

Gary W Felton

List of Publications by Year in descending order

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120
papers

8,460
citations

34105
52
h-index

49909
87
g-index

125
all docs

125
docs citations

125
times ranked

5850
citing authors

#	ARTICLE	IF	CITATIONS
1	Sorghum and maize flavonoids are detrimental to growth and survival of fall armyworm <i>Spodoptera frugiperda</i> . <i>Journal of Pest Science</i> , 2023, 96, 1551-1567.	3.7	7
2	Stomata-mediated interactions between plants, herbivores, and the environment. <i>Trends in Plant Science</i> , 2022, 27, 287-300.	8.8	51
3	The dual function of elicitors and effectors from insects: reviewing the "arms race" against plant defenses. <i>Plant Molecular Biology</i> , 2022, 109, 427-445.	3.9	19
4	Anti-Herbivore Resistance Changes in Tomato with Elevation. <i>Journal of Chemical Ecology</i> , 2022, 48, 196.	1.8	0
5	Enterococcal symbionts of caterpillars facilitate the utilization of a suboptimal diet. <i>Journal of Insect Physiology</i> , 2022, 138, 104369.	2.0	17
6	Plant Nutrition Influences Resistant Maize Defense Responses to the Fall Armyworm (<i>Spodoptera</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.2	10
7	Special Issues in Honor of Professor Dr. Dr. hc mult. Wittko Francke, 28 November 1940â€“27 December 2020. <i>Journal of Chemical Ecology</i> , 2022, 48, 241-243.	1.8	0
8	Opposing Growth Responses of Lepidopteran Larvae to the Establishment of Gut Microbiota. <i>Microbiology Spectrum</i> , 2022, 10, .	3.0	5
9	Host permissiveness to baculovirus influences timeâ€“dependent immune responses and fitness costs. <i>Insect Science</i> , 2021, 28, 103-114.	3.0	8
10	Changes in tolerance and resistance of a plant to insect herbivores under variable water availability. <i>Environmental and Experimental Botany</i> , 2021, 183, 104334.	4.2	22
11	Changes in arthropod community but not plant quality benefit a specialist herbivore on plants under reduced water availability. <i>Oecologia</i> , 2021, 195, 383-396.	2.0	9
12	Silencing the alarm: an insect salivary enzyme closes plant stomata and inhibits volatile release. <i>New Phytologist</i> , 2021, 230, 793-803.	7.3	34
13	Silicon-Mediated Enhancement of Herbivore Resistance in Agricultural Crops. <i>Frontiers in Plant Science</i> , 2021, 12, 631824.	3.6	24
14	Effects of maize (<i>Zea mays</i>) genotypes and microbial sources in shaping fall armyworm (<i>Spodoptera</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.3	22
15	Parasitoid Causes Cascading Effects on Plant-Induced Defenses Mediated Through the Gut Bacteria of Host Caterpillars. <i>Frontiers in Microbiology</i> , 2021, 12, 708990.	3.5	6
16	Concerted impacts of antiherbivore defenses and opportunistic <i>Serratia</i> pathogens on the fall armyworm (<i>Spodoptera frugiperda</i>). <i>Oecologia</i> , 2021, , 1.	2.0	4
17	Special Issues in Honor of Professor Dr. Dr. hc mult. Wittko Francke, 28 November 1940 - 27 December 2020. <i>Journal of Chemical Ecology</i> , 2021, 47, 927-929.	1.8	0
18	Geographically isolated Colorado potato beetle mediating distinct defense responses in potato is associated with the alteration of gut microbiota. <i>Journal of Pest Science</i> , 2020, 93, 379-390.	3.7	11

