Gary W Felton

List of Publications by Year
in descending order

120 papers	8,460 citations	34076 52 h-index	49868 87 g-index
125 all docs	125 docs citations	125 times ranked	5850 citing authors

#	Article	IF	Citations
1	Caterpillar saliva beats plant defences. Nature, 2002, 416, 599-600.	13.7	477
2	Antioxidant systems in insects. Archives of Insect Biochemistry and Physiology, 1995, 29, 187-197.	0.6	437
3	Herbivory in the Previous Generation Primes Plants for Enhanced Insect Resistance Â Â. Plant Physiology, 2012, 158, 854-863.	2.3	394
4	Herbivore exploits orally secreted bacteria to suppress plant defenses. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15728-15733.	3.3	386
5	Plantâ€"insect dialogs: complex interactions at the plantâ€"insect interface. Current Opinion in Plant Biology, 2008, 11, 457-463.	3.5	232
6	Trade-offs between pathogen and herbivore resistance. Current Opinion in Plant Biology, 2000, 3, 309-314.	3.5	220
7	Role of trichomes in defense against herbivores: comparison of herbivore response to woolly and hairless trichome mutants in tomato (Solanum lycopersicum). Planta, 2012, 236, 1053-1066.	1.6	200
8	Prooxidant effects of phenolic acids on the generalist herbivore Helicoverpa zea (Lepidoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Insect Biochemistry and Molecular Biology, 1994, 24, 943-953.	1.2	189
9	Cues from chewing insects â€" the intersection of DAMPs, HAMPs, MAMPs and effectors. Current Opinion in Plant Biology, 2015, 26, 80-86.	3.5	183
10	Plants on early alert: glandular trichomes as sensors for insect herbivores. New Phytologist, 2009, 184, 644-656.	3.5	181
11	Methyl Jasmonate Application Induces Increased Densities of Glandular Trichomes on Tomato, Lycopersicon esculentum. Journal of Chemical Ecology, 2005, 31, 2211-2216.	0.9	175
12	Tritrophic Interactions: Microbe-Mediated Plant Effects on Insect Herbivores. Annual Review of Phytopathology, 2017, 55, 313-331.	3.5	168
13	Evidence that the caterpillar salivary enzyme glucose oxidase provides herbivore offense in solanaceous plants. Archives of Insect Biochemistry and Physiology, 2005, 58, 128-137.	0.6	160
14	Salivary glucose oxidase: Multifunctional roles forHelicoverpa zea?. Archives of Insect Biochemistry and Physiology, 1999, 42, 99-109.	0.6	159
15	Microorganisms from aphid honeydew attract and enhance the efficacy of natural enemies. Nature Communications, 2011, 2, 348.	5.8	152
16	Arthropod-Inducible Proteins: Broad Spectrum Defenses against Multiple Herbivores. Plant Physiology, 2008, 146, 852-858.	2.3	147
17	Caterpillar Herbivory and Salivary Enzymes Decrease Transcript Levels of Medicago truncatula genes Encoding Early Enzymes in Terpenoid Biosynthesis. Plant Molecular Biology, 2006, 60, 519-531.	2.0	145
18	Impact of chemical elicitor applications on greenhouse tomato plants and population growth of the green peach aphid, Myzus persicae. Entomologia Experimentalis Et Applicata, 2006, 120, 175-188.	0.7	133

