Michael R Kanost

List of Publications by Citations

173 papers	12,408 citations	62 h-index	108 g-index
190 ext. papers	13,766 ext. citations	4.3 avg, IF	6.32 L-index

#	Paper	IF	Citations
173	Biological mediators of insect immunity. *Annual Review of Entomology*, **1997**, 42, 611-43	21.8	1018
172	RNA interference in Lepidoptera: an overview of successful and unsuccessful studies and implications for experimental design. *Journal of Insect Physiology*, **2011**, 57, 231-45	2.4	588
171	Innate immune responses of a lepidopteran insect, Manduca sexta. *Immunological Reviews*, **2004**, 198, 97-105	11.3	519
170	Evolutionary dynamics of immune-related genes and pathways in disease-vector mosquitoes. *Science*, **2007**, 316, 1738-43	33.3	461
169	Serine proteinase inhibitors in arthropod immunity. *Developmental and Comparative Immunology*, **1999**, 23, 291-301	3.2	353
168	The clip-domain family of serine proteinases in arthropods. *Insect Biochemistry and Molecular Biology*, **2000**, 30, 95-105	4.5	298
167	Laccase 2 is the phenoloxidase gene required for beetle cuticle tanning. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 11337-42	11.5	279
166	Serine proteases and their homologs in the Drosophila melanogaster genome: an initial analysis of sequence conservation and phylogenetic relationships. *Gene*, **2003**, 304, 117-31	3.8	259
165	Insect Haemolymph Proteins. *Advances in Insect Physiology*, **1990**, 22, 299-396	2.5	255
164	Molecular structure of an apolipoprotein determined at 2.5-A resolution. *Biochemistry*, **1991**, 30, 603-8	3.2	251
163	Immulectin-2, a lipopolysaccharide-specific lectin from an insect, Manduca sexta, is induced in response to gram-negative bacteria. *Journal of Biological Chemistry*, **2000**, 275, 37373-81	5.4	214
162	Immulectin, an inducible C-type lectin from an insect, Manduca sexta, stimulates activation of plasma prophenol oxidase. *Insect Biochemistry and Molecular Biology*, **1999**, 29, 585-97	4.5	184
161	Nonproteolytic serine proteinase homologs are involved in prophenoloxidase activation in the tobacco hornworm, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2003**, 33, 197-208	4.5	181
160	A beta1,3-glucan recognition protein from an insect, Manduca sexta, agglutinates microorganisms and activates the phenoloxidase cascade. *Journal of Biological Chemistry*, **2000**, 275, 7505-14	5.4	179
159	Immunity in lepidopteran insects. *Advances in Experimental Medicine and Biology*, **2010**, 708, 181-204	3.6	171
158	Oxidative conjugation of catechols with proteins in insect skeletal systems. *Tetrahedron*, **2001**, 57, 385-392	2.4	164
157	Prophenoloxidase-activating proteinase-3 (PAP-3) from Manduca sexta hemolymph: a clip-domain serine proteinase regulated by serpin-1J and serine proteinase homologs. *Insect Biochemistry and Molecular Biology*, **2003**, 33, 1049-60	4.5	163

156	Prophenoloxidase-activating proteinase-2 from hemolymph of Manduca sexta. A bacteria-inducible serine proteinase containing two clip domains. *Journal of Biological Chemistry*, **2003**, 278, 3552-61	5.4	158
155	Immulectin-2, a pattern recognition receptor that stimulates hemocyte encapsulation and melanization in the tobacco hornworm, Manduca sexta. *Developmental and Comparative Immunology*, **2004**, 28, 891-900	3.2	141
154	Manduca sexta serpin-3 regulates prophenoloxidase activation in response to infection by inhibiting prophenoloxidase-activating proteinases. *Journal of Biological Chemistry*, **2003**, 278, 46556-64	5.4	138
153	Characterization of cDNAs encoding putative laccase-like multicopper oxidases and developmental expression in the tobacco hornworm, Manduca sexta, and the malaria mosquito, Anopheles gambiae. *Insect Biochemistry and Molecular Biology*, **2004**, 34, 29-41	4.5	138
152	Subunit composition of pro-phenol oxidase from Manduca sexta: molecular cloning of subunit ProPO-P1. *Insect Biochemistry and Molecular Biology*, **1997**, 27, 835-50	4.5	135