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19	Host plant defense produces species specific alterations to flight muscle protein structure and flight-related fitness traits of two armyworms. <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	6
20	Asymmetric Responses to Climate Change: Temperature Differentially Alters Herbivore Salivary Elicitor and Host Plant Responses to Herbivory. <i>Journal of Chemical Ecology</i> , 2020, 46, 891-905.	1.8	10
21	Induction of defensive proteins in Solanaceae by salivary glucose oxidase of <i>Helicoverpa zea</i> caterpillars and consequences for larval performance. <i>Arthropod-Plant Interactions</i> , 2020, 14, 317-325.	1.1	11
22	Oral cues are not enough: induction of defensive proteins in <i>Nicotiana tabacum</i> upon feeding by caterpillars. <i>Planta</i> , 2020, 251, 89.	3.2	5
23	Diet influences proliferation and stability of gut bacterial populations in herbivorous lepidopteran larvae. <i>PLoS ONE</i> , 2020, 15, e0229848.	2.5	46
24	Top-down effects from parasitoids may mediate plant defence and plant fitness. <i>Functional Ecology</i> , 2020, 34, 1767-1778.	3.6	9
25	Fungi from the black cutworm <i>Agrotis ipsilon</i> oral secretions mediate plant-insect interactions. <i>Arthropod-Plant Interactions</i> , 2020, 14, 423-432.	1.1	5
26	Editorial: Plant-Arthropod Interactions: Effectors and Elicitors of Arthropods and Their Associated Microbes. <i>Frontiers in Plant Science</i> , 2020, 11, 610160.	3.6	0
27	Co-option of microbial associates by insects and their impact on plant-herbivore interactions. <i>Plant, Cell and Environment</i> , 2019, 42, 1078-1086.	5.7	62
28	Induced Plant Defenses Against Herbivory in Cultivated and Wild Tomato. <i>Journal of Chemical Ecology</i> , 2019, 45, 693-707.	1.8	47
29	Plant defenses interact with insect enteric bacteria by initiating a leaky gut syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15991-15996.	7.1	65
30	Parasitic Wasp Mediates Plant Perception of Insect Herbivores. <i>Journal of Chemical Ecology</i> , 2019, 45, 972-981.	1.8	16
31	Pathogen-Mediated Tritrophic Interactions: Baculovirus-Challenged Caterpillars Induce Higher Plant Defenses than Healthy Caterpillars. <i>Journal of Chemical Ecology</i> , 2019, 45, 515-524.	1.8	7
32	Phytohormones in Fall Armyworm Saliva Modulate Defense Responses in Plants. <i>Journal of Chemical Ecology</i> , 2019, 45, 598-609.	1.8	40
33	Host plant and population source drive diversity of microbial gut communities in two polyphagous insects. <i>Scientific Reports</i> , 2019, 9, 2792.	3.3	97
34	<i>Enterobacter ludwigii</i> , isolated from the gut microbiota of <i>Helicoverpa zea</i> , promotes tomato plant growth and yield without compromising anti-herbivore defenses. <i>Arthropod-Plant Interactions</i> , 2019, 13, 271-278.	1.1	13
35	Proteomic analysis of labial saliva of the generalist cabbage looper (<i>Trichoplusia ni</i>) and its role in interactions with host plants. <i>Journal of Insect Physiology</i> , 2018, 107, 97-103.	2.0	23
36	Intraspecific differences in plant defense induction by fall armyworm strains. <i>New Phytologist</i> , 2018, 218, 310-321.	7.3	42

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37	Symbiotic polydnavirus of a parasite manipulates caterpillar and plant immunity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5199-5204.	7.1	64
38	Gut-Associated Bacteria of <i>Helicoverpa zea</i> Indirectly Trigger Plant Defenses in Maize. Journal of Chemical Ecology, 2018, 44, 690-699.	1.8	19
39	Herbivore-Induced Defenses in Tomato Plants Enhance the Lethality of the Entomopathogenic Bacterium, <i>Bacillus thuringiensis</i> var. <i>kurstaki</i> . Journal of Chemical Ecology, 2018, 44, 947-956.	1.8	8
40	Host plant species determines symbiotic bacterial community mediating suppression of plant defenses. Scientific Reports, 2017, 7, 39690.	3.3	76
41	Plant-mediated effects on an insect–pathogen interaction vary with intraspecific genetic variation in plant defences. Oecologia, 2017, 183, 1121-1134.	2.0	29
42	Genomics of Lepidoptera saliva reveals function in herbivory. Current Opinion in Insect Science, 2017, 19, 61-69.	4.4	43
43	<i>Helicoverpa zea</i> gut-associated bacteria indirectly induce defenses in tomato by triggering a salivary elicitor(s). New Phytologist, 2017, 214, 1294-1306.	7.3	72
44	Quantitative proteomic analysis of the fall armyworm saliva. Insect Biochemistry and Molecular Biology, 2017, 86, 81-92.	2.7	35
45	Tritrophic Interactions: Microbe-Mediated Plant Effects on Insect Herbivores. Annual Review of Phytopathology, 2017, 55, 313-331.	7.8	168
46	Fall Armyworm-Associated Gut Bacteria Modulate Plant Defense Responses. Molecular Plant-Microbe Interactions, 2017, 30, 127-137.	2.6	119
47	Letter from the Editor: A Daunting Task. Journal of Chemical Ecology, 2017, 43, 119-119.	1.8	0
48	Host plant driven transcriptome plasticity in the salivary glands of the cabbage looper (<i>Trichoplusia</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.5	30
49	Turnabout Is Fair Play: Herbivory-Induced Plant Chitinases Excreted in Fall Armyworm Frass Suppress Herbivore Defenses in Maize. Plant Physiology, 2016, 171, 694-706.	4.8	74
50	Lessons from the Far End: Caterpillar FRASS-Induced Defenses in Maize, Rice, Cabbage, and Tomato. Journal of Chemical Ecology, 2016, 42, 1130-1141.	1.8	34
51	Intraplant communication in maize contributes to defense against insects. Plant Signaling and Behavior, 2016, 11, e1212800.	2.4	10
52	Herbivore Oral Secreted Bacteria Trigger Distinct Defense Responses in Preferred and Non-Preferred Host Plants. Journal of Chemical Ecology, 2016, 42, 463-474.	1.8	44
53	Chew and spit: tree-feeding notodontid caterpillars anoint girdles with saliva. Arthropod-Plant Interactions, 2016, 10, 143-150.	1.1	16
54	Essential Amino Acid Supplementation by Gut Microbes of a Wood-Feeding Cerambycid. Environmental Entomology, 2016, 45, 66-73.	1.4	55

