1â€”FcÎ³R1a (CD64a) Immune Complex Through Intermolecular Glycoprotein Bonds. <i>Journal of Molecular Biology</i> , 2022, 434, 167391.	2.0	7
3	Construction of an InstantPC-derivatized glycan glucose unit database: A foundation work for high-throughput and high-sensitivity glycomic analysis. <i>Glycobiology</i> , 2022, 32, 289-303.	1.3	7
4	Full Beta-Dispersion Region Dielectric Spectra and Dielectric Models of Viable and Non-Viable CHO Cells. <i>IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology</i> , 2021, 5, 70-77.	2.3	6
5	The role of protein hydrolysates in prolonging viability and enhancing antibody production of CHO cells. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 3115-3129.	1.7	8
6	Dataset from HDX-MS Studies of IgG1 Glycoforms and Their Interactions with the FcÎ³R1a (CD64) Receptor. <i>Journal of Research of the National Institute of Standards and Technology</i> , 2021, 126, .	0.4	1
7	Strategic feeding of NS0 and CHO cell cultures to control glycan profiles and immunogenic epitopes of monoclonal antibodies. <i>Journal of Biotechnology</i> , 2021, 333, 49-62.	1.9	7
8	High-throughput and high-sensitivity N-Glycan profiling: A platform for biopharmaceutical development and disease biomarker discovery. <i>Analytical Biochemistry</i> , 2021, 623, 114205.	1.1	8
9	Effects of cysteine, asparagine, or glutamine limitations in Chinese hamster ovary cell batch and fedâ€”batch cultures. <i>Biotechnology Progress</i> , 2020, 36, e2946.	1.3	14
10	Mammalian cell culture for production of recombinant proteins: A review of the critical steps in their biomanufacturing. <i>Biotechnology Advances</i> , 2020, 43, 107552.	6.0	99
11	Mass spectrometric analysis of core fucosylation and sequence variation in a humanâ€”camelid monoclonal antibody. <i>Molecular Omics</i> , 2020, 16, 221-230.	1.4	4
12	Comparison of two glycoengineering strategies to control the fucosylation of a monoclonal antibody. <i>Journal of Biotechnology</i> , 2020, 324, 100015.	1.9	7
13	Purification of rabies virus glycoprotein produced in <i>Drosophila melanogaster</i> S2 cells: An efficient immunoaffinity method. <i>Biotechnology Progress</i> , 2020, 36, e3046.	1.3	3
14	Parallel singleâ€”cell optical transit dielectrophoresis cytometer. <i>Electrophoresis</i> , 2020, 41, 720-728.	1.3	6
15	Glycanâ€”masking hemagglutinin antigens from stable CHO cell clones for H5N1 avian influenza vaccine development. <i>Biotechnology and Bioengineering</i> , 2019, 116, 598-609.	1.7	14
16	Cytoplasmic conductivity as a marker for bioprocess monitoring: Study of Chinese hamster ovary cells under nutrient deprivation and reintroduction. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2896-2905.	1.7	7
17	Modulating antibodyâ€”dependent cellular cytotoxicity of epidermal growth factor receptorâ€”specific heavyâ€”chain antibodies through hinge engineering. <i>Immunology and Cell Biology</i> , 2019, 97, 526-537.	1.0	5
18	Progression of change in membrane capacitance and cytoplasm conductivity of cells during controlled starvation using dual-frequency DEP cytometry. <i>Analytica Chimica Acta</i> , 2019, 1059, 59-67.	2.6	16

#	ARTICLE	IF	CITATIONS
19	Solidâ€Phase Enzymatic Remodeling Produces High Yields of Single Glycoform Antibodies. <i>Biotechnology Journal</i> , 2018, 13, e1700381.	1.8	15
20	Dielectric Properties of Single Cells Subjected to Heat Shock Using DEP Cytometry. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2018, 66, 5933-5940.	2.9	13
