Alejandra Bravo

List of Publications by Year
in descending order

191 papers	12,341 citations	30070 54 h-index	28297 105 g-index
199 all docs	199 docs citations	199 times ranked	4878 citing authors

#	Article	IF	Citations
1	Mode of action of Bacillus thuringiensis Cry and Cyt toxins and their potential for insect control. Toxicon, 2007, 49, 423-435.	1.6	1,039
2	Bacillus thuringiensis: A story of a successful bioinsecticide. Insect Biochemistry and Molecular Biology, 2011, 41, 423-431.	2.7	848
3	RNA interference in Lepidoptera: An overview of successful and unsuccessful studies and implications for experimental design. Journal of Insect Physiology, 2011, 57, 231-245.	2.0	729
4	<i>Bacillus thuringiensis</i>insecticidal three-domain Cry toxins: mode of action, insect resistance and consequences for crop protection. FEMS Microbiology Reviews, 2013, 37, 3-22.	8.6	563
5	How Bacillus thuringiensis has evolved specific toxins to colonize the insect world. Trends in Genetics, 2001, 17, 193-199.	6.7	530
6	Oligomerization triggers binding of a Bacillus thuringiensis Cry1Ab pore-forming toxin to aminopeptidase N receptor leading to insertion into membrane microdomains. Biochimica Et Biophysica Acta - Biomembranes, 2004, 1667, 38-46.	2.6	360
7	Structure, Diversity, and Evolution of Protein Toxins from Spore-Forming Entomopathogenic Bacteria. Annual Review of Genetics, 2003, 37, 409-433.	7.6	338
8	Characterization of<i>cry</i>Genes in a Mexican<i>Bacillus thuringiensis</i>Strain Collection. Applied and Environmental Microbiology, 1998, 64, 4965-4972.	3.1	301
9	Evolution of <i>Bacillus thuringiensis</i> Cry toxins insecticidal activity. Microbial Biotechnology, 2013, 6, 17-26.	4.2	231
10	Cadherin-like receptor binding facilitates proteolytic cleavage of helix Î±-1 in domain I and oligomer pre-pore formation ofBacillus thuringiensisCry1Ab toxin. FEBS Letters, 2002, 513, 242-246.	2.8	223
11	Signaling versus punching hole: How do Bacillus thuringiensis toxins kill insect midgut cells?. Cellular and Molecular Life Sciences, 2009, 66, 1337-1349.	5.4	219
12	Engineering Modified Bt Toxins to Counter Insect Resistance. Science, 2007, 318, 1640-1642.	12.6	218
13	Bacillus thuringiensis subsp. israelensis Cyt1Aa synergizes Cry11Aa toxin by functioning as a membrane-bound receptor. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18303-18308.	7.1	202
14	How to cope with insect resistance to Bt toxins?. Trends in Biotechnology, 2008, 26, 573-579.	9.3	201
15	Role of Alkaline Phosphatase from Manduca sexta in the Mechanism of Action of Bacillus thuringiensis Cry1Ab Toxin. Journal of Biological Chemistry, 2010, 285, 12497-12503.	3.4	150
16	Heliothis virescens and Manduca sextaLipid Rafts Are Involved in Cry1A Toxin Binding to the Midgut Epithelium and Subsequent Pore Formation. Journal of Biological Chemistry, 2002, 277, 13863-13872.	3.4	147
17	A GPI-anchored alkaline phosphatase is a functional midgut receptor of Cry11Aa toxin in Aedes aegypti larvae. Biochemical Journal, 2006, 394, 77-84.	3.7	146
18	Phylogenetic relationships of Bacillus thuringiensis delta-endotoxin family proteins and their functional domains. Journal of Bacteriology, 1997, 179, 2793-2801.	2.2	137