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19	Herbivore damage to sagebrush induces resistance in wild tobacco: evidence for eavesdropping between plants. Oikos, 2003, 100, 325-332.	1.2	132
20	Fall Armyworm-Associated Gut Bacteria Modulate Plant Defense Responses. Molecular Plant-Microbe Interactions, 2017, 30, 127-137.	1.4	119
21	Salivary Glucose Oxidase from Caterpillars Mediates the Induction of Rapid and Delayed-Induced Defenses in the Tomato Plant. PLoS ONE, 2012, 7, e36168.	1.1	107
22	Nutritive quality of plant protein: Sources of variation and insect herbivore responses. Archives of Insect Biochemistry and Physiology, 1996, 32, 107-130.	0.6	102
23	Ascorbate peroxidase: A novel antioxidant enzyme in insects. Archives of Insect Biochemistry and Physiology, 1997, 34, 57-68.	0.6	101
24	Host plant and population source drive diversity of microbial gut communities in two polyphagous insects. Scientific Reports, 2019, 9, 2792.	1.6	97
25	Reassessment of the role of gut alkalinity and detergency in insect herbivory. Journal of Chemical Ecology, 1991, 17, 1821-1836.	0.9	96
26	Survey of a Salivary Effector in Caterpillars: Glucose Oxidase Variation and Correlation with Host Range. Journal of Chemical Ecology, 2010, 36, 885-897.	0.9	95
27	Inactivation of baculovirus by quinones formed in insect-damaged plant tissues. Journal of Chemical Ecology, 1990, 16, 1221-1236.	0.9	93
28	Protective action of midgut catalase in lepidopteran larvae against oxidative plant defenses. Journal of Chemical Ecology, 1991, 17, 1715-1732.	0.9	92
29	Priming of antiherbivore defensive responses in plants. Insect Science, 2013, 20, 273-285.	1.5	91
30	Indigestion is a plant's best defense. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18771-18772.	3.3	87
31	Insights into the Saliva of the Brown Marmorated Stink Bug Halyomorpha halys (Hemiptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	1.1	85
32	The host plant as a factor in the synthesis and secretion of salivary glucose oxidase in larvalHelicoverpa zea. Archives of Insect Biochemistry and Physiology, 2005, 58, 106-113.	0.6	82
33	Ablation of Caterpillar Labial Salivary Glands: Technique for Determining the Role of Saliva in Insectâ€“Plant Interactions. Journal of Chemical Ecology, 2006, 32, 981-992.	0.9	80
34	Host plant species determines symbiotic bacterial community mediating suppression of plant defenses. Scientific Reports, 2017, 7, 39690.	1.6	76
35	Do Caterpillars Secrete â€œOral Secretionsâ€?. Journal of Chemical Ecology, 2009, 35, 326-335.	0.9	75
36	Turnabout Is Fair Play: Herbivory-Induced Plant Chitinases Excreted in Fall Armyworm Frass Suppress Herbivore Defenses in Maize. Plant Physiology, 2016, 171, 694-706.	2.3	74

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37	<i>Helicoverpa zea</i> gutâ€associated bacteria indirectly induce defenses in tomato by triggering a salivary elicitor(s). New Phytologist, 2017, 214, 1294-1306.	3.5	72
38	Plant phenolics as dietary antioxidants for herbivorous insects: a test with genetically modified tobacco. Journal of Chemical Ecology, 2001, 27, 2579-2597.	0.9	71
39	Plant defenses: Chlorogenic acid and polyphenol oxidase enhance toxicity ofBacillus thuringiensis subsp.kurstaki toHeliothis zea. Journal of Chemical Ecology, 1991, 17, 217-237.	0.9	69
40	Specificity of Induced Resistance in Tomato Against Specialist Lepidopteran and Coleopteran Species. Journal of Chemical Ecology, 2011, 37, 378-386.	0.9	68
41	Parasitism by <i>Cuscuta pentagona</i> sequentially induces JA and SA defence pathways in tomato. Plant, Cell and Environment, 2010, 33, 290-303.	2.8	67
42	Ethylene Contributes to <i>maize insect resistance1</i>-Mediated Maize Defense against the Phloem Sap-Sucking Corn Leaf Aphid. Plant Physiology, 2015, 169, 313-324.	2.3	65
43	Plant defenses interact with insect enteric bacteria by initiating a leaky gut syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15991-15996.	3.3	65
44	ATP Hydrolyzing Salivary Enzymes of Caterpillars Suppress Plant Defenses. PLoS ONE, 2012, 7, e41947.	1.1	64
45	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.	3.3	64
46	Hostâ€specific salivary elicitor(s) of <scp>E</scp>uropean corn borer induce defenses in tomato and maize. New Phytologist, 2013, 199, 66-73.	3.5	62
47	Coâ€option of microbial associates by insects and their impact on plantâ€“folivore interactions. Plant, Cell and Environment, 2019, 42, 1078-1086.	2.8	62
48	Insect Eggs Can Enhance Wound Response in Plants: A Study System of Tomato Solanum lycopersicum L. and Helicoverpa zea Boddie. PLoS ONE, 2012, 7, e37420.	1.1	62
49	Enzymatic Antinutritive Defenses of the Tomato Plant Against Insects. ACS Symposium Series, 1991, , 166-197.	0.5	61
50	Maize Plants Recognize Herbivore-Associated Cues from Caterpillar Frass. Journal of Chemical Ecology, 2015, 41, 781-792.	0.9	61
51	Roles of ethylene and jasmonic acid in systemic induced defense in tomato (Solanum lycopersicum) against Helicoverpa zea. Planta, 2014, 239, 577-589.	1.6	58
52	Herbivore Cues from the Fall Armyworm (<i>Spodoptera frugiperda</i>) Larvae Trigger Direct Defenses in Maize. Molecular Plant-Microbe Interactions, 2014, 27, 461-470.	1.4	56
53	Gut Microbes Contribute to Nitrogen Provisioning in a Wood-Feeding Cerambycid. Environmental Entomology, 2014, 43, 903-912.	0.7	55
54	Essential Amino Acid Supplementation by Gut Microbes of a Wood-Feeding Cerambycid. Environmental Entomology, 2016, 45, 66-73.	0.7	55

