Donald L Jarvis

List of Publications by Year in descending order

110 papers	6,100 citations	81900 39 h-index	76900 74 g-index
113 all docs	113 docs citations	113 times ranked	4908 citing authors

#	Article	IF	Citations
1	Baculovirus as versatile vectors for protein expression in insect and mammalian cells. Nature Biotechnology, 2005, 23, 567-575.	17.5	867
2	Silkworms transformed with chimeric silkworm/spider silk genes spin composite silk fibers with improved mechanical properties. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 923-928.	7.1	241
3	Letter to the Glyco-Forum: Effective glycoanalysis with Maackia amurensis lectins requires a clear understanding of their binding specificities. Glycobiology, 2011, 21, 988-993.	2.5	202
4	Expression system for structural and functional studies of human glycosylation enzymes. Nature Chemical Biology, 2018, 14, 156-162.	8.0	182
5	Chapter 14 Baculovirusâ€“Insect Cell Expression Systems. Methods in Enzymology, 2009, 463, 191-222.	1.0	176
6	Protein Nâ€Glycosylation in the Baculovirusâ€“Insect Cell Expression System and Engineering of Insect Cells to Produce â€œMammalianizedâ€• Recombinant Glycoproteins. Advances in Virus Research, 2006, 68, 159-191.	2.1	170
7	Developing baculovirus-insect cell expression systems for humanized recombinant glycoprotein production. Virology, 2003, 310, 1-7.	2.4	166
8	Use of Early Baculovirus Promoters for Continuous Expression and Efficient Processing of Foreign Gene Products in Stably Transformed Lepidopteran Cells. Nature Biotechnology, 1990, 8, 950-955.	17.5	165
9	Protein N-Glycosylation in the Baculovirus-Insect Cell System. Current Drug Targets, 2007, 8, 1116-1125.	2.1	161
10	Glycoproteins from Insect Cells: Sialylated or Not?. Biological Chemistry, 2001, 382, 151-9.	2.5	159
11	Biochemical Analysis of the N-Glycosylation Pathway in Baculovirus-Infected Lepidopteran Insect Cells. Virology, 1995, 212, 500-511.	2.4	140
12	Engineering the Protein N-Glycosylation Pathway in Insect Cells for Production of Biantennary, Complex N-Glycansâ€. Biochemistry, 2002, 41, 15093-15104.	2.5	140
13	Immediate-Early Baculovirus Vectors for Foreign Gene Expression in Transformed or Infected Insect Cells. Protein Expression and Purification, 1996, 8, 191-203.	1.3	132
14	Modifying the insect cell N-glycosylation pathway with immediate early baculovirus expression vectors. Nature Biotechnology, 1996, 14, 1288-1292.	17.5	132
15	Stable expression of mammalian beta 1,4-galactosyltransferase extends the N-glycosylation pathway in insect cells. Glycobiology, 1998, 8, 473-480.	2.5	120
16	Requirements for nuclear localization and supramolecular assembly of a baculovirus polyhedrin protein. Virology, 1991, 185, 795-810.	2.4	103
17	Engineering N-glycosylation pathways in the baculovirus-insect cell system. Current Opinion in Biotechnology, 1998, 9, 528-533.	6.6	100
18	Biosynthesis and Processing of the Autographa californica Nuclear Polyhedrosis Virus gp64 Protein. Virology, 1994, 205, 300-313.	2.4	91