#	Article	IF	Citations
19	Diversity of Bacillus thuringiensis Strains from Latin America with Insecticidal Activity against Different Mosquito Species. Applied and Environmental Microbiology, 2003, 69, 5269-5274.	3.1	130
20	Efficacy of genetically modified Bt toxins against insects with different genetic mechanisms of resistance. Nature Biotechnology, 2011, 29, 1128-1131.	17.5	127
21	Immunocytochemical localization of Bacillus thuringiensis insecticidal crystal proteins in intoxicated insects. Journal of Invertebrate Pathology, 1992, 60, 237-246.	3.2	122
22	Single Amino Acid Mutations in the Cadherin Receptor from Heliothis virescens Affect Its Toxin Binding Ability to Cry1A Toxins. Journal of Biological Chemistry, 2005, 280, 8416-8425.	3.4	119
23	Domain II Loop 3 of Bacillus thuringiensis Cry1Ab Toxin Is Involved in a â€œPing Pongâ€•Binding Mechanism with Manduca sexta Aminopeptidase-N and Cadherin Receptors. Journal of Biological Chemistry, 2009, 284, 32750-32757.	3.4	118
24	Interactions ofBacillus thuringiensisCrystal Proteins with the Midgut Epithelial Cells ofSpodoptera frugiperda(Lepidoptera: Noctuidae). Journal of Invertebrate Pathology, 1996, 68, 203-212.	3.2	105
25	Bacillus thuringiensis Cry1Ab Mutants Affecting Oligomer Formation Are Non-toxic to Manduca sexta Larvae. Journal of Biological Chemistry, 2007, 282, 21222-21229.	3.4	101
26	Î´-Endotoxins induce cation channels inSpodoptera frugiperdabrush border membranes in suspension and in planar lipid bilayers. FEBS Letters, 1995, 360, 217-222.	2.8	100
27	Cyt toxins produced by Bacillus thuringiensis: A protein fold conserved in several pathogenic microorganisms. Peptides, 2013, 41, 87-93.	2.4	99
28	<i>Bacillus thuringiensis</i> Cry1A toxins are versatile proteins with multiple modes of action: two distinct pre-pores are involved in toxicity. Biochemical Journal, 2014, 459, 383-396.	3.7	98
29	Mapping the Epitope in Cadherin-like Receptors Involved inBacillus thuringiensis Cry1A Toxin Interaction Using Phage Display. Journal of Biological Chemistry, 2001, 276, 28906-28912.	3.4	97
30	Molecular Basis for Bacillus thuringiensis Cry1Ab Toxin Specificity:â€‰ Two Structural Determinants in the Manduca sexta Bt-R1 Receptor Interact with Loops Î±-8 and 2 in Domain II of Cy1Ab Toxin. Biochemistry, 2003, 42, 10482-10489.	2.5	97
31	Immunocytochemical analysis of specific binding of Bacillus thuringiensis insecticidal crystal proteins to lepidopteran and coleopteran mudgut membranes. Journal of Invertebrate Pathology, 1992, 60, 247-253.	3.2	96
32	Role of receptor interaction in the mode of action of insecticidal Cry and Cyt toxins produced by Bacillus thuringiensis. Peptides, 2007, 28, 169-173.	2.4	96
33	The mitogen-activated protein kinase p38 is involved in insect defense against Cry toxins from Bacillus thuringiensis. Insect Biochemistry and Molecular Biology, 2010, 40, 58-63.	2.7	90
34	Specific Epitopes of Domains II and III of Bacillus thuringiensis Cry1Ab Toxin Involved in the Sequential Interaction with Cadherin and Aminopeptidase-N Receptors in Manduca sexta. Journal of Biological Chemistry, 2006, 281, 34032-34039.	3.4	89
35	Evidence of Field-Evolved Resistance of Spodoptera frugiperda to Bt Corn Expressing Cry1F in Brazil That Is Still Sensitive to Modified Bt Toxins. PLoS ONE, 2015, 10, e0119544.	2.5	89