21	Microwave Near-Field Detection of Single Biological Cells and Nanoparticles. , 2018, , .		3
22	Quantitative Model for Ion Transport and Cytoplasm Conductivity of Chinese Hamster Ovary Cells. <i>Scientific Reports</i> , 2018, 8, 17818.	1.6	19
23	DEP Measurement of the Dielectric Properties of Single CHO Cells Under Thermal Stress. , 2018, , .		2
24	Single cell dielectrophoresis study of apoptosis progression induced by controlled starvation. <i>Bioelectrochemistry</i> , 2018, 124, 73-79.	2.4	13
25	A low redox potential affects monoclonal antibody assembly and glycosylation in cell culture. <i>Journal of Biotechnology</i> , 2017, 246, 71-80.	1.9	11
26	CMOS single cell dielectrophoresis cytometer. <i>Sensors and Actuators B: Chemical</i> , 2017, 249, 246-255.	4.0	12
27	Preparative separation of monoclonal antibody aggregates by cation-exchange laterally-fed membrane chromatography. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1055-1056, 158-164.	1.2	20
28	A semi-empirical glycosylation model of a camelid monoclonal antibody under hypothermia cell culture conditions. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1005-1020.	1.4	10
29	Recombinant hemagglutinin proteins formulated in a novel PELC/CpG adjuvant for H7N9 subunit vaccine development. <i>Antiviral Research</i> , 2017, 146, 213-220.	1.9	4
30	Improved therapeutic efficacy of mammalian expressed-recombinant interferon gamma against ovarian cancer cells. <i>Experimental Cell Research</i> , 2017, 359, 20-29.	1.2	18
31	Inhibition of glycosylation on a camelid antibody uniquely affects its FcÎ³RI binding activity. <i>European Journal of Pharmaceutical Sciences</i> , 2017, 96, 428-439.	1.9	11
32	Change in the dielectric response of single cells induced by nutrient deprivation over a wide frequency range. , 2017, , .		5
33	Two-frequency dielectrophoresis analysis of viable/non-viable single CHO cells employing a microwave cytometer. , 2016, , .		1
34	Influenza Virus Hemagglutinin Glycoproteins with Different N-Glycan Patterns Activate Dendritic Cells In Vitro. <i>Journal of Virology</i> , 2016, 90, 6085-6096.	1.5	23
35	Components of yeast (<i>Sacchromyces cerevisiae</i>) extract as defined media additives that support the growth and productivity of CHO cells. <i>Journal of Biotechnology</i> , 2016, 233, 129-142.	1.9	18
36	In-flow dielectric characterization of single biological cells using a wideband DEP cytometer. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
37	Multi-Frequency DEP Cytometer Employing a Microwave Sensor for Dielectric Analysis of Single Cells. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-9.	2.9	23
38	Production of IgGs with a human-like sialylation in CHO cells. BMC Proceedings, 2015, 9, .	1.8	2
39	The differential polarizability of CHO cells can be used to monitor changes in metabolism. BMC Proceedings, 2015, 9, P47.	1.8	0
40	Multi-frequency DEP cytometer employing a microwave interferometer for the dielectric analysis of micro-particles. , 2015, , .		4
41	Low glucose depletes glycan precursors, reduces site occupancy and galactosylation of a monoclonal antibody in CHO cell culture. Biotechnology Journal, 2015, 10, 1051-1066.	1.8	45
42	A systematic study of glycopeptide esterification for the semi-quantitative determination of sialylation in antibodies. Rapid Communications in Mass Spectrometry, 2015, 29, 1817-1826.	0.7	22
43	Serum and Protein Free Media. Cell Engineering, 2015, , 223-236.	0.4	11