#	Article	IF	Citations
19	A transgenic insect cell line engineered to produce CMP-sialic acid and sialylated glycoproteins. Glycobiology, 2003, 13, 497-507.	2.5	87
20	N-glycan patterns of human transferrin produced in Trichoplusia ni insect cells: effects of mammalian galactosyltransferase. Glycobiology, 2000, 10, 837-847.	2.5	83
21	Improved glycosylation of a foreign protein by Tn-5B1-4 cells engineered to express mammalian glycosyltransferases. Biotechnology and Bioengineering, 2001, 74, 230-239.	3.3	74
22	Mucin-type O-glycosylation is controlled by short- and long-range glycopeptide substrate recognition that varies among members of the polypeptide GalNAc transferase family. Glycobiology, 2016, 26, 360-376.	2.5	73
23	Bioluminescent Imaging and Histopathologic Characterization of WEEV Neuroinvasion in Outbred CD-1 Mice. PLoS ONE, 2013, 8, e53462.	2.5	72
24	A fused lobes Gene Encodes the Processing Î²-N-Acetylglucosaminidase in Sf9 Cells*. Journal of Biological Chemistry, 2008, 283, 11330-11339.	3.4	68
25	A new glycoengineered insect cell line with an inducibly mammalianized protein N-glycosylation pathway. Glycobiology, 2012, 22, 417-428.	2.5	67
26	The Lectin Domain of the Polypeptide GalNAc Transferase Family of Glycosyltransferases (ppGalNAc Ts) Acts as a Switch Directing Glycopeptide Substrate Glycosylation in an N- or C-terminal Direction, Further Controlling Mucin Type O-Glycosylation. Journal of Biological Chemistry, 2013, 288, 19900-19914.	3.4	67
27	Insect cell hosts for baculovirus expression vectors contain endogenous exoglycosidase activity. Biotechnology Progress, 1993, 9, 146-152.	2.6	60
28	Comparative Glycomics Analysis of Influenza Hemagglutinin (H5N1) Produced in Vaccine Relevant Cell Platforms. Journal of Proteome Research, 2013, 12, 3707-3720.	3.7	60
29	Role of glycosylation in the transport of recombinant glycoproteins through the secretory pathway of lepidopteran insect cells. Journal of Cellular Biochemistry, 1990, 42, 181-191.	2.6	58
30	Early Synthesis of Budded Virus Envelope Fusion Protein GP64 Enhances Autographa californica Multicapsid Nucleopolyhedrovirus Virulence in Orally Infected Heliothis virescens. Journal of Virology, 2003, 77, 280-290.	3.4	56
31	The plasma-membrane-associated form of SV40 large tumor antigen: biochemical and biological properties. Biochimica Et Biophysica Acta: Reviews on Cancer, 1986, 865, 171-195.	7.4	49
32	Novel Baculovirus Expression Vectors That Provide Sialylation of Recombinant Glycoproteins in Lepidopteran Insect Cells. Journal of Virology, 2001, 75, 6223-6227.	3.4	49
33	CRISPR-Cas9 vectors for genome editing and host engineering in the baculovirusâ€“insect cell system. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9068-9073.	7.1	49
34	Baculovirus Expression Vectors. , 1997, , 389-431.		48
35	Modification of simian virus 40 large tumor antigen by glycosylation. Virology, 1985, 141, 173-189.	2.4	47
36	Mammalian Glycosyltransferase Expression Allows Sialoglycoprotein Production by Baculovirus-Infected Insect Cells. Protein Expression and Purification, 2001, 22, 234-241.	1.3	47