36	Bacillus thuringiensis ssp. israelensis Cyt1Aa enhances activity of Cry11Aa toxin by facilitating the formation of a pre-pore oligomeric structure. Cellular Microbiology, 2007, 9, 2931-2937.	2.1	88

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37	Strategies to improve the insecticidal activity of Cry toxins from Bacillus thuringiensis. Peptides, 2009, 30, 589-595.	2.4	81
38	<i>Aedes aegypti</i> cadherin serves as a putative receptor of the Cry11Aa toxin from <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i>. Biochemical Journal, 2009, 424, 191-200.	3.7	76
39	Structural Changes of the Cry1Ac Oligomeric Pre-Pore fromBacillus thuringiensisInduced byN-Acetylgalactosamine Facilitates Toxin Membrane Insertionâ€. Biochemistry, 2006, 45, 10329-10336.	2.5	74
40	Enhancement of insecticidal activity of Bacillus thuringiensis Cry1A toxins by fragments of a toxin-binding cadherin correlates with oligomer formation. Peptides, 2009, 30, 583-588.	2.4	71
41	Processing of Cry1Ab Î´-endotoxin from Bacillus thuringiensis by Manduca sexta and Spodoptera frugiperda midgut proteases: role in protoxin activation and toxin inactivation. Insect Biochemistry and Molecular Biology, 2001, 31, 1155-1163.	2.7	69
42	Binding of Bacillus thuringiensis subsp. israelensis Cry4Ba to Cyt1Aa has an important role in synergism. Peptides, 2011, 32, 595-600.	2.4	67
43	Genetic Variability of Spodoptera frugiperda Smith (Lepidoptera: Noctuidae) Populations from Latin America Is Associated with Variations in Susceptibility to Bacillus thuringiensis Cry Toxins. Applied and Environmental Microbiology, 2006, 72, 7029-7035.	3.1	65
44	Hydropathic Complementarity Determines Interaction of Epitope 869HITDTNNK876 in Manduca sexta Bt-R1 Receptor with Loop 2 of Domain II ofBacillus thuringiensis Cry1A Toxins. Journal of Biological Chemistry, 2002, 277, 30137-30143.	3.4	64
45	Mode of action of mosquitocidal Bacillus thuringiensis toxins. Toxicon, 2007, 49, 597-600.	1.6	63
46	An Î±â€amylase is a novel receptor for <i>Bacillus thuringiensis</i> ssp. <i>israelensis</i> Cry4Ba and Cry11Aa toxins in the malaria vector mosquito <i>Anopheles albimanus</i> (<i>Diptera</i>:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 377 T	2.8	63
47	Pore formation by Cry toxins. Advances in Experimental Medicine and Biology, 2010, 677, 127-142.	1.6	63
48	Cry11Aa toxin fromBacillus thuringiensisbinds its receptor inAedes aegyptimosquito larvae through loop Î±-8 of domain II. FEBS Letters, 2005, 579, 3508-3514.	2.8	61
49	Role of MAPK p38 in the cellular responses to pore-forming toxins. Peptides, 2011, 32, 601-606.	2.4	61
50	Differential Role of Manduca sexta Aminopeptidase-N and Alkaline Phosphatase in the Mode of Action of Cry1Aa, Cry1Ab, and Cry1Ac Toxins from Bacillus thuringiensis. Applied and Environmental Microbiology, 2013, 79, 4543-4550.	3.1	61
51	Aminopeptidase dependent pore formation ofBacillus thuringiensisCrylAc toxin onTrichoplusia nimembranes. FEBS Letters, 1997, 414, 303-307.	2.8	60
52	Dual mode of action of Bt proteins: protoxin efficacy against resistant insects. Scientific Reports, 2015, 5, 15107.	3.3	59
53	Multiple Receptors as Targets of Cry Toxins in Mosquitoes. Journal of Agricultural and Food Chemistry, 2011, 59, 2829-2838.	5.2	57
54	A Bacillus thuringiensis S-Layer Protein Involved in Toxicity against Epilachna varivestis (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.1	55

