John F Tooker

List of Publications by Year
in descending order

120 papers	5,915 citations	101384 36 h-index	85405 71 g-index
124 all docs	124 docs citations	124 times ranked	5667 citing authors

#	Article	IF	Citations
1	A framework for evaluating ecosystem services provided by cover crops in agroecosystems. Agricultural Systems, 2014, 125, 12-22.	3.2	420
2	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
3	Large-Scale Deployment of Seed Treatments Has Driven Rapid Increase in Use of Neonicotinoid Insecticides and Preemptive Pest Management in U.S. Field Crops. Environmental Science & Technology, 2015, 49, 5088-5097.	4.6	382
4	Bee nutrition and floral resource restoration. Current Opinion in Insect Science, 2015, 10, 133-141.	2.2	318
5	Macronutrient ratios in pollen shape bumble bee (Bombus impatiens) foraging strategies and floral preferences. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4035-42.	3.3	262
6	Genotypically diverse cultivar mixtures for insect pest management and increased crop yields. Journal of Applied Ecology, 2012, 49, 974-985.	1.9	206
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	Plants on early alert: glandular trichomes as sensors for insect herbivores. New Phytologist, 2009, 184, 644-656.	3.5	181
9	EDITOR'S CHOICE: Neonicotinoid insecticide travels through a soil food chain, disrupting biological control of nonâ€target pests and decreasing soya bean yield. Journal of Applied Ecology, 2015, 52, 250-260.	1.9	149
10	Pollen Protein: Lipid Macronutrient Ratios May Guide Broad Patterns of Bee Species Floral Preferences. Insects, 2020, 11, 132.	1.0	128
11	Gall insects can avoid and alter indirect plant defenses. New Phytologist, 2008, 178, 657-671.	3.5	125
12	Seeds of Change: Corn Seed Mixtures for Resistance Management and Integrated Pest Management. Journal of Economic Entomology, 2011, 104, 343-352.	0.8	112
13	Phytohormone Dynamics Associated with Gall Insects, and their Potential Role in the Evolution of the Gall-Inducing Habit. Journal of Chemical Ecology, 2014, 40, 742-753.	0.9	108
14	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
15	Herbicide drift can affect plant and arthropod communities. Agriculture, Ecosystems and Environment, 2014, 185, 77-87.	2.5	104
16	Shared genes related to aggression, rather than chemical communication, are associated with reproductive dominance in paper wasps (Polistes metricus). BMC Genomics, 2014, 15, 75.	1.2	82
17	Influence of Plant Community Structure on Natural Enemies of Pine Needle Scale (Homoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.7	80
18	Exposure of Solidago altissima plants to volatile emissions of an insect antagonist () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (Sciences of the United States of America, 2013, 110, 199-204.	3.3	77