#	Article	IF	Citations
37	The Role of the AcMNPV25KGene, â€œFP25,â€•in Baculoviruspolhandp10Expression. Virology, 1996, 226, 34-46.	2.4	46
38	Isolation and characterization of a class II Î±-mannosidase cDNA from lepidopteran insect cells. Glycobiology, 1997, 7, 113-127.	2.5	46
39	Identification and characterization of a Drosophila melanogaster ortholog of human Â1,4-galactosyltransferase VII. Glycobiology, 2002, 12, 589-597.	2.5	45
40	Molecular Cloning and Functional Characterization of a Lepidopteran Insect Î²4-N-Acetylgalactosaminyltransferase with Broad Substrate Specificity, a Functional Role in Glycoprotein Biosynthesis, and a Potential Functional Role in Glycolipid Biosynthesis. Journal of Biological Chemistry, 2004, 279, 33501-33518.	3.4	44
41	Isolation and characterization of an Î±1,2-mannosidase cDNA from the lepidopteran insect cell line Sf9. Glycobiology, 1997, 7, 433-443.	2.5	42
42	Evidence for a sialic acid salvaging pathway in lepidopteran insect cells. Glycobiology, 2003, 13, 487-495.	2.5	42
43	An Overview and History of Glyco-Engineering in Insect Expression Systems. Methods in Molecular Biology, 2015, 1321, 131-152.	0.9	42
44	Insect Cells Encode a Class II Î±-Mannosidase with Unique Properties. Journal of Biological Chemistry, 2001, 276, 16335-16340.	3.4	41
45	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.	2.5	41
46	Construction and characterization of new piggyBac vectors for constitutive or inducible expression of heterologous gene pairs and the identification of a previously unrecognized activator sequence in piggyBac. BMC Biotechnology, 2007, 7, 5.	3.3	39
47	A novel baculovirus vector for the production of nonfucosylated recombinant glycoproteins in insect cells. Glycobiology, 2014, 24, 325-340.	2.5	39
48	N-Glycan processing by a lepidopteran insect Â1,2-mannosidase. Glycobiology, 2000, 10, 347-355.	2.5	36
49	Identification, expression and characterisation of a major salivary allergen (Cul s 1) of the biting midge Culicoides sonorensis relevant for summer eczema in horses. International Journal for Parasitology, 2009, 39, 243-250.	3.1	36
50	Molecular cloning and functional characterization of Î²-N-acetylglucosaminidase genes from Sf9 cells. Protein Expression and Purification, 2006, 47, 571-590.	1.3	35
51	Modifying an Insect CellN-Glycan Processing Pathway Using CRISPR-Cas Technology. ACS Chemical Biology, 2015, 10, 2199-2208.	3.4	35
52	Substrate Specificities and Intracellular Distributions of Three N-glycan Processing Enzymes Functioning at a Key Branch Point in the Insect N-Glycosylation Pathway. Journal of Biological Chemistry, 2012, 287, 7084-7097.	3.4	34
53	Rhabdovirus-like endogenous viral elements in the genome of Spodoptera frugiperda insect cells are actively transcribed: Implications for adventitious virus detection. Biologicals, 2016, 44, 219-225.	1.4	34
54	Structural comparisons of wild-type and nuclear transport-defective simian virus 40 large tumor antigens. Virology, 1984, 134, 168-176.	2.4	32

#	Article	IF	Citations
55	A new insect cell glycoengineering approach provides baculovirus-inducible glycogene expression and increases human-type glycosylation efficiency. Journal of Biotechnology, 2014, 182-183, 19-29.	3.8	32
56	A new rapid amplification of cDNA ends method for extremely guanine plus cytosine-rich genes. Analytical Biochemistry, 2006, 356, 222-228.	2.4	30
57	Impact of a human CMP-sialic acid transporter on recombinant glycoprotein sialylation in glycoengineered insect cells. Glycobiology, 2013, 23, 199-210.	2.5	30
58	Mutational Analysis of the N-Linked Glycans on<i>Autographa californica</i>Nucleopolyhedrovirus gp64. Journal of Virology, 1998, 72, 9459-9469.	3.4	29
59	Biosynthesis and subcellular localization of a lepidopteran insect alpha 1,2-mannosidase. Insect Biochemistry and Molecular Biology, 2001, 31, 289-297.	2.7	27
60	Construction and Characterization of Immediate Early Baculovirus Pesticides. Biological Control, 1996, 7, 228-235.	3.0	26
61	Expression and functional characterization of a nucleotide sugar transporter from Drosophila melanogaster: relevance to protein glycosylation in insect cell expression systems. Protein Expression and Purification, 2002, 26, 438-448.	1.3	26
62	Î²-(1â†’4)-Galactosyltransferase activity in native and engineered insect cells measured with time-resolved europium fluorescence. Carbohydrate Research, 2002, 337, 2181-2186.	2.3	26
63	Characterization of an Sf-rhabdovirus-negative Spodoptera frugiperda cell line as an alternative host for recombinant protein production in the baculovirus-insect cell system. Protein Expression and Purification, 2016, 122, 45-55.	1.3	26
64	Targeted glycoengineering extends the protein N-glycosylation pathway in the silkworm silk gland. Insect Biochemistry and Molecular Biology, 2015, 65, 20-27.	2.7	25
65	Baculovirus Expression Vectors.. Annals of the New York Academy of Sciences, 1991, 646, 240-247.	3.8	24
66	Effect of signal sequence and promoter on the speed of action of a genetically modified Autographa californica nucleopolyhedrovirus expressing the scorpion toxin LqhIT2. Biological Control, 2003, 27, 53-64.	3.0	24
67	Isolation and analysis of a baculovirus vector that supports recombinant glycoprotein sialylation by SfSWT-1 cells cultured in serum-free medium. Biotechnology and Bioengineering, 2006, 95, 37-47.	3.3	23
68	Transforming Lepidopteran Insect Cells for Continuous Recombinant Protein Expression. Methods in Molecular Biology, 2007, 388, 299-315.	0.9	23
69	Transforming Lepidopteran Insect Cells for Improved Protein Processing. Methods in Molecular Biology, 2007, 388, 341-356.	0.9	23
70	Innovative use of a bacterial enzyme involved in sialic acid degradation to initiate sialic acid biosynthesis in glycoengineered insect cells. Metabolic Engineering, 2012, 14, 642-652.	7.0	22
71	Utility of temporally distinct baculovirus promoters for constitutive and baculovirus-inducible transgene expression in transformed insect cells. Journal of Biotechnology, 2013, 165, 11-17.	3.8	22
72	Identification of genes encoding <i>N</i>â€glycan processing Î²â€<i>N</i>â€acetylglucosaminidases in <i>Trichoplusia ni</i> and <i>Bombyx mori</i>: Implications for glycoengineering of baculovirus expression systems. Biotechnology Progress, 2010, 26, 34-44.	2.6	21