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55	Tryptophan Spectroscopy Studies and Black Lipid Bilayer Analysis Indicate that the Oligomeric Structure of Cry1Ab Toxin fromBacillus thuringiensisIs the Membrane-Insertion Intermediateâ€. Biochemistry, 2004, 43, 166-174.	2.5	54
56	An ADAM metalloprotease is a Cry3Aa Bacillus thuringiensis toxin receptor. Biochemical and Biophysical Research Communications, 2007, 362, 437-442.	2.1	54
57	N-terminal Activation Is an Essential Early Step in the Mechanism of Action of the Bacillus thuringiensis Cry1Ac Insecticidal Toxin. Journal of Biological Chemistry, 2002, 277, 23985-23987.	3.4	53
58	Cadherin, Alkaline Phosphatase, and Aminopeptidase N as Receptors of Cry11Ba Toxin from <i>Bacillus thuringiensis</i> subsp. <i>jegathesan</i> in <i>Aedes aegypti</i>. Applied and Environmental Microbiology, 2011, 77, 24-31.	3.1	53
59	Comparative Proteomic Analysis of Aedes aegypti Larval Midgut after Intoxication with Cry11Aa Toxin from Bacillus thuringiensis. PLoS ONE, 2012, 7, e37034.	2.5	51
60	Unfolding Events in the Water-soluble Monomeric Cry1Ab Toxin during Transition to Oligomeric Pre-pore and Membrane-inserted Pore Channel. Journal of Biological Chemistry, 2004, 279, 55168-55175.	3.4	49
61	Efficacy of Genetically Modified Bt Toxins Alone and in Combinations Against Pink Bollworm Resistant to Cry1Ac and Cry2Ab. PLoS ONE, 2013, 8, e80496.	2.5	49
62	ABCC2 is associated with Bacillus thuringiensis Cry1Ac toxin oligomerization and membrane insertion in diamondback moth. Scientific Reports, 2017, 7, 2386.	3.3	49
63	Dominant Negative Mutants of Bacillus thuringiensis Cry1Ab Toxin Function as Anti-Toxins: Demonstration of the Role of Oligomerization in Toxicity. PLoS ONE, 2009, 4, e5545.	2.5	49
64	Evaluation of the Impact of Genetically Modified Cotton After 20 Years of Cultivation in Mexico. Frontiers in Bioengineering and Biotechnology, 2018, 6, 82.	4.1	46
65	Bacterial Toxins Active against Mosquitoes: Mode of Action and Resistance. Toxins, 2021, 13, 523.	3.4	46
66	Resistance to Bacillus thuringiensis Mediated by an ABC Transporter Mutation Increases Susceptibility to Toxins from Other Bacteria in an Invasive Insect. PLoS Pathogens, 2016, 12, e1005450.	4.7	45
67	Characterization of the mechanism of action of the genetically modified Cry1AbMod toxin that is active against Cry1Ab-resistant insects. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2229-2237.	2.6	42
68	Midgut GPI-anchored proteins with alkaline phosphatase activity from the cotton boll weevil (Anthonomus grandis) are putative receptors for the Cry1B protein of Bacillus thuringiensis. Insect Biochemistry and Molecular Biology, 2010, 40, 138-145.	2.7	40
69	Single concentration tests show synergism among Bacillus thuringiensis subsp. israelensis toxins against the malaria vector mosquito Anopheles albimanus. Journal of Invertebrate Pathology, 2010, 104, 231-233.	3.2	40
70	A Single Point Mutation Resulting in Cadherin Mislocalization Underpins Resistance against Bacillus thuringiensis Toxin in Cotton Bollworm. Journal of Biological Chemistry, 2017, 292, 2933-2943.	3.4	39
71	Mode of action of Bacillus thuringiensis PS86Q3 strain in hymenopteran forest pests. Insect Biochemistry and Molecular Biology, 2001, 31, 849-856.	2.7	38