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55	Ethylene Contributes to <i>maize</i> insect resistance1</i>-Mediated Maize Defense against the Phloem Sap-Sucking Corn Leaf Aphid. <i>Plant Physiology</i> , 2015, 169, 313-324.	4.8	65
56	Cues from chewing insects â€” the intersection of DAMPs, HAMPs, MAMPs and effectors. <i>Current Opinion in Plant Biology</i> , 2015, 26, 80-86.	7.1	183
57	Maize Plants Recognize Herbivore-Associated Cues from Caterpillar Frass. <i>Journal of Chemical Ecology</i> , 2015, 41, 781-792.	1.8	61
58	Benefits and costs of tomato seed treatment with plant defense elicitors for insect resistance. <i>Arthropod-Plant Interactions</i> , 2014, 8, 539-545.	1.1	26
59	Enhancing Plant Resistance at the Seed Stage: Low Concentrations of Methyl Jasmonate Reduce the Performance of the Leaf Miner <i>Tuta absoluta</i> but do not Alter the Behavior of its Predator <i>Chrysoperla externa</i> . <i>Journal of Chemical Ecology</i> , 2014, 40, 1090-1098.	1.8	37
60	Gut Microbes Contribute to Nitrogen Provisioning in a Wood-Feeding Cerambycid. <i>Environmental Entomology</i> , 2014, 43, 903-912.	1.4	55
61	Roles of ethylene and jasmonic acid in systemic induced defense in tomato (<i>Solanum lycopersicum</i>) against <i>Helicoverpa zea</i> . <i>Planta</i> , 2014, 239, 577-589.	3.2	58
62	Effect of PGPR on population growth parameters of cotton aphid. <i>Archives of Phytopathology and Plant Protection</i> , 2014, 47, 1274-1285.	1.3	13
63	Herbivore Cues from the Fall Armyworm (<i>Spodoptera frugiperda</i>) Larvae Trigger Direct Defenses in Maize. <i>Molecular Plant-Microbe Interactions</i> , 2014, 27, 461-470.	2.6	56
64	Insights into the Saliva of the Brown Marmorated Stink Bug <i>Halyomorpha halys</i> (Hemiptera: Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 T	2.5	85
65	Colorado potato beetle manipulates plant defenses in local and systemic leaves. <i>Plant Signaling and Behavior</i> , 2013, 8, e27592.	2.4	34
66	Hostâ€”specific salivary elicitor(s) of <sc>E</sc>uropean corn borer induce defenses in tomato and maize. <i>New Phytologist</i> , 2013, 199, 66-73.	7.3	62
67	Priming of antiherbivore defensive responses in plants. <i>Insect Science</i> , 2013, 20, 273-285.	3.0	91
68	Herbivore exploits orally secreted bacteria to suppress plant defenses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 15728-15733.	7.1	386
69	Salivary signals of European corn borer induce indirect defenses in tomato. <i>Plant Signaling and Behavior</i> , 2013, 8, e27318.	2.4	15
70	Herbivory in the Previous Generation Primes Plants for Enhanced Insect Resistance Â Â. <i>Plant Physiology</i> , 2012, 158, 854-863.	4.8	394
71	Role of trichomes in defense against herbivores: comparison of herbivore response to woolly and hairless trichome mutants in tomato (<i>Solanum lycopersicum</i>). <i>Planta</i> , 2012, 236, 1053-1066.	3.2	200
72	Salivary Glucose Oxidase from Caterpillars Mediates the Induction of Rapid and Delayed-Induced Defenses in the Tomato Plant. <i>PLoS ONE</i> , 2012, 7, e36168.	2.5	107