#	Article	IF	Citations
73	Adventitious viruses in insect cell lines used for recombinant protein expression. Protein Expression and Purification, 2018, 144, 25-32.	1.3	21
74	Factors affecting recombinant Western equine encephalitis virus glycoprotein production in the baculovirus system. Protein Expression and Purification, 2011, 80, 274-282.	1.3	19
75	Liposome-Antigen-Nucleic Acid Complexes Protect Mice from Lethal Challenge with Western and Eastern Equine Encephalitis Viruses. Journal of Virology, 2014, 88, 1771-1780.	3.4	18
76	Continuous Foreign Gene Expression in Transformed Lepidopteran Insect Cells. , 1995, 39, 187-202.		17
77	Recombinant Protein Expression in Baculovirus-Infected Insect Cells. Methods in Enzymology, 2014, 536, 149-163.	1.0	17
78	Identification and Biochemical Characterization of the Novel Î±2,3-Sialyltransferase WbwA from Pathogenic Escherichia coli Serotype O104. Journal of Bacteriology, 2015, 197, 3760-3768.	2.2	17
79	Autographa californica M nucleopolyhedrovirus early GP64 synthesis mitigates developmental resistance in orally infected noctuid hosts. Journal of General Virology, 2004, 85, 833-842.	2.9	17
80	SV40 T-Antigen as a Dual Oncogene: Structure and Function of the Plasma Membrane-Associated Population. Annals of the New York Academy of Sciences, 1989, 567, 104-121.	3.8	16
81	Engineering Î²1,4-galactosyltransferase I to reduce secretion and enhance N-glycan elongation in insect cells. Journal of Biotechnology, 2015, 193, 52-65.	3.8	16
82	Biosynthesis and processing of Spodoptera frugiperdaÂ-mannosidase III. Glycobiology, 2002, 12, 369-377.	2.5	15
83	Heterologous protein expression affects the death kinetics of baculovirus-infected insect cell cultures: A quantitative study by use of n-target theory. Biotechnology Progress, 1994, 10, 55-59.	2.6	14
84	Acceptor specificities and selective inhibition of recombinant human Gal- and GlcNAc-transferases that synthesize core structures 1, 2, 3 and 4 of O-glycans. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4274-4281.	2.4	14
85	Venezuelan and western equine encephalitis virus E1 liposome antigen nucleic acid complexes protect mice from lethal challenge with multiple alphaviruses. Virology, 2016, 499, 30-39.	2.4	14
86	Effect of Expression of Manganese Superoxide Dismutase in Baculovirus-Infected Insect Cells. Applied Biochemistry and Biotechnology, 2004, 119, 181-194.	2.9	13
87	Re-visiting the endogenous capacity for recombinant glycoprotein sialylation by baculovirus-infected Tn-4h and DpN1 cells. Glycobiology, 2010, 20, 1323-1330.	2.5	13
88	Complete Genome Sequence of the Autographa californica Multiple Nucleopolyhedrovirus Strain E2. Genome Announcements, 2014, 2, .	0.8	13
89	Modification of the poliovirus capsid by ultraviolet light. Canadian Journal of Microbiology, 1981, 27, 1185-1193.	1.7	12
90	Electrophoretic analysis of glycoprotein glycans produced by lepidopteran insect cells infected with an immediate early recombinant baculovirus encoding mammalian beta1,4-galactosyltransferase. Glycoconjugate Journal, 1999, 16, 753-756.	2.7	12