72	Cloning and Epitope Mapping of Cry11Aa-Binding Sites in the Cry11Aa-Receptor Alkaline Phosphatase from <i>Aedes aegypti</i>. Biochemistry, 2009, 48, 8899-8907.	2.5	38

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73	The regulation landscape of MAPK signaling cascade for thwarting Bacillus thuringiensis infection in an insect host. PLoS Pathogens, 2021, 17, e1009917.	4.7	37
74	Two <scp>ABC</scp> transporters are differentially involved in the toxicity of two <scp><i>Bacillus thuringiensis</i></scp> Cry1 toxins to the invasive cropâ€pest <scp><i>Spodoptera frugiperda</i></scp> (J. E. Smith). Pest Management Science, 2021, 77, 1492-1501.	3.4	36
75	Isolation of Cry1Ab protein mutants ofBacillus thuringiensisby a highly efficient PCR site-directed mutagenesis system. FEMS Microbiology Letters, 1996, 145, 333-339.	1.8	35
76	The Amino- and Carboxyl-Terminal Fragments of the <i>Bacillus thuringensis</i> Cyt1Aa Toxin Have Differential Roles in Toxin Oligomerization and Pore Formation. Biochemistry, 2011, 50, 388-396.	2.5	34
77	Cadherin binding is not a limiting step for <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> Cry4Ba toxicity to <i>Aedes aegypti</i> larvae. Biochemical Journal, 2012, 443, 711-717.	3.7	34
78	Aedes aegypti alkaline phosphatase ALP1 is a functional receptor of Bacillus thuringiensis Cry4Ba and Cry11Aa toxins. Insect Biochemistry and Molecular Biology, 2012, 42, 683-689.	2.7	34
79	Identification of ABCC2 as a binding protein of Cry1Ac onÂbrush border membrane vesicles from<i>Helicoverpa armigera</i>by an improved pullâ€down assay. MicrobiologyOpen, 2016, 5, 659-669.	3.0	34
80	Encapsulation Strategies for <i>Bacillus thuringiensis</i>: From Now to the Future. Journal of Agricultural and Food Chemistry, 2021, 69, 4564-4577.	5.2	34
81	FOXA transcriptional factor modulates insect susceptibility to Bacillus thuringiensis Cry1Ac toxin by regulating the expression of toxin-receptor ABCC2 and ABCC3 genes. Insect Biochemistry and Molecular Biology, 2017, 88, 1-11.	2.7	33
82	A single amino acid polymorphism in ABCC2 loop 1 is responsible for differential toxicity of Bacillus thuringiensis Cry1Ac toxin in different Spodoptera (Noctuidae) species. Insect Biochemistry and Molecular Biology, 2018, 100, 59-65.	2.7	33
83	Specific binding between Bacillus thuringiensis Cry9Aa and Vip3Aa toxins synergizes their toxicity against Asiatic rice borer (Chilo suppressalis). Journal of Biological Chemistry, 2018, 293, 11447-11458.	3.4	33
84	Structural and functional studies of Î±-helix 5 region from Bacillus thuringiensis Cry1Ab Î´-endotoxin. BBA - Proteins and Proteomics, 2001, 1546, 122-131.	2.1	32
85	Characterization of the Cry1Ah resistance in Asian corn Borer and its cross-resistance to other Bacillus thuringiensis toxins. Scientific Reports, 2018, 8, 234.	3.3	31
86	The C-terminal protoxin region of Bacillus thuringiensis Cry1Ab toxin has a functional role in binding to GPI-anchored receptors in the insect midgut. Journal of Biological Chemistry, 2018, 293, 20263-20272.	3.4	31
87	Oligomerization is a key step in Cyt1Aa membrane insertion and toxicity but not necessary to synergize Cry11Aa toxicity in Aedes aegypti larvae.. Environmental Microbiology, 2013, 15, n/a-n/a.	3.8	30