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19	Effects of the herbicide dicamba on nontarget plants and pollinator visitation. Environmental Toxicology and Chemistry, 2016, 35, 144-151.	2.2	73
20	Meta-analysis reveals that seed-applied neonicotinoids and pyrethroids have similar negative effects on abundance of arthropod natural enemies. PeerJ, 2016, 4, e2776.	0.9	70
21	Slug (Mollusca: Agriolimacidae, Arionidae) Ecology and Management in No-Till Field Crops, With an Emphasis on the mid-Atlantic Region. Journal of Integrated Pest Management, 2012, 3, C1-C9.	0.9	68
22	Floral Host Plants of Syrphidae and Tachinidae (Diptera) of Central Illinois. Annals of the Entomological Society of America, 2006, 99, 96-112.	1.3	67
23	Consistent pollen nutritional intake drives bumble bee (Bombus impatiens) colony growth and reproduction across different habitats. Ecology and Evolution, 2018, 8, 5765-5776.	0.8	63
24	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
25	Conservation biological control in urban landscapes: Manipulating parasitoids of bagworm (Lepidoptera: Psychidae) with flowering forbs. Biological Control, 2005, 34, 99-107.	1.4	61
26	Maize Plants Recognize Herbivore-Associated Cues from Caterpillar Frass. Journal of Chemical Ecology, 2015, 41, 781-792.	0.9	61
27	Identification of an insect-produced olfactory cue that primes plant defenses. Nature Communications, 2017, 8, 337.	5.8	60
28	Feeding by a gall-inducing caterpillar species alters levels of indole-3-acetic and abscisic acid in Solidago altissima (Asteraceae) stems. Arthropod-Plant Interactions, 2011, 5, 115-124.	0.5	59
29	Flowering Plant Hosts of Adult Hymenopteran Parasitoids of Central Illinois. Annals of the Entomological Society of America, 2000, 93, 580-588.	1.3	56
30	One Gene Versus Two: A Regional Study on the Efficacy of Single Gene Versus Pyramided Resistance for Soybean Aphid Management. Journal of Economic Entomology, 2014, 107, 1680-1687.	0.8	52
31	Balancing Disturbance and Conservation in Agroecosystems to Improve Biological Control. Annual Review of Entomology, 2020, 65, 81-100.	5.7	52
32	Nonlinear partial differential equations and applications: Altered host plant volatiles are proxies for sex pheromones in the gall wasp Antistrophus rufus. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15486-15491.	3.3	49
33	Neonicotinoid Seed Treatments: Limitations and Compatibility with Integrated Pest Management. Agricultural and Environmental Letters, 2017, 2, ael2017.08.0026.	0.8	49
34	Wild bees as winners and losers: Relative impacts of landscape composition, quality, and climate. Global Change Biology, 2021, 27, 1250-1265.	4.2	48
35	Tritrophic Interactions and Reproductive Fitness of the Prairie PerennialSilphium laciniatumGillette (Asteraceae). Environmental Entomology, 2006, 35, 537-545.	0.7	46
36	Planting Green Effects on Corn and Soybean Production. Agronomy Journal, 2019, 111, 2314-2325.	0.9	42

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37	Is tillage beneficial or detrimental for insect and slug management? A meta-analysis. Agriculture, Ecosystems and Environment, 2020, 294, 106849.	2.5	41
38	The potential of genotypically diverse cultivar mixtures to moderate aphid populations in wheat (Triticum aestivum L.). Arthropod-Plant Interactions, 2013, 7, 33-43.	0.5	40
39	Phytohormones in Fall Armyworm Saliva Modulate Defense Responses in Plants. Journal of Chemical Ecology, 2019, 45, 598-609.	0.9	40
40	Feeding by Hessian fly [Mayetiola destructor (Say)] larvae does not induce plant indirect defences. Ecological Entomology, 2007, 32, 153-161.	1.1	39
41	Newer characters, same story: neonicotinoid insecticides disrupt food webs through direct and indirect effects. Current Opinion in Insect Science, 2021, 46, 50-56.	2.2	36
42	Plant volatiles are behavioral cues for adult females of the gall wasp Antistrophus rufus. Chemoecology, 2005, 15, 85-88.	0.6	35
43	The volatile emission of Eurosta solidaginis primes herbivore-induced volatile production in Solidago altissima and does not directly deter insect feeding. BMC Plant Biology, 2014, 14, 173.	1.6	35
44	Managing fertility with animal waste to promote arthropod pest suppression. Biological Control, 2019, 134, 130-140.	1.4	35
45	Chemical cues linked to risk: Cues from belowâ€ground natural enemies enhance plant defences and influence herbivore behaviour and performance. Functional Ecology, 2019, 33, 798-808.	1.7	35
46	A Gall-Inducing Caterpillar Species Increases Essential Fatty Acid Content of Its Host Plant Without Concomitant Increases in Phytohormone Levels. Molecular Plant-Microbe Interactions, 2009, 22, 551-559.	1.4	33
47	Feeding by Hessian Fly (Mayetiola destructor [Say]) Larvae on Wheat Increases Levels of Fatty Acids and Indole-3-Acetic Acid but not Hormones Involved in Plant-Defense Signaling. Journal of Plant Growth Regulation, 2011, 30, 158-165.	2.8	31
48	Biology and Economics of Recommendations for Insecticide-Based Management of Soybean Aphid. Plant Health Progress, 2016, 17, 265-269.	0.8	31
49	Quantitative evolutionary patterns in bipartite networks: Vicariance, phylogenetic tracking or diffuse coâ€evolution?. Methods in Ecology and Evolution, 2018, 9, 761-772.	2.2	31
50	Cytokinins Are Abundant and Widespread among Insect Species. Plants, 2020, 9, 208.	1.6	31
51	Developing ecologically based pest management programs for terrestrial molluscs in field and forage crops. Journal of Pest Science, 2017, 90, 825-838.	1.9	30
52	Nectar Sources of Day-Flying Lepidoptera of Central Illinois. Annals of the Entomological Society of America, 2002, 95, 84-96.	1.3	29
53	Gall insects and indirect plant defenses. Plant Signaling and Behavior, 2008, 3, 503-504.	1.2	29
54	Combining intercropping with semiochemical releases: optimization of alternative control of Sitobion avenae in wheat crops in China. Entomologia Experimentalis Et Applicata, 2011, 140, 189-195.	0.7	29