151	Molecular and functional analyses of amino acid decarboxylases involved in cuticle tanning in Tribolium castaneum. *Journal of Biological Chemistry*, **2009**, 284, 16584-16594	5.4	129
150	Characterization of two chitin synthase genes of the red flour beetle, Tribolium castaneum, and alternate exon usage in one of the genes during development. *Insect Biochemistry and Molecular Biology*, **2004**, 34, 291-304	4.5	127
149	Comparative analysis of serine protease-related genes in the honey bee genome: possible involvement in embryonic development and innate immunity. *Insect Molecular Biology*, **2006**, 15, 603-14	3.4	125
148	The structure of a Michaelis serpin-protease complex. *Nature Structural Biology*, **2001**, 8, 979-83		125
147	Clip-domain serine proteases as immune factors in insect hemolymph. *Current Opinion in Insect Science*, **2015**, 11, 47-55	5.1	122
146	Characterization and functional analysis of 12 naturally occurring reactive site variants of serpin-1 from Manduca sexta. *Journal of Biological Chemistry*, **1997**, 272, 1082-7	5.4	118
145	Functions of Manduca sexta hemolymph proteinases HP6 and HP8 in two innate immune pathways. *Journal of Biological Chemistry*, **2009**, 284, 19716-26	5.4	116
144	Multifaceted biological insights from a draft genome sequence of the tobacco hornworm moth, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2016**, 76, 118-147	4.5	112
143	A Novel Serpin Expressed by Blood-Borne Microfilariae of the Parasitic Nematode Brugia malayi Inhibits Human Neutrophil Serine Proteinases. *Blood*, **1999**, 94, 1418-1428	2.2	104
142	Beta-1,3-glucan recognition protein-2 (betaGRP-2)from Manduca sexta; an acute-phase protein that binds beta-1,3-glucan and lipoteichoic acid to aggregate fungi and bacteria and stimulate prophenoloxidase activation. *Insect Biochemistry and Molecular Biology*, **2004**, 34, 89-100	4.5	103
141	PHENOLOXIDASES IN INSECT IMMUNITY **2008**, 69-96		99
140	Identification of plasma proteases inhibited by Manduca sexta serpin-4 and serpin-5 and their association with components of the prophenol oxidase activation pathway. *Journal of Biological Chemistry*, **2005**, 280, 14932-42	5.4	99
139	Bacteria-induced protein P4 (hemolin) from Manduca sexta: a member of the immunoglobulin superfamily which can inhibit hemocyte aggregation. *Archives of Insect Biochemistry and Physiology*, **1991**, 18, 285-300	2.3	97

138	Manduca sexta serpin-4 and serpin-5 inhibit the prophenol oxidase activation pathway: cDNA cloning, protein expression, and characterization. *Journal of Biological Chemistry*, **2005**, 280, 14923-31	5.4	96
137	Manduca sexta lipopolysaccharide-specific immulectin-2 protects larvae from bacterial infection. *Developmental and Comparative Immunology*, **2003**, 27, 189-96	3.2	95
136	A hemocyte-specific integrin required for hemocytic encapsulation in the tobacco hornworm, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2005**, 35, 369-80	4.5	90
135	Insect multicopper oxidases: diversity, properties, and physiological roles. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 179-88	4.5	88
134	Characterization of a regulatory unit that controls melanization and affects longevity of mosquitoes. *Cellular and Molecular Life Sciences*, **2011**, 68, 1929-39	10.3	85
133	Chitin synthase genes in Manduca sexta: characterization of a gut-specific transcript and differential tissue expression of alternately spliced mRNAs during development. *Insect Biochemistry and Molecular Biology*, **2005**, 35, 529-40	4.5	85
132	Binding of hemolin to bacterial lipopolysaccharide and lipoteichoic acid. An immunoglobulin superfamily member from insects as a pattern-recognition receptor. *FEBS Journal*, **2002**, 269, 1827-34		85
131	Manduca sexta hemolymph proteinase 21 activates prophenoloxidase-activating proteinase 3 in an insect innate immune response proteinase cascade. *Journal of Biological Chemistry*, **2007**, 282, 11742-9	5.4	84