88	Insecticidal Proteins from Bacillus thuringiensis and Their Mechanism of Action. , 2017, , 53-66.		30
89	Evidence for intermolecular interaction as a necessary step for pore-formation activity and toxicity ofBacillus thuringiensisCry1Ab toxin. FEMS Microbiology Letters, 2000, 191, 221-225.	1.8	29
90	Permeability Changes of Manduca sexta Midgut Brush Border Membranes Induced by Oligomeric Structures of Different Cry Toxins. Journal of Membrane Biology, 2006, 212, 61-68.	2.1	29

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91	Role of Tryptophan Residues in Toxicity of Cry1Ab Toxin from Bacillus thuringiensis. Applied and Environmental Microbiology, 2006, 72, 901-907.	3.1	28
92	Genetic Basis of Cry1F-Resistance in a Laboratory Selected Asian Corn Borer Strain and Its Cross-Resistance to Other Bacillus thuringiensis Toxins. PLoS ONE, 2016, 11, e0161189.	2.5	28
93	A system for the directed evolution of the insecticidal protein from Bacillus thuringiensis. Molecular Biotechnology, 2007, 36, 90-101.	2.4	27
94	The pre-pore from Bacillus thuringiensis Cry1Ab toxin is necessary to induce insect death in Manduca sexta. Peptides, 2008, 29, 318-323.	2.4	27
95	Toxicity of Cry1A toxins from Bacillus thuringiensis to CF1 cells does not involve activation of adenylate cyclase/PKA signaling pathway. Insect Biochemistry and Molecular Biology, 2017, 80, 21-31.	2.7	27
96	Engineering Bacillus thuringiensis Cyt1Aa toxin specificity from dipteran to lepidopteran toxicity. Scientific Reports, 2018, 8, 4989.	3.3	27
97	Cry64Ba and Cry64Ca, Two ETX/MTX2-Type Bacillus thuringiensis Insecticidal Proteins Active against Hemipteran Pests. Applied and Environmental Microbiology, 2018, 84, .	3.1	27
98	Characterization of novel Brazilian Bacillus thuringiensis strains active against Spodoptera frugiperda and other insect pests. Journal of Applied Entomology, 2004, 128, 102-107.	1.8	26
99	Oligomerization of Cry11Aa from <i>Bacillus thuringiensis</i> Has an Important Role in Toxicity against <i>Aedes aegypti</i>. Applied and Environmental Microbiology, 2009, 75, 7548-7550.	3.1	26
100	A Tenebrio molitor GPI-anchored alkaline phosphatase is involved in binding of Bacillus thuringiensis Cry3Aa to brush border membrane vesicles. Peptides, 2013, 41, 81-86.	2.4	26
101	A versatile contribution of both aminopeptidases N and ABC transporters to Bt Cry1Ac toxicity in the diamondback moth. BMC Biology, 2022, 20, 33.	3.8	26
102	Evidence for intermolecular interaction as a necessary step for pore-formation activity and toxicity of Bacillus thuringiensis Cry1Ab toxin. FEMS Microbiology Letters, 2000, 191, 221-225.	1.8	25
103	Structural and functional analysis of the pre-pore and membrane-inserted pore of Cry1Ab toxin. Journal of Invertebrate Pathology, 2006, 92, 172-177.	3.2	25
104	Dominant Negative Phenotype of Bacillus thuringiensis Cry1Ab, Cry11Aa and Cry4Ba Mutants Suggest Hetero-Oligomer Formation among Different Cry Toxins. PLoS ONE, 2011, 6, e19952.	2.5	25
105	Transcriptional cellular responses in midgut tissue of Aedes aegypti larvae following intoxication with Cry11Aa toxin from Bacillus thuringiensis. BMC Genomics, 2015, 16, 1042.	2.8	24
106	Isolated domain II and III from theBacillus thuringiensisCrylAb Î´-endotoxin binds to lepidopteran midgut membranes. FEBS Letters, 1997, 414, 313-318.	2.8	23