#	Article	IF	Citations
91	The Drosophila Neurally Altered Carbohydrate Mutant Has a Defective Golgi GDP-fucose Transporter. Journal of Biological Chemistry, 2012, 287, 29599-29609.	3.4	12
92	Infectivity of Sf-rhabdovirus variants in insect and mammalian cell lines. Virology, 2017, 512, 234-245.	2.4	11
93	Overcoming the bloodâ€"brain barrier by Annexin A1-binding peptide to target brain tumours. British Journal of Cancer, 2020, 123, 1633-1643.	6.4	11
94	Transforming Lepidopteran Insect Cells for Continuous Recombinant Protein Expression. Methods in Molecular Biology, 2016, 1350, 329-348.	0.9	11
95	Mapping Functional Domains in AcMNPV pp31. Virology, 1996, 222, 318-331.	2.4	9
96	Expression and purification of Suid Herpesvirus-1 glycoprotein E in the baculovirus system and its use to diagnose Aujeszkyâ€™s disease in infected pigs. Protein Expression and Purification, 2013, 90, 1-8.	1.3	8
97	Facile removal of high mannose structures prior to extracting complex type Nâ€glycans from deâ€Nâ€glycosylated peptides retained by C18 solid phase to allow more efficient glycomic mapping. Proteomics, 2014, 14, 87-92.	2.2	8
98	A new nodavirusâ€negative Trichoplusia ni cell line for baculovirusâ€mediated protein production. Biotechnology and Bioengineering, 2020, 117, 3248-3264.	3.3	6
99	Transforming Lepidopteran Insect Cells for Improved Protein Processing and Expression. Methods in Molecular Biology, 2016, 1350, 359-379.	0.9	6
100	Development of an orally-administrable tumor vasculature-targeting therapeutic using annexin A1-binding D-peptides. PLoS ONE, 2021, 16, e0241157.	2.5	5
101	A New Bacmid for Customized Protein Glycosylation Pathway Engineering in the Baculovirus-Insect Cell System. ACS Chemical Biology, 2021, 16, 1941-1950.	3.4	5
102	A new insect cell line engineered to produce recombinant glycoproteins with cleavable N-glycans. Journal of Biological Chemistry, 2021, , 101454.	3.4	1
103	Title is missing!. , 2021, 16, e0241157.		0
104	Title is missing!. , 2021, 16, e0241157.		0
105	Title is missing!. , 2021, 16, e0241157.		0
106	Title is missing!. , 2021, 16, e0241157.		0
107	Title is missing!. , 2021, 16, e0241157.		0
108	Title is missing!. , 2021, 16, e0241157.		0

#	Article	IF	Citations
109	Transforming Lepidopteran Insect Cells for Continuous Recombinant Protein Expression. , 0, , 299-316.		0
110	Transforming Lepidopteran Insect Cells for Improved Protein Processing. , 0, , 341-356.		0