130	Characterization of tyrosine hydroxylase from Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2007**, 37, 1327-37	4.5	84
129	Increased melanizing activity in Anopheles gambiae does not affect development of Plasmodium falciparum. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 16858-63	11.5	83
128	Soluble peptidoglycan fragments stimulate antibacterial protein synthesis by fat body from larvae of Manduca sexta. *Developmental and Comparative Immunology*, **1985**, 9, 559-68	3.2	83
127	Model reactions for insect cuticle sclerotization: cross-linking of recombinant cuticular proteins upon their laccase-catalyzed oxidative conjugation with catechols. *Insect Biochemistry and Molecular Biology*, **2006**, 36, 353-65	4.5	81
126	Proteolytic activation and function of the cytokine Spꢀzle in the innate immune response of a lepidopteran insect, Manduca sexta. *FEBS Journal*, **2010**, 277, 148-62	5.7	79
125	Serpins in arthropod biology. *Seminars in Cell and Developmental Biology*, **2017**, 62, 105-119	7.5	77
124	Biological activity of Manduca sexta paralytic and plasmatocyte spreading peptide and primary structure of its hemolymph precursor. *Insect Biochemistry and Molecular Biology*, **1999**, 29, 1075-86	4.5	75
123	Overview of chitin metabolism enzymes in Manduca sexta: Identification, domain organization, phylogenetic analysis and gene expression. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 114-26	4.5	72
122	Manduca sexta serpin-5 regulates prophenoloxidase activation and the Toll signaling pathway by inhibiting hemolymph proteinase HP6. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 683-9	4.5	72
121	Organization of serpin gene-1 from Manduca sexta. Evolution of a family of alternate exons encoding the reactive site loop. *Journal of Biological Chemistry*, **1996**, 271, 28017-23	5.4	71

120	Protease inhibitors of Manduca sexta expressed in transgenic cotton. *Plant Cell Reports*, **1995**, 14, 758-62	5.1	69
119	Effects of parasitism by the braconid wasp Cotesia congregata on host hemolymph proteins of the tobacco hornworm, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **1993**, 23, 643-53	4.5	68
118	Molecular identification of a bevy of serine proteinases in Manduca sexta hemolymph. *Insect Biochemistry and Molecular Biology*, **2005**, 35, 931-43	4.5	66
117	Sequence of a cDNA and expression of the gene encoding a putative epidermal chitin synthase of Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2002**, 32, 1497-506	4.5	66
116	Hematopoietic organs of Manduca sexta and hemocyte lineages. *Development Genes and Evolution*, **2003**, 213, 477-91	1.8	65
115	Isolation and characterization of novel inducible serine protease inhibitors from larval hemolymph of the greater wax moth Galleria mellonella. *FEBS Journal*, **2000**, 267, 2046-53		64
114	Bacterial challenge stimulates innate immune responses in extra-embryonic tissues of tobacco hornworm eggs. *Insect Molecular Biology*, **2004**, 13, 19-24	3.4	63
113	Multiple alpha subunits of integrin are involved in cell-mediated responses of the Manduca immune system. *Developmental and Comparative Immunology*, **2008**, 32, 365-79	3.2	62
112	The structure of active serpin 1K from Manduca sexta. *Structure*, **1999**, 7, 103-9	5.2	62
111	Two major cuticular proteins are required for assembly of horizontal laminae and vertical pore canals in rigid cuticle of Tribolium castaneum. *Insect Biochemistry and Molecular Biology*, **2014**, 53, 22-9	4.5	58
110	Identification, mRNA expression and functional analysis of several yellow family genes in Tribolium castaneum. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 259-66	4.5	58
109	Proteomic and transcriptomic analyses of rigid and membranous cuticles and epidermis from the elytra and hindwings of the red flour beetle, Tribolium castaneum. *Journal of Proteome Research*, **2012**, 11, 269-78	5.6	56
108	Cuticular protein with a low complexity sequence becomes cross-linked during insect cuticle sclerotization and is required for the adult molt. *Scientific Reports*, **2015**, 5, 10484	4.9	55