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55	Stereochemistry of Host Plant Monoterpenes as Mate Location Cues for the Gall Wasp Antistrophus rufus. Journal of Chemical Ecology, 2004, 30, 473-477.	0.9	28
56	Jasmonate in Lepidopteran Eggs and Neonates. Journal of Chemical Ecology, 2005, 31, 2753-2759.	0.9	26
57	Moving beyond resistance management toward an expanded role for seed mixtures in agriculture. Agriculture, Ecosystems and Environment, 2015, 208, 29-36.	2.5	26
58	In-Field Habitat Management to Optimize Pest Control of Novel Soil Communities in Agroecosystems. Insects, 2017, 8, 82.	1.0	26
59	Direct and Indirect Effects of the Synthetic-Auxin Herbicide Dicamba on Two Lepidopteran Species. Environmental Entomology, 2013, 42, 586-594.	0.7	24
60	The Evolution of Endophagy in Herbivorous Insects. Frontiers in Plant Science, 2020, 11, 581816.	1.7	24
61	Impact of prescribed burning on endophytic insect communities of prairie perennials (Asteraceae:) Tj ETQq1 1 0.784314 rgBT /Overlo	1.2	22
62	Trichomes as sensors. Plant Signaling and Behavior, 2010, 5, 73-75.	1.2	22
63	Handheld Lasers Allow Efficient Detection of Fluorescent Marked Organisms in the Field. PLoS ONE, 2015, 10, e0129175.	1.1	22
64	Variety mixtures of wheat influence aphid populations and attract an aphid predator. Arthropod-Plant Interactions, 2017, 11, 133-146.	0.5	22
65	E-Î²-farnesene synergizes the influence of an insecticide to improve control of cabbage aphids in China. Crop Protection, 2012, 35, 91-96.	1.0	21
66	Current European corn borer, Ostrinia nubilalis , injury levels in the northeastern United States and the value of Bt field corn. Pest Management Science, 2014, 70, 1711-1719.	1.7	21
67	Inter-varietal interactions among plants in genotypically diverse mixtures tend to decrease herbivore performance. Oecologia, 2016, 182, 189-202.	0.9	21
68	Trophic Position of the Endophytic Beetle, <I>Mordellistena aethiops</I> Smith (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10	0.7	20
69	Bumble bees exhibit daily behavioral patterns in pollen foraging. Arthropod-Plant Interactions, 2014, 8, 273.	0.5	20
70	A high-diversity/IPM cropping system fosters beneficial arthropod populations, limits invertebrate pests, and produces competitive maize yields. Agriculture, Ecosystems and Environment, 2020, 292, 106812.	2.5	20
71	First Report of Western Bean Cutworm (Striacosta albicosta) in Pennsylvania. Crop Management, 2010, 9, 1-4.	0.3	19
72	Zucchini Yellow Mosaic Virus Infection Limits Establishment and Severity of Powdery Mildew in Wild Populations of Cucurbita pepo. Frontiers in Plant Science, 2018, 9, 792.	1.7	19