107	Domains II and III of Bacillus thuringiensis Cry1Ab Toxin Remain Exposed to the Solvent after Insertion of Part of Domain I into the Membrane. Journal of Biological Chemistry, 2011, 286, 19109-19117.	3.4	23
108	Role of UPR Pathway in Defense Response of Aedes aegypti against Cry11Aa Toxin from Bacillus thuringiensis. International Journal of Molecular Sciences, 2013, 14, 8467-8478.	4.1	23

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109	MAPK-mediated transcription factor GATAd contributes to Cry1Ac resistance in diamondback moth by reducing PxmALP expression. PLoS Genetics, 2022, 18, e1010037.	3.5	23
110	Pore formation activity of Cry1Ab toxin from Bacillus thuringiensis in an improved membrane vesicle preparation from Manduca sexta midgut cell microvilli. Biochimica Et Biophysica Acta - Biomembranes, 2002, 1562, 63-69.	2.6	22
111	The Cadherin Protein Is Not Involved in Susceptibility to Bacillus thuringiensis Cry1Ab or Cry1Fa Toxins in Spodoptera frugiperda. Toxins, 2020, 12, 375.	3.4	20
112	Defense and death responses to pore forming toxins. Biotechnology and Genetic Engineering Reviews, 2009, 26, 65-82.	6.2	19
113	Synergistic activity of Bacillus thuringiensis toxins against Simulium spp. larvae. Journal of Invertebrate Pathology, 2014, 121, 70-73.	3.2	19
114	Binding and Oligomerization of Modified and Native Bt Toxins in Resistant and Susceptible Pink Bollworm. PLoS ONE, 2015, 10, e0144086.	2.5	19
115	Assembling of Holotrichia parallela (dark black chafer) midgut tissue transcriptome and identification of midgut proteins that bind to Cry8Ea toxin from Bacillus thuringiensis. Applied Microbiology and Biotechnology, 2015, 99, 7209-7218.	3.6	19
116	Reduced Expression of a Novel Midgut Trypsin Gene Involved in Protoxin Activation Correlates with Cry1Ac Resistance in a Laboratory-Selected Strain of Plutella xylostella (L.). Toxins, 2020, 12, 76.	3.4	19
117	Adoption of Bacillus thuringiensis-based biopesticides in agricultural systems and new approaches to improve their use in Brazil. Biological Control, 2022, 165, 104792.	3.0	19
118	Assessment of cry1 Gene Contents of Bacillus thuringiensis Strains by Use of DNA Microarrays. Applied and Environmental Microbiology, 2005, 71, 5391-5398.	3.1	18
119	Modified <i>Bacillus thuringiensis</i> Toxins and a Hybrid <i>B. thuringiensis</i> Strain Counter Greenhouse-Selected Resistance in <i>Trichoplusia ni</i>. Applied and Environmental Microbiology, 2009, 75, 5739-5741.	3.1	18
120	Enhancement of Bacillus thuringiensis Cry1Ab and Cry1Fa Toxicity to Spodoptera frugiperda by Domain III Mutations Indicates There Are Two Limiting Steps in Toxicity as Defined by Receptor Binding and Protein Stability. Applied and Environmental Microbiology, 2018, 84, .	3.1	18
121	The Cadherin Cry1Ac Binding-Region is Necessary for the Cooperative Effect with ABCC2 Transporter Enhancing Insecticidal Activity of Bacillus thuringiensis Cry1Ac Toxin. Toxins, 2019, 11, 538.	3.4	18
122	Cryptic endotoxic nature ofBacillus thuringiensisCry1Ab insecticidal crystal protein. FEBS Letters, 2004, 570, 30-36.	2.8	17
123	Toxicity of Bacillus thuringiensis Î´-endotoxins against bean shoot borer (Epinotia aporema Wals.) larvae, a major soybean pest in Argentina. Journal of Invertebrate Pathology, 2007, 94, 125-129.	3.2	17