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73	ATP Hydrolyzing Salivary Enzymes of Caterpillars Suppress Plant Defenses. PLoS ONE, 2012, 7, e41947.	2.5	64
74	Insect Eggs Can Enhance Wound Response in Plants: A Study System of Tomato <i>Solanum lycopersicum</i> L. and <i>Helicoverpa zea</i> Boddie. PLoS ONE, 2012, 7, e37420.	2.5	62
75	Microorganisms from aphid honeydew attract and enhance the efficacy of natural enemies. Nature Communications, 2011, 2, 348.	12.8	152
76	Reiterative and interruptive signaling in induced plant resistance to chewing insects. Phytochemistry, 2011, 72, 1624-1634.	2.9	29
77	Specificity of Induced Resistance in Tomato Against Specialist Lepidopteran and Coleopteran Species. Journal of Chemical Ecology, 2011, 37, 378-386.	1.8	68
78	Survey of a Salivary Effector in Caterpillars: Glucose Oxidase Variation and Correlation with Host Range. Journal of Chemical Ecology, 2010, 36, 885-897.	1.8	95
79	Parasitism by <i>Cuscuta pentagona</i> sequentially induces JA and SA defence pathways in tomato. Plant, Cell and Environment, 2010, 33, 290-303.	5.7	67
80	Trichomes as sensors. Plant Signaling and Behavior, 2010, 5, 73-75.	2.4	22
81	Cloning and characterization of acetylcholinesterase 1 genes from insecticide-resistant field populations of <i>Liposcelis paeta</i> Pearman (Psocoptera: Liposcelididae). Insect Biochemistry and Molecular Biology, 2010, 40, 415-424.	2.7	18
82	Do Caterpillars Secrete "Oral Secretions"? Journal of Chemical Ecology, 2009, 35, 326-335.	1.8	75
83	Plants on early alert: glandular trichomes as sensors for insect herbivores. New Phytologist, 2009, 184, 644-656.	7.3	181
84	Plant-insect dialogs: complex interactions at the plant-insect interface. Current Opinion in Plant Biology, 2008, 11, 457-463.	7.1	232
85	Arthropod-Inducible Proteins: Broad Spectrum Defenses against Multiple Herbivores. Plant Physiology, 2008, 146, 852-858.	4.8	147
86	Caterpillar Secretions and Induced Plant Responses. , 2008, , 369-387.		42
87	Induction of Systemic Acquired Resistance in Cotton Foliage Does Not Adversely Affect the Performance of an Entomopathogen. Journal of Chemical Ecology, 2007, 33, 1570-1581.	1.8	10
88	Impact of chemical elicitor applications on greenhouse tomato plants and population growth of the green peach aphid, <i>Myzus persicae</i> . Entomologia Experimentalis Et Applicata, 2006, 120, 175-188.	1.4	133
89	Caterpillar Herbivory and Salivary Enzymes Decrease Transcript Levels of <i>Medicago truncatula</i> genes Encoding Early Enzymes in Terpenoid Biosynthesis. Plant Molecular Biology, 2006, 60, 519-531.	3.9	145
90	Ablation of Caterpillar Labial Salivary Glands: Technique for Determining the Role of Saliva in Insect-Plant Interactions. Journal of Chemical Ecology, 2006, 32, 981-992.	1.8	80