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55	Potential influence of midgut pH and redox potential on protein utilization in insect herbivores. Archives of Insect Biochemistry and Physiology, 1996, 32, 85-105.	0.6	51
56	Evidence that caterpillar labial saliva suppresses infectivity of potential bacterial pathogens. Archives of Insect Biochemistry and Physiology, 2005, 58, 138-144.	0.6	51
57	Stomata-mediated interactions between plants, herbivores, and the environment. Trends in Plant Science, 2022, 27, 287-300.	4.3	51
58	VARIATION IN FEMALE SOUTHERN PINE BEETLE SIZE AND LIPID CONTENT IN RELATION TO FUNGAL ASSOCIATES. Canadian Entomologist, 1995, 127, 145-154.	0.4	50
59	Ascorbate oxidation reduction inHelicoverpa zea as a scavenging system against dietary oxidants. Archives of Insect Biochemistry and Physiology, 1992, 19, 27-37.	0.6	47
60	Induced Plant Defenses Against Herbivory in Cultivated and Wild Tomato. Journal of Chemical Ecology, 2019, 45, 693-707.	0.9	47
61	Diet influences proliferation and stability of gut bacterial populations in herbivorous lepidopteran larvae. PLoS ONE, 2020, 15, e0229848.	1.1	46
62	Herbivore Oral Secreted Bacteria Trigger Distinct Defense Responses in Preferred and Non-Preferred Host Plants. Journal of Chemical Ecology, 2016, 42, 463-474.	0.9	44
63	Genomics of Lepidoptera saliva reveals function in herbivory. Current Opinion in Insect Science, 2017, 19, 61-69.	2.2	43
64	CHARACTERIZATION OF A SALIVARY LYSOZYME IN LARVAL Helicoverpa zea. Journal of Chemical Ecology, 2004, 30, 2439-2457.	0.9	42
65	Intraspecific differences in plant defense induction by fall armyworm strains. New Phytologist, 2018, 218, 310-321.	3.5	42
66	Caterpillar Secretions and Induced Plant Responses. , 2008, , 369-387.		42
67	Phytohormones in Fall Armyworm Saliva Modulate Defense Responses in Plants. Journal of Chemical Ecology, 2019, 45, 598-609.	0.9	40
68	Diet and the Susceptibility of Helicoverpa zea (Noctuidae: Lepidoptera) to a Nuclear Polyhedrosis Virus. Environmental Entomology, 1992, 21, 1220-1223.	0.7	37
69	Enhancing Plant Resistance at the Seed Stage: Low Concentrations of Methyl Jasmonate Reduce the Performance of the Leaf Miner Tuta absoluta but do not Alter the Behavior of its Predator Chrysoperla externa. Journal of Chemical Ecology, 2014, 40, 1090-1098.	0.9	37
70	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.	1.2	36
71	Quantitative proteomic analysis of the fall armyworm saliva. Insect Biochemistry and Molecular Biology, 2017, 86, 81-92.	1.2	35
72	Colorado potato beetle manipulates plant defenses in local and systemic leaves. Plant Signaling and Behavior, 2013, 8, e27592.	1.2	34