107	Analysis of chitin-binding proteins from Manduca sexta provides new insights into evolution of peritrophin A-type chitin-binding domains in insects. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 127-41	4.5	55
106	Sequence conservation, phylogenetic relationships, and expression profiles of nondigestive serine proteases and serine protease homologs in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 51-63	4.5	55
105	Primary structure of ribosomal proteins S3 and S7 from Manduca sexta. *Insect Molecular Biology*, **1996**, 5, 31-8	3.4	55
104	Mechanical properties of the beetle elytron, a biological composite material. *Biomacromolecules*, **2011**, 12, 321-35	6.9	54
103	Peptidoglycan fragments elicit antibacterial protein synthesis in larvae of Manduca sexta. *Archives of Insect Biochemistry and Physiology*, **2005**, 8, 147-164	2.3	53

102	Formation of rigid, non-flight forewings (elytra) of a beetle requires two major cuticular proteins. *PLoS Genetics*, **2012**, 8, e1002682	6	51
101	Manduca sexta serpin-7, a putative regulator of hemolymph prophenoloxidase activation. *Insect Biochemistry and Molecular Biology*, **2013**, 43, 555-61	4.5	49
100	Multicopper oxidase-1 is a ferroxidase essential for iron homeostasis in Drosophila melanogaster. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 13337-42	11.5	49
99	Isolation and characterization of bacteria-induced protein P4 from hemolymph of Manduca sexta. *Archives of Insect Biochemistry and Physiology*, **1990**, 15, 33-41	2.3	49
98	An integrin-tetraspanin interaction required for cellular innate immune responses of an insect, Manduca sexta. *Journal of Biological Chemistry*, **2007**, 282, 22563-72	5.4	48
97	Structural features, evolutionary relationships, and transcriptional regulation of C-type lectin-domain proteins in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 75-85	4.5	47
96	Isolation and characterization of a hemocyte aggregation inhibitor from hemolymph of Manduca sexta larvae. *Archives of Insect Biochemistry and Physiology*, **1994**, 27, 123-36	2.3	47
95	Hemolymph proteinases in immune responses of Manduca sexta. *Advances in Experimental Medicine and Biology*, **2001**, 484, 319-28	3.6	47
94	Characterization of the multicopper oxidase gene family in Anopheles gambiae. *Insect Biochemistry and Molecular Biology*, **2008**, 38, 817-24	4.5	45
93	The extracellular matrix protein lacunin is expressed by a subset of hemocytes involved in basal lamina morphogenesis. *Journal of Insect Physiology*, **2001**, 47, 997-1006	2.4	45
92	Regulation of Insect Hemolymph Phenoloxidases **1993**, 317-342		45
91	Four serine proteinases expressed in Manduca sexta haemocytes. *Insect Molecular Biology*, **1999**, 8, 39-53	3.4	44
90	The serpin gene family in Anopheles gambiae. *Gene*, **2009**, 442, 47-54	3.8	43
89	Neuroglian-positive plasmatocytes of Manduca sexta and the initiation of hemocyte attachment to foreign surfaces. *Developmental and Comparative Immunology*, **2006**, 30, 447-62	3.2	43
88	A bacteria-induced, intracellular serpin in granular hemocytes of Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2001**, 31, 887-98	4.5	43
87	Structure, expression, and hormonal control of genes from the mosquito, Aedes aegypti, which encode proteins similar to the vitelline membrane proteins of Drosophila melanogaster. *Developmental Biology*, **1993**, 155, 558-68	3.1	43
86	Serpin-1 splicing isoform J inhibits the proSpätzle-activating proteinase HP8 to regulate expression of antimicrobial hemolymph proteins in Manduca sexta. *Developmental and Comparative Immunology*, **2011**, 35, 135-41	3.2	42
85	Molecular cloning of cDNAs for two pro-phenol oxidase subunits from the malaria vector, Anopheles gambiae. *Insect Biochemistry and Molecular Biology*, **1997**, 27, 693-9	4.5	42

84	Developmental expression of Manduca sexta hemolin. *Archives of Insect Biochemistry and Physiology*, **1999**, 42, 198-212	2.3	42