44	A compact microwave frequency reflectometer with attoFarad sensitivity: A path towards an integrated dielectrophoresis cytometer. Sensors and Actuators A: Physical, 2015, 232, 132-140.	2.0	5
45	Glycosylation in Cell Culture. Cell Engineering, 2015, , 237-258.	0.4	6
46	Production of α 2,6-sialylated IgG1 in CHO cells. MAbs, 2015, 7, 571-583.	2.6	84
47	Mass spectrometric analysis of products of metabolic glycan engineering with azido-modification of sialic acids. Analytical and Bioanalytical Chemistry, 2015, 407, 8945-8958.	1.9	5
48	An integrated approach to analyze EG2-hFc monoclonal antibody N-glycosylation by MALDI-MS. Canadian Journal of Chemistry, 2015, 93, 754-763.	0.6	12
49	Tuning a MAb glycan profile in cell culture: Supplementing N-acetylglucosamine to favour G0 glycans without compromising productivity and cell growth. Journal of Biotechnology, 2015, 214, 105-112.	1.9	25
50	Evaluation of Quenching and Extraction Methods for Nucleotide/Nucleotide Sugar Analysis. Methods in Molecular Biology, 2015, 1321, 361-372.	0.4	3
51	Isolation and quantification of N-glycans from immunoglobulin G antibodies for quantitative glycosylation analysis. Journal of Biological Methods, 2015, 2, e19.	1.0	18
52	5.1 Physiology and Metabolism of Animal Cells for Production. , 2014, , 301-325.		0
53	Dielectrophoresis study of electroporation effects on Chinese hamster ovary cells. , 2014, , .		0
54	Purification of chimeric heavy chain monoclonal antibody EG2-hFc using hydrophobic interaction membrane chromatography: An alternative to protein A affinity chromatography. Biotechnology and Bioengineering, 2014, 111, 1139-1149.	1.7	18

#	ARTICLE	IF	CITATIONS
55	Glycosylation analysis of Chinese hamster ovary produced glycoproteins. <i>Pharmaceutical Bioprocessing</i> , 2014, 2, 449-468.	0.8	5
56	Monitoring Cell Growth, Viability, and Apoptosis. <i>Methods in Molecular Biology</i> , 2014, 1104, 169-192.	0.4	19
57	The availability of glucose to CHO cells affects the intracellular lipid-linked oligosaccharide distribution, site occupancy and the N-glycosylation profile of a monoclonal antibody. <i>Journal of Biotechnology</i> , 2014, 170, 17-27.	1.9	100
58	The choice of mammalian cell host and possibilities for glycosylation engineering. <i>Current Opinion in Biotechnology</i> , 2014, 30, 107-112.	3.3	144
59	Increased CHO cell fed-batch monoclonal antibody production using the autophagy inhibitor 3-MA or gradually increasing osmolality. <i>Biochemical Engineering Journal</i> , 2014, 91, 37-45.	1.8	22
60	The bioactivity and fractionation of peptide hydrolysates in cultures of CHO cells. <i>Biotechnology Progress</i> , 2014, 30, 584-593.	1.3	26
61	The changing dielectric properties of CHO cells can be used to determine early apoptotic events in a bioprocess. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2902-2914.	1.7	46
62	Serum-free media: standardizing cell culture system. <i>Pharmaceutical Bioprocessing</i> , 2013, 1, 315-318.	0.8	7
63	Microfluidic device for simultaneous pulsed electric field electroporation and dielectrophoresis studies of single biological cells. , 2013, , .		2
64	Semi-automated detection of single cell signatures from a dielectrophoretic cytometer. , 2013, , .		1
65	Fed-batch CHO cell production and feed glutamine replacement to reduce ammonia production. <i>Biotechnology Progress</i> , 2013, 29, 165-175.	1.3	48