124	Comprehensive analysis of Cry1Ac protoxin activation mediated by midgut proteases in susceptible and resistant Plutella xylostella (L.). Pesticide Biochemistry and Physiology, 2020, 163, 23-30.	3.6	17
125	Functional display of Bacillus thuringiensis Cry1Ac toxin on T7 phage. Journal of Invertebrate Pathology, 2006, 92, 45-49.	3.2	16
126	<i>Bacillus thuringiensis</i> targets the host intestinal epithelial junctions for successful infection of <i>Caenorhabditis elegans</i>. Environmental Microbiology, 2019, 21, 1086-1098.	3.8	16

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127	Identification of Aminopeptidase-N2 as a Cry2Ab binding protein in Manduca sexta. Peptides, 2017, 98, 93-98.	2.4	15
128	Cell lines as models for the study of Cry toxins from Bacillus thuringiensis. Insect Biochemistry and Molecular Biology, 2018, 93, 66-78.	2.7	15
129	Identification of midgut membrane proteins from different instars of Helicoverpa armigera (Lepidoptera: Noctuidae) that bind to Cry1Ac toxin. PLoS ONE, 2018, 13, e0207789.	2.5	15
130	GATAe transcription factor is involved in Bacillus thuringiensis Cry1Ac toxin receptor gene expression inducing toxin susceptibility. Insect Biochemistry and Molecular Biology, 2020, 118, 103306.	2.7	15
131	Employing phage display to study the mode of action of Bacillus thuringiensis Cry toxins. Peptides, 2008, 29, 324-329.	2.4	14
132	Membrane binding and oligomer membrane insertion are necessary but insufficient for Bacillus thuringiensis Cyt1Aa toxicity. Peptides, 2014, 53, 286-291.	2.4	14
133	Insecticidal Specificity of Cry1Ah to Helicoverpa armigera Is Determined by Binding of APN1 via Domain II Loops 2 and 3. Applied and Environmental Microbiology, 2017, 83, .	3.1	14
134	Tobacco plants expressing the Cry1AbMod toxin suppress tolerance to Cry1Ab toxin of Manduca sexta cadherin-silenced larvae. Insect Biochemistry and Molecular Biology, 2011, 41, 513-519.	2.7	13
135	Toxicity and mode of action of insecticidal Cry1A proteins from Bacillus thuringiensis in an insect cell line, CF-1. Peptides, 2014, 53, 292-299.	2.4	13
136	Transgenic cotton co-expressing chimeric Vip3AcAa and Cry1Ac confers effective protection against Cry1Ac-resistant cotton bollworm. Transgenic Research, 2017, 26, 763-774.	2.4	13
137	Helix Î±-3 inter-molecular salt bridges and conformational changes are essential for toxicity of Bacillus thuringiensis 3D-Cry toxin family. Scientific Reports, 2018, 8, 10331.	3.3	13
138	Synergistic resistance of Helicoverpa armigera to Bt toxins linked to cadherin and ABC transporters mutations. Insect Biochemistry and Molecular Biology, 2021, 137, 103635.	2.7	13
139	Spodoptera frugiperda (J. E. Smith) Aminopeptidase N1 Is a Functional Receptor of the Bacillus thuringiensis Cry1Ca Toxin. Applied and Environmental Microbiology, 2018, 84, .	3.1	12
140	Insect Hsp90 Chaperone Assists Bacillus thuringiensis Cry Toxicity by Enhancing Protoxin Binding to the Receptor and by Protecting Protoxin from Gut Protease Degradation. MBio, 2019, 10, .	4.1	12
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142	Nutrient conditions determine the localization of <i>Bacillus thuringiensis</i> Vip3Aa protein in the mother cell compartment. Microbial Biotechnology, 2021, 14, 551-560.	4.2	12
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