83	In search of a function for hemolin, a hemolymph protein from the immunoglobulin superfamily. *Journal of Insect Physiology*, **1996**, 42, 73-79	2.4	42
82	Characterization of endogenous and recombinant forms of laccase-2, a multicopper oxidase from the tobacco hornworm, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2009**, 39, 596-606	4.5	41
81	Loss of function of the yellow-e gene causes dehydration-induced mortality of adult Tribolium castaneum. *Developmental Biology*, **2015**, 399, 315-24	3.1	40
80	Annotation and expression analysis of cuticular proteins from the tobacco hornworm, Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 100-13	4.5	39
79	Innate immunity in a pyralid moth: functional evaluation of domains from a beta-1,3-glucan recognition protein. *Journal of Biological Chemistry*, **2004**, 279, 26605-11	5.4	39
78	A genome-wide analysis of antimicrobial effector genes and their transcription patterns in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 23-37	4.5	36
77	Initiating protease with modular domains interacts with β-glucan recognition protein to trigger innate immune response in insects. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13856-61	11.5	35
76	Identification of plasma proteinase complexes with serpin-3 in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2012**, 42, 946-55	4.5	34
75	Isolation and characterization of four serine proteinase inhibitors (serpins) from hemolymph of Manduca sexta. *Insect Biochemistry*, **1990**, 20, 141-147		33
74	Different isoforms of an apoprotein (apolipophorin III) associate with lipoproteins in Locusta migratoria. *FEBS Journal*, **1991**, 196, 509-17		32
73	Phylogenetic analysis and expression profiling of the pattern recognition receptors: Insights into molecular recognition of invading pathogens in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2015**, 62, 38-50	4.5	29
72	Clustering of adhesion receptors following exposure of insect blood cells to foreign surfaces. *Journal of Insect Physiology*, **2005**, 51, 555-64	2.4	29
71	Regulation of serpin gene-1 in Manduca sexta. *Insect Biochemistry and Molecular Biology*, **1995**, 25, 285-91	4.5	29
70	Monoclonal antibody MS13 identifies a plasmatocyte membrane protein and inhibits encapsulation and spreading reactions of Manduca sexta hemocytes. *Archives of Insect Biochemistry and Physiology*, **2000**, 45, 95-108	2.3	28
69	Expression and purification of Manduca sexta prophenoloxidase-activating proteinase precursor (proPAP) from baculovirus-infected insect cells. *Protein Expression and Purification*, **2001**, 23, 328-37	2	28
68	Juvenile hormone analog and injection effects on locust hemolymph protein synthesis. *Archives of Insect Biochemistry and Physiology*, **1992**, 20, 167-180	2.3	28
67	Multicopper oxidase-3 is a laccase associated with the peritrophic matrix of Anopheles gambiae. *PLoS ONE*, **2012**, 7, e33985	3.7	28

66	An insight into the transcriptome and proteome of the salivary gland of the stable fly, Stomoxys calcitrans. *Insect Biochemistry and Molecular Biology*, **2009**, 39, 607-14	4.5	27
65	Mechanical properties of elytra from Tribolium castaneum wild-type and body color mutant strains. *Journal of Insect Physiology*, **2010**, 56, 1901-6	2.4	27
64	Neuroglian on hemocyte surfaces is involved in homophilic and heterophilic interactions of the innate immune system of Manduca sexta. *Developmental and Comparative Immunology*, **2007**, 31, 1159-67	3.2	26
63	Multicopper oxidase-1 orthologs from diverse insect species have ascorbate oxidase activity. *Insect Biochemistry and Molecular Biology*, **2015**, 59, 58-71	4.5	24
62	Self-association of an insect β1,3-glucan recognition protein upon binding laminarin stimulates prophenoloxidase activation as an innate immune response. *Journal of Biological Chemistry*, **2014**, 289, 28399-410	5.4	24
61	A family of C-type lectins in Manduca sexta. *Advances in Experimental Medicine and Biology*, **2001**, 484, 191-4	3.6	24