66	Differential electronic detector to monitor apoptosis using dielectrophoresis-induced translation of flowing cells (dielectrophoresis cytometry). <i>Biomicrofluidics</i> , 2013, 7, 024101.	1.2	39
67	Electroporation and dielectrophoresis of single cells using a microfluidic system employing a microwave interferometric sensor. , 2013, , .		5
68	Different Immunity Elicited by Recombinant H5N1 Hemagglutinin Proteins Containing Pauci-Mannose, High-Mannose, or Complex Type N-Glycans. <i>PLoS ONE</i> , 2013, 8, e66719.	1.1	37
69	Recent advances in technology supporting biopharmaceutical production from mammalian cells. <i>Applied Microbiology and Biotechnology</i> , 2012, 96, 885-894.	1.7	161
70	Inhibition of glutamine-dependent autophagy increases production in CHO Cell fed-batch processes. <i>Biotechnology and Bioengineering</i> , 2012, 109, 1228-1238.	1.7	33
71	Using recombinant DNA technology for the development of live-attenuated dengue vaccines. <i>Enzyme and Microbial Technology</i> , 2012, 51, 67-72.	1.6	8
72	The Role of Glycosylation in Therapeutic Antibodies. <i>Cell Engineering</i> , 2011, , 251-292.	0.4	6

#	ARTICLE	IF	CITATIONS
73	Review of dengue virus and the development of a vaccine. <i>Biotechnology Advances</i> , 2011, 29, 239-247.	6.0	151
74	Enhanced Production of Human Recombinant Proteins from CHO cells Grown to High Densities in Macroporous Microcarriers. <i>Molecular Biotechnology</i> , 2011, 49, 263-276.	1.3	24
75	Strategies for the enhancement of recombinant protein production from mammalian cells by growth arrest. <i>Biotechnology Advances</i> , 2010, 28, 385-394.	6.0	105
76	Fragmentation of negative ions from <i>N</i> -linked carbohydrates, Part 4. Fragmentation of complex glycans lacking substitution on the 6-antenna. <i>Journal of Mass Spectrometry</i> , 2010, 45, 528-535.	0.7	42
77	High productivity of human recombinant beta-interferon from a low-temperature perfusion culture. <i>Journal of Biotechnology</i> , 2010, 150, 509-518.	1.9	56
78	Expression systems for therapeutic glycoprotein production. <i>Current Opinion in Biotechnology</i> , 2009, 20, 700-707.	3.3	350
79	Microwave frequency sensor for detection of biological cells in microfluidic channels. <i>Biomicrofluidics</i> , 2009, 3, 034103.	1.2	64
80	Pluronic Enhances the Robustness and Reduces the Cell Attachment of Mammalian Cells. <i>Molecular Biotechnology</i> , 2008, 39, 167-177.	1.3	81
81	High yields of monomeric recombinant β -interferon from macroporous microcarrier cultures under hypothermic conditions. <i>Biotechnology Progress</i> , 2008, 24, 832-838.	1.3	22
82	CHO cells adapted to hypothermic growth produce high yields of recombinant β -interferon. <i>Biotechnology Progress</i> , 2008, 24, 898-906.	1.3	62
83	Enhanced Production of Monomeric Interferon- β by CHO Cells through the Control of Culture Conditions. <i>Biotechnology Progress</i> , 2008, 21, 22-30.	1.3	135
84	Production and Glycosylation of Recombinant β -Interferon in Suspension and Cytopore Microcarrier Cultures of CHO Cells. <i>Biotechnology Progress</i> , 2008, 21, 31-39.	1.3	43
85	High Genetic Stability of Dengue Virus Propagated in MRC-5 Cells as Compared to the Virus Propagated in Vero Cells. <i>PLoS ONE</i> , 2008, 3, e1810.	1.1	14
86	High immunogenic enterovirus 71 strain and its production using serum-free microcarrier Vero cell culture. <i>Vaccine</i> , 2007, 25, 19-24.	1.7	70
87	Cell Counting and Viability Measurements. <i>Methods in Biotechnology</i> , 2007, , 205-222.	0.2	13