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91	The Role of Insect-Derived Cues in Eliciting Indirect Plant Defenses in Tobacco, <i>Nicotiana tabacum</i> . Plant Signaling and Behavior, 2006, 1, 243-250.	2.4	36
92	Evidence that caterpillar labial saliva suppresses infectivity of potential bacterial pathogens. Archives of Insect Biochemistry and Physiology, 2005, 58, 138-144.	1.5	51
93	The host plant as a factor in the synthesis and secretion of salivary glucose oxidase in larval <i>Helicoverpa zea</i> . Archives of Insect Biochemistry and Physiology, 2005, 58, 106-113.	1.5	82
94	Evidence that the caterpillar salivary enzyme glucose oxidase provides herbivore offense in solanaceous plants. Archives of Insect Biochemistry and Physiology, 2005, 58, 128-137.	1.5	160
95	Methyl Jasmonate Application Induces Increased Densities of Glandular Trichomes on Tomato, <i>Lycopersicon esculentum</i> . Journal of Chemical Ecology, 2005, 31, 2211-2216.	1.8	175
96	Indigestion is a plant's best defense. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18771-18772.	7.1	87
97	Temporal effects on jasmonate induction of anti-herbivore defense in <i>Physalis angulata</i> : seasonal and ontogenetic gradients. Biochemical Systematics and Ecology, 2004, 32, 117-126.	1.3	22
98	CHARACTERIZATION OF A SALIVARY LYSOZYME IN LARVAL <i>Helicoverpa zea</i> . Journal of Chemical Ecology, 2004, 30, 2439-2457.	1.8	42
99	Title is missing!. Journal of Insect Behavior, 2003, 16, 247-256.	0.7	26
100	Herbivore damage to sagebrush induces resistance in wild tobacco: evidence for eavesdropping between plants. Oikos, 2003, 100, 325-332.	2.7	132
101	Caterpillar saliva beats plant defences. Nature, 2002, 416, 599-600.	27.8	477
102	Evidence that ribonuclease activity present in beetle regurgitant is found to stimulate virus resistance in plants. Journal of Chemical Ecology, 2002, 28, 1691-1696.	1.8	28
103	Plant phenolics as dietary antioxidants for herbivorous insects: a test with genetically modified tobacco. Journal of Chemical Ecology, 2001, 27, 2579-2597.	1.8	71
104	Trade-offs between pathogen and herbivore resistance. Current Opinion in Plant Biology, 2000, 3, 309-314.	7.1	220
105	Salivary glucose oxidase: Multifunctional roles for <i>Helicoverpa zea</i> ?. Archives of Insect Biochemistry and Physiology, 1999, 42, 99-109.	1.5	159
106	Salivary glucose oxidase: Multifunctional roles for <i>Helicoverpa zea</i> ?. , 1999, 42, 99.		1
107	Ascorbate peroxidase: A novel antioxidant enzyme in insects. Archives of Insect Biochemistry and Physiology, 1997, 34, 57-68.	1.5	101
108	Nutritive quality of plant protein: Sources of variation and insect herbivore responses. Archives of Insect Biochemistry and Physiology, 1996, 32, 107-130.	1.5	102

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109	Potential influence of midgut pH and redox potential on protein utilization in insect herbivores. Archives of Insect Biochemistry and Physiology, 1996, 32, 85-105.	1.5	51
110	Antioxidant systems in insects. Archives of Insect Biochemistry and Physiology, 1995, 29, 187-197.	1.5	437
111	VARIATION IN FEMALE SOUTHERN PINE BEETLE SIZE AND LIPID CONTENT IN RELATION TO FUNGAL ASSOCIATES. Canadian Entomologist, 1995, 127, 145-154.	0.8	50
112	Prooxidant effects of phenolic acids on the generalist herbivore <i>Helicoverpa zea</i> (Lepidoptera: Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Insect Biochemistry and Molecular Biology, 1994, 24, 943-953.	2.7	189
113	Diet and the Susceptibility of <i>Helicoverpa zea</i> (Noctuidae: Lepidoptera) to a Nuclear Polyhedrosis Virus. Environmental Entomology, 1992, 21, 1220-1223.	1.4	37
114	Ascorbate oxidation reduction in <i>Helicoverpa zea</i> as a scavenging system against dietary oxidants. Archives of Insect Biochemistry and Physiology, 1992, 19, 27-37.	1.5	47
115	Enzymatic Antinutritive Defenses of the Tomato Plant Against Insects. ACS Symposium Series, 1991, , 166-197.	0.5	61
116	Protective action of midgut catalase in lepidopteran larvae against oxidative plant defenses. Journal of Chemical Ecology, 1991, 17, 1715-1732.	1.8	92
117	Reassessment of the role of gut alkalinity and detergency in insect herbivory. Journal of Chemical Ecology, 1991, 17, 1821-1836.	1.8	96
118	Plant defenses: Chlorogenic acid and polyphenol oxidase enhance toxicity of <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> to <i>Heliothis zea</i> . Journal of Chemical Ecology, 1991, 17, 217-237.	1.8	69
119	Inactivation of baculovirus by quinones formed in insect-damaged plant tissues. Journal of Chemical Ecology, 1990, 16, 1221-1236.	1.8	93
120	Lyonetâ€™s gland of the tomato fruitworm, <i>Helicoverpa zea</i> (Lepidoptera: Noctuidae). Research Ideas and Outcomes, 0, 5, .	1.0	2