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73	Lessons from the Far End: Caterpillar FRASS-Induced Defenses in Maize, Rice, Cabbage, and Tomato. Journal of Chemical Ecology, 2016, 42, 1130-1141.	0.9	34
74	Silencing the alarm: an insect salivary enzyme closes plant stomata and inhibits volatile release. New Phytologist, 2021, 230, 793-803.	3.5	34
75	Host plant driven transcriptome plasticity in the salivary glands of the cabbage looper (Trichoplusia) Tj ETQq1 1 0.784314 rgBT /Overlo	1.1	30
76	Reiterative and interruptive signaling in induced plant resistance to chewing insects. Phytochemistry, 2011, 72, 1624-1634.	1.4	29
77	Plant-mediated effects on an insectâ€“pathogen interaction vary with intraspecific genetic variation in plant defences. Oecologia, 2017, 183, 1121-1134.	0.9	29
78	Evidence that ribonuclease activity present in beetle regurgitant is found to stimulate virus resistance in plants. Journal of Chemical Ecology, 2002, 28, 1691-1696.	0.9	28
79	Title is missing!. Journal of Insect Behavior, 2003, 16, 247-256.	0.4	26
80	Benefits and costs of tomato seed treatment with plant defense elicitors for insect resistance. Arthropod-Plant Interactions, 2014, 8, 539-545.	0.5	26
81	Silicon-Mediated Enhancement of Herbivore Resistance in Agricultural Crops. Frontiers in Plant Science, 2021, 12, 631824.	1.7	24
82	Proteomic analysis of labial saliva of the generalist cabbage looper (Trichoplusia ni) and its role in interactions with host plants. Journal of Insect Physiology, 2018, 107, 97-103.	0.9	23
83	Temporal effects on jasmonate induction of anti-herbivore defense in Physalis angulata: seasonal and ontogenetic gradients. Biochemical Systematics and Ecology, 2004, 32, 117-126.	0.6	22
84	Trichomes as sensors. Plant Signaling and Behavior, 2010, 5, 73-75.	1.2	22
85	Changes in tolerance and resistance of a plant to insect herbivores under variable water availability. Environmental and Experimental Botany, 2021, 183, 104334.	2.0	22
86	Effects of maize (Zea mays) genotypes and microbial sources in shaping fall armyworm (Spodoptera) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.6	22
87	Gut-Associated Bacteria of Helicoverpa zea Indirectly Trigger Plant Defenses in Maize. Journal of Chemical Ecology, 2018, 44, 690-699.	0.9	19
88	The dual function of elicitors and effectors from insects: reviewing the â€˜arms raceâ€™ against plant defenses. Plant Molecular Biology, 2022, 109, 427-445.	2.0	19
89	Cloning and characterization of acetylcholinesterase 1 genes from insecticide-resistant field populations of Liposcelis paeta Pearman (Psocoptera: Liposcelididae). Insect Biochemistry and Molecular Biology, 2010, 40, 415-424.	1.2	18
90	Enterococcal symbionts of caterpillars facilitate the utilization of a suboptimal diet. Journal of Insect Physiology, 2022, 138, 104369.	0.9	17