88	Glycosylation of an immunoglobulin produced from a murine hybridoma cell line: The effect of culture mode and the anti-apoptotic gene, bcl-2. <i>Biotechnology and Bioengineering</i> , 2007, 97, 156-169.	1.7	33
89	Effect of Culture Conditions on Glycosylation of Recombinant beta-Interferon in CHO Cells. , 2007, , 71-85.		7
90	Optimisation of the Cellular Metabolism of Glycosylation for Recombinant Proteins Produced by Mammalian Cell Systems. <i>Cytotechnology</i> , 2006, 50, 57-76.	0.7	139

#	ARTICLE	IF	CITATIONS
91	Intracellular ATP and total adenylate concentrations are critical predictors of reovirus productivity from Vero cells. <i>Biotechnology and Bioengineering</i> , 2006, 94, 667-679.	1.7	25
92	The effect of dissolved oxygen on the production and the glycosylation profile of recombinant human erythropoietin produced from CHO cells. <i>Biotechnology and Bioengineering</i> , 2006, 94, 481-494.	1.7	89
93	Animal cell cultures: recent achievements and perspectives in the production of biopharmaceuticals. <i>Applied Microbiology and Biotechnology</i> , 2005, 68, 283-291.	1.7	415
94	Application of the StrOligo algorithm for the automated structure assignment of complex N-linked glycans from glycoproteins using tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2003, 17, 2713-2720.	0.7	68
95	Detailed glycan analysis of serum glycoproteins of patients with congenital disorders of glycosylation indicates the specific defective glycan processing step and provides an insight into pathogenesis. <i>Glycobiology</i> , 2003, 13, 601-622.	1.3	138
96	Measurement of hydrophobic interactions of mammalian cells grown in culture. <i>Journal of Biotechnology</i> , 2002, 95, 39-48.	1.9	14
97	Erythropoietin production from CHO cells grown by continuous culture in a fluidized-bed bioreactor. <i>Biotechnology and Bioengineering</i> , 2002, 77, 194-203.	1.7	69
98	A Study of Immunoglobulin G Glycosylation in Monoclonal and Polyclonal Species by Electrospray and Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry. <i>Analytical Biochemistry</i> , 2002, 305, 16-31.	1.1	45
99	Effects of Ammonia and Glucosamine on the Heterogeneity of Erythropoietin Glycoforms. <i>Biotechnology Progress</i> , 2002, 18, 129-138.	1.3	110
100	The effect of the catalytic topoisomerase II inhibitor dexrazoxane (ICRF-187) on CC9C10 hybridoma viability and productivity. <i>Cytotechnology</i> , 2001, 37, 107-117.	0.7	2
101	Comparisons of the Glycosylation of a Monoclonal Antibody Produced under Nominally Identical Cell Culture Conditions in Two Different Bioreactors. <i>Biotechnology Progress</i> , 2000, 16, 462-470.	1.3	73
102	Effect of Ammonia on the Glycosylation of Human Recombinant Erythropoietin in Culture. <i>Biotechnology Progress</i> , 2000, 16, 751-759.	1.3	75
103	Application of a Serum-Free Medium for the Growth of Vero Cells and the Production of Reovirus. <i>Biotechnology Progress</i> , 2000, 16, 854-858.	1.3	50
104	Enhanced erythropoietin heterogeneity in a CHO culture is caused by proteolytic degradation and can be eliminated by a high glutamine level. , 2000, 34, 83-99.		30
105	The inhibitory effect of glutamate on the growth of a murine hybridoma is caused by competitive inhibition of the x(-) (C) transport system required for cystine utilization. , 2000, 32, 31-43.		6
106	The effect of glucose and glutamine on the intracellular nucleotide pool and oxygen uptake rate of a murine hybridoma. , 2000, 34, 47-57.		26