60	Characterization and regulation of expression of an antifungal peptide from hemolymph of an insect, Manduca sexta. *Developmental and Comparative Immunology*, **2016**, 61, 258-68	3.2	23
59	Functional analysis of four processing products from multiple precursors encoded by a lebocin-related gene from Manduca sexta. *Developmental and Comparative Immunology*, **2010**, 34, 638-47	3.2	23
58	Kinetic properties of alternatively spliced isoforms of laccase-2 from Tribolium castaneum and Anopheles gambiae. *Insect Biochemistry and Molecular Biology*, **2012**, 42, 193-202	4.5	22
57	Analysis of mutually exclusive alternatively spliced serpin-1 isoforms and identification of serpin-1 proteinase complexes in Manduca sexta hemolymph. *Journal of Biological Chemistry*, **2010**, 285, 29642-50	5.4	22
56	RNAi-induced silencing of embryonic tryptophan oxygenase in the Pyralid moth, Plodia interpunctella. *Journal of Insect Science*, **2004**, 4, 15	2	22
55	Insect proteinases **1999**, 125-148		22
54	Model reactions for insect cuticle sclerotization: participation of amino groups in the cross-linking of Manduca sexta cuticle protein MsCP36. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 252-8	4.5	21
53	Leureptin: a soluble, extracellular leucine-rich repeat protein from Manduca sexta that binds lipopolysaccharide. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 713-22	4.5	20
52	The immune properties of Manduca sexta transferrin. *Insect Biochemistry and Molecular Biology*, **2017**, 81, 1-9	4.5	19
51	The lysozyme from insect (Manduca sexta) is a cold-adapted enzyme. *Protein and Peptide Letters*, **2007**, 14, 774-8	1.9	19
50	An initial event in the insect innate immune response: structural and biological studies of interactions between β1,3-glucan and the N-terminal domain of β1,3-glucan recognition protein. *Biochemistry*, **2013**, 52, 161-70	3.2	18
49	Monoclonal antibodies against Manduca sexta hemocytes bind Aedes aegypti hemocytes: characterization of six monoclonal antibodies that bind hemocytes from both species. *Developmental and Comparative Immunology*, **1995**, 19, 451-61	3.2	15

48	Adipokinetic hormone causes formation of a low density lipophorin in the house cricket, Acheta domesticus. *Insect Biochemistry*, **1990**, 20, 859-863		14
47	Serpins from an insect, Manduca sexta. *Advances in Experimental Medicine and Biology*, **1997**, 425, 155-613.6		14
46	Molecular cloning of a multidomain cysteine protease and protease inhibitor precursor gene from the tobacco hornworm (Manduca sexta) and functional expression of the cathepsin F-like cysteine protease domain. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 835-46	4.5	13
45	Roles of haemolymph proteins in antimicrobial defences of Manduca sexta **2009**, 34-48		12
44	Development of a new method for collecting hemolymph and measuring phenoloxidase activity in Tribolium castaneum. *BMC Research Notes*, **2019**, 12, 7	2.3	12
43	The Manduca sexta serpinome: Analysis of serpin genes and proteins in the tobacco hornworm. *Insect Biochemistry and Molecular Biology*, **2018**, 102, 21-30	4.5	12
42	Redox potentials, laccase oxidation, and antilarval activities of substituted phenols. *Bioorganic and Medicinal Chemistry*, **2012**, 20, 1679-89	3.4	11
41	Insect Proteases **2012**, 346-364		11
40	Tribolium castaneum as a model for high-throughput RNAi screening. *Advances in Biochemical Engineering/Biotechnology*, **2013**, 136, 163-78	1.7	11
39	Purification of a cysteine protease inhibitor from larval hemolymph of the tobacco hornworm (Manduca sexta) and functional expression of the recombinant protein. *Insect Biochemistry and Molecular Biology*, **2007**, 37, 960-8	4.5	11
38	Susceptibility of the Zebra Caterpillar to Autographa californica Nuclear Polyhedrosis Virus1. *Journal of Economic Entomology*, **1979**, 72, 570-572	2.2	11
37	Superoxide dismutase 2 knockdown leads to defects in locomotor activity, sensitivity to paraquat, and increased cuticle pigmentation in Tribolium castaneum. *Scientific Reports*, **2016**, 6, 29583	4.9	11