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91	Chew and spit: tree-feeding notodontid caterpillars anoint girdles with saliva. Arthropod-Plant Interactions, 2016, 10, 143-150.	0.5	16
92	Parasitic Wasp Mediates Plant Perception of Insect Herbivores. Journal of Chemical Ecology, 2019, 45, 972-981.	0.9	16
93	Salivary signals of European corn borer induce indirect defenses in tomato. Plant Signaling and Behavior, 2013, 8, e27318.	1.2	15
94	Effect of PGPR on population growth parameters of cotton aphid. Archives of Phytopathology and Plant Protection, 2014, 47, 1274-1285.	0.6	13
95	Enterobacter ludwigii, isolated from the gut microbiota of Helicoverpa zea, promotes tomato plant growth and yield without compromising anti-herbivore defenses. Arthropod-Plant Interactions, 2019, 13, 271-278.	0.5	13
96	Geographically isolated Colorado potato beetle mediating distinct defense responses in potato is associated with the alteration of gut microbiota. Journal of Pest Science, 2020, 93, 379-390.	1.9	11
97	Induction of defensive proteins in Solanaceae by salivary glucose oxidase of Helicoverpa zea caterpillars and consequences for larval performance. Arthropod-Plant Interactions, 2020, 14, 317-325.	0.5	11
98	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.	0.9	10
99	Intraplant communication in maize contributes to defense against insects. Plant Signaling and Behavior, 2016, 11, e1212800.	1.2	10
100	Asymmetric Responses to Climate Change: Temperature Differentially Alters Herbivore Salivary Elicitor and Host Plant Responses to Herbivory. Journal of Chemical Ecology, 2020, 46, 891-905.	0.9	10
101	Plant Nutrition Influences Resistant Maize Defense Responses to the Fall Armyworm (Spodoptera) Tj ETQq1 1 0.784314 rgBT /Overlock	1.1	10
102	Topâ€down effects from parasitoids may mediate plant defence and plant fitness. Functional Ecology, 2020, 34, 1767-1778.	1.7	9
103	Changes in arthropod community but not plant quality benefit a specialist herbivore on plants under reduced water availability. Oecologia, 2021, 195, 383-396.	0.9	9
104	Herbivore-Induced Defenses in Tomato Plants Enhance the Lethality of the Entomopathogenic Bacterium, Bacillus thuringiensis var. kurstaki. Journal of Chemical Ecology, 2018, 44, 947-956.	0.9	8
105	Host permissiveness to baculovirus influences timeâ€dependent immune responses and fitness costs. Insect Science, 2021, 28, 103-114.	1.5	8
106	Pathogen-Mediated Tritrophic Interactions: Baculovirus-Challenged Caterpillars Induce Higher Plant Defenses than Healthy Caterpillars. Journal of Chemical Ecology, 2019, 45, 515-524.	0.9	7
107	Sorghum and maize flavonoids are detrimental to growth and survival of fall armyworm Spodoptera frugiperda. Journal of Pest Science, 2023, 96, 1551-1567.	1.9	7
108	Host plant defense produces species specific alterations to flight muscle protein structure and flight-related fitness traits of two armyworms. Journal of Experimental Biology, 2020, 223, .	0.8	6

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109	Parasitoid Causes Cascading Effects on Plant-Induced Defenses Mediated Through the Gut Bacteria of Host Caterpillars. Frontiers in Microbiology, 2021, 12, 708990.	1.5	6
110	Oral cues are not enough: induction of defensive proteins in Nicotiana tabacum upon feeding by caterpillars. Planta, 2020, 251, 89.	1.6	5
111	Fungi from the black cutworm Agrotis ipsilon oral secretions mediate plantâ€"insect interactions. Arthropod-Plant Interactions, 2020, 14, 423-432.	0.5	5
112	Opposing Growth Responses of Lepidopteran Larvae to the Establishment of Gut Microbiota. Microbiology Spectrum, 2022, 10, .	1.2	5
113	Concerted impacts of antiherbivore defenses and opportunistic Serratia pathogens on the fall armyworm (Spodoptera frugiperda). Oecologia, 2021, , 1.	0.9	4
114	Lyonetâ€™s gland of the tomato fruitworm, Helicoverpa zea (Lepidoptera: Noctuidae). Research Ideas and Outcomes, 0, 5, .	1.0	2
115	Salivary glucose oxidase: Multifunctional roles for Helicoverpa zea?. , 1999, 42, 99.		1
116	Letter from the Editor: A Daunting Task. Journal of Chemical Ecology, 2017, 43, 119-119.	0.9	0
117	Special Issues in Honor of Professor Dr. Dr. hc mult. Wittko Francke, 28 November 1940 - 27 December 2020. Journal of Chemical Ecology, 2021, 47, 927-929.	0.9	0
118	Editorial: Plant-Arthropod Interactions: Effectors and Elicitors of Arthropods and Their Associated Microbes. Frontiers in Plant Science, 2020, 11, 610160.	1.7	0
119	Anti-Herbivore Resistance Changes in Tomato with Elevation. Journal of Chemical Ecology, 2022, 48, 196.	0.9	0
120	Special Issues in Honor of Professor Dr. Dr. hc mult. Wittko Francke, 28 November 1940â€"27 December 2020. Journal of Chemical Ecology, 2022, 48, 241-243.	0.9	0