107	Linoleic acid improves the robustness of cells in agitated cultures. <i>Cytotechnology</i> , 1999, 30, 27-36.	0.7	15
108	Development of an Assay for the Measurement of the Surfactant Pluronic F-68 in Mammalian Cell Culture Medium. <i>Analytical Biochemistry</i> , 1998, 262, 39-44.	1.1	32

#	ARTICLE	IF	CITATIONS
109	The relationship between intracellular UDP-N-acetyl hexosamine nucleotide pool and monoclonal antibody production in a mouse hybridoma. <i>Journal of Biotechnology</i> , 1998, 60, 67-80.	1.9	14
110	Dissolved oxygen concentration in serum-free continuous culture affects N-linked glycosylation of a monoclonal antibody. <i>Journal of Biotechnology</i> , 1998, 62, 55-71.	1.9	139
111	Unsaturated fatty acids enhance cell yields and perturb the energy metabolism of an antibody-secreting hybridoma. <i>Biochemical Journal</i> , 1997, 322, 615-623.	1.7	24
112	The effect of alternative carbohydrates on the growth and antibody production of a murine hybridoma. <i>Applied Biochemistry and Biotechnology</i> , 1996, 59, 93-104.	1.4	21
113	The effect of fatty acids on hybridoma cell growth and antibody productivity in serum-free cultures. <i>Journal of Biotechnology</i> , 1995, 39, 165-173.	1.9	21
114	Adaptation of mammalian cells to non-ammoniogenic media. <i>Cytotechnology</i> , 1994, 15, 87-94.	0.7	22
115	Profile of energy metabolism in a murine hybridoma: Glucose and glutamine utilization. <i>Journal of Cellular Physiology</i> , 1994, 161, 71-76.	2.0	66
116	Effect of temperature on nucleotide pools and monoclonal antibody production in a mouse hybridoma. <i>Biotechnology and Bioengineering</i> , 1994, 44, 1235-1245.	1.7	52
117	Glutamine-based dipeptides are utilized in mammalian cell culture by extracellular hydrolysis catalyzed by a specific peptidase. <i>Journal of Biotechnology</i> , 1994, 37, 277-290.	1.9	51
118	Specific activities of glycosyltransferase enzymes vary with monoclonal antibody productivity in murine hybridomas. <i>Biotechnology Letters</i> , 1993, 15, 553-558.	1.1	3
119	Glucose and glutamine metabolism of a murine B-lymphocyte hybridoma grown in batch culture. <i>Applied Biochemistry and Biotechnology</i> , 1993, 43, 93-116.	1.4	103
120	Characterization of glutamine metabolism in two related murine hybridomas. <i>Journal of Biotechnology</i> , 1992, 23, 167-182.	1.9	35
121	Growth inhibition in animal cell culture. <i>Applied Biochemistry and Biotechnology</i> , 1991, 30, 29-41.	1.4	227
122	THE EFFECT OF METABOLIC BY-PRODUCTS ON ANIMAL CELLS IN CULTURE. , 1991, , 226-228.		9
123	The effect of pH on the toxicity of ammonia to a murine hybridoma. <i>Journal of Biotechnology</i> , 1990, 15, 91-100.	1.9	82
124	Nutritional aspects of the growth of animal cells in culture. <i>Journal of Biotechnology</i> , 1989, 12, 97-110.	1.9	88
125	The effects of glutamine utilisation and ammonia production on the growth of BHK cells in microcarrier cultures. <i>Journal of Biotechnology</i> , 1984, 1, 187-196.	1.9	89
126	Copper tolerance in the green alga, <i>Chlorella vulgaris</i> .. <i>Plant, Cell and Environment</i> , 1980, 3, 119-126.	2.8	43

#	ARTICLE	IF	CITATIONS
127	Copper tolerance in the green alga, <i>Chlorella vulgaris</i> . <i>Plant, Cell and Environment</i> , 1980, 3, 119-126.	2.8	34
128	Mechanisms of copper tolerance in the marine fouling alga <i>Ectocarpus siliculosus</i> ? Evidence for an exclusion mechanism. <i>Marine Biology</i> , 1979, 54, 195-199.	0.7	79
129	<i>Animal Cell Culture and Technology</i> . , 0, , .		73