36	Comparative analysis of seven types of superoxide dismutases for their ability to respond to oxidative stress in Bombyx mori. *Scientific Reports*, **2019**, 9, 2170	4.9	11
35	A multicopper oxidase-related protein is essential for insect viability, longevity and ovary development. *PLoS ONE*, **2014**, 9, e111344	3.7	10
34	Crystal structure of native Anopheles gambiae serpin-2, a negative regulator of melanization in mosquitoes. *Proteins: Structure, Function and Bioinformatics*, **2011**, 79, 1999-2003	4.2	10
33	RNAi-induced silencing of embryonic tryptophan oxygenase in the Pyralid moth, Plodia interpunctella. *Journal of Insect Science*, **2004**, 4, 1-9		10
32	Hemolymph protease-5 links the melanization and Toll immune pathways in the tobacco hornworm,. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 23581-23587	11.5	10
31	Proteolytic activation of prophenoloxidase in an insect Manduca sexta. *Advances in Experimental Medicine and Biology*, **2001**, 484, 313-7	3.6	9

30	Iron binding and release properties of transferrin-1 from Drosophila melanogaster and Manduca sexta: Implications for insect iron homeostasis. *Insect Biochemistry and Molecular Biology*, **2020**, 125, 103438	4.5	9
29	Manduca sexta serpin-12 controls the prophenoloxidase activation system in larval hemolymph. *Insect Biochemistry and Molecular Biology*, **2018**, 99, 27-36	4.5	9
28	Isolation and characterization of apolipophorin-III from the giant water bug (Lethocerus medius). *Insect Biochemistry and Molecular Biology*, **1995**, 25, 759-64	4.5	8
27	Inhibition of immune pathway-initiating hemolymph protease-14 by Manduca sexta serpin-12, a conserved mechanism for the regulation of melanization and Toll activation in insects. *Insect Biochemistry and Molecular Biology*, **2020**, 116, 103261	4.5	8
26	Structural and inhibitory effects of hinge loop mutagenesis in serpin-2 from the malaria vector Anopheles gambiae. *Journal of Biological Chemistry*, **2015**, 290, 2946-56	5.4	7
25	Differential alaserpin expression during development of the antennae in the tobacco hawkmoth, Manduca sexta. *Archives of Insect Biochemistry and Physiology*, **1992**, 19, 39-52	2.3	6
24	Hemolymph **2009**, 446-449		5
23	Phylogenetic and sequence analyses of insect transferrins suggest that only transferrin 1 has a role in iron homeostasis. *Insect Science*, **2021**, 28, 495-508	3.6	5
22	Serine Protease Inhibitors from the Serpin Gene Family in Manduca sexta and Drosophila melanogaster **1990**, 139-146		4
21	Structural insight into the novel iron-coordination and domain interactions of transferrin-1 from a model insect, Manduca sexta. *Protein Science*, **2021**, 30, 408-422	6.3	4
20	Self-Assembled Coacervates of Chitosan and an Insect Cuticle Protein Containing a Rebers-Riddiford Motif. *Biomacromolecules*, **2018**, 19, 2391-2400	6.9	3
19	Serpins in a Lepidopteran Insect, Manduca sexta **2007**, 229-241		3
18	Changes in composition and levels of hemolymph proteins during metamorphosis of Manduca sexta. *Insect Biochemistry and Molecular Biology*, **2020**, 127, 103489	4.5	3
17	A Novel Serpin Expressed by Blood-Borne Microfilariae of the Parasitic Nematode Brugia malayi Inhibits Human Neutrophil Serine Proteinases. *Blood*, **1999**, 94, 1418-1428	2.2	2
16	Expression and Characterization of Stress Responsive Peptide-1; an Inducer of Antimicrobial Peptide Synthesis **2019**, 4, 42-52		1
15	A Biochemical and Structural Look into the Functional Role of Transferrin in D. melanogaster. *FASEB Journal*, **2018**, 32, 652.39	0.9	1
14	Developmental expression of Manduca sexta hemolin **1999**, 42, 198		1
13	Cuticle tanning in Tribolium castaneum. *Entomological Research*, **2011**, 41, 293-293	1.3	0

12	Investigation of an antifungal peptide, Diapausin, from Manduca sexta. *FASEB Journal*, **2019**, 33, 800.2	0.9	0
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