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73	Intellectual Property, Scientific Independence, and the Efficacy and Environmental Impacts of Genetically Engineered Crops. Rural Sociology, 2015, 80, 147-172.	1.1	18
74	Life history and habitat explain variation among insect pest populations subject to global change. Ecosphere, 2018, 9, e02274.	1.0	18
75	Jasmonate, Salicylate, and Benzoate in Insect Eggs. Journal of Chemical Ecology, 2007, 33, 331-343.	0.9	17
76	Costs of plant defense priming: exposure to volatile cues from a specialist herbivore increases short-term growth but reduces rhizome production in tall goldenrod (Solidago altissima). BMC Plant Biology, 2019, 19, 209.	1.6	17
77	Weather and regional crop composition variation drive spatial synchrony of lepidopteran agricultural pests. Ecological Entomology, 2020, 45, 573-582.	1.1	17
78	Insecticideâ€contaminated honeydew: risks for beneficial insects. Biological Reviews, 2022, 97, 664-678.	4.7	17
79	A Maize Inbred Exhibits Resistance Against Western Corn Rootwoorm, Diabrotica virgifera virgifera. Journal of Chemical Ecology, 2017, 43, 1109-1123.	0.9	16
80	Corn Earworm (Lepidoptera: Noctuidae) in Northeastern Field Corn: Infestation Levels and the Value of Transgenic Hybrids. Journal of Economic Entomology, 2013, 106, 1250-1259.	0.8	15
81	A network approach reveals parasitoid wasps to be generalized nectar foragers. Arthropod-Plant Interactions, 2019, 13, 239-251.	0.5	15
82	Beyond the Headlines: The Influence of Insurance Pest Management on an Unseen, Silent Entomological Majority. Frontiers in Sustainable Food Systems, 2020, 4, .	1.8	15
83	Soybean aphid biotype 1 genome: Insights into the invasive biology and adaptive evolution of a major agricultural pest. Insect Biochemistry and Molecular Biology, 2020, 120, 103334.	1.2	15
84	A petiole-galling insect herbivore decelerates leaf lamina litter decomposition rates. Functional Ecology, 2012, 26, 628-636.	1.7	14
85	Landscape Factors Influencing Stink Bug Injury in Mid-Atlantic Tomato Fields. Journal of Economic Entomology, 2017, 110, tow252.	0.8	14
86	The volatile emission of a specialist herbivore alters patterns of plant defence, growth and flower production in a field population of goldenrod. Functional Ecology, 2017, 31, 1062-1070.	1.7	13
87	Are bacterial symbionts associated with gall induction in insects?. Arthropod-Plant Interactions, 2021, 15, 1-12.	0.5	12
88	Earlyâ€season plant cover supports more effective pest control than insecticide applications. Ecological Applications, 2022, 32, e2598.	1.8	12
89	Floral Host Plants of Adult Beetles in Central Illinois: An Historical Perspective. Annals of the Entomological Society of America, 2012, 105, 287-297.	1.3	11
90	Cultivar mixtures of soybeans have inconsistent effects on herbivore and natural-enemy populations. Agriculture, Ecosystems and Environment, 2020, 292, 106835.	2.5	11

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91	Preventive insecticide use affects arthropod decomposers and decomposition in field crops. Applied Soil Ecology, 2021, 157, 103757.	2.1	11
92	Small-Grain Cover Crops Have Limited Effect on Neonicotinoid Contamination from Seed Coatings. Environmental Science & Technology, 2021, 55, 4679-4687.	4.6	11
93	Jasmonate in Lepidopteran Larvae. Journal of Chemical Ecology, 2006, 32, 2321-2326.	0.9	10
94	Chemical Ecology and Sociality in Aphids: Opportunities and Directions. Journal of Chemical Ecology, 2018, 44, 770-784.	0.9	10
95	Endophytic insect communities of two prairie perennials (Asteraceae: Silphium spp.). Biodiversity and Conservation, 2004, 13, 2551-2566.	1.2	9
96	Modeling the decision process for barley yellow dwarf management. Computers and Electronics in Agriculture, 2016, 127, 775-786.	3.7	9
97	Assessing surface and subsurface transport of neonicotinoid insecticides from noâ€till crop fields. Journal of Environmental Quality, 2021, 50, 476-484.	1.0	9
98	Parasitic Plants in Agriculture: Chemical Ecology of Germination and Host-Plant Location as Targets for Sustainable Control: A Review. Sustainable Agriculture Reviews, 2009, , 123-136.	0.6	9
99	Potential Impacts of Translocation of Neonicotinoid Insecticides to Cotton (Gossypium hirsutum) Tj ETQq1 1 0.784314 rgBT /Overloc 159-168.	0.7	8
100	A long-term dataset on wild bee abundance in Mid-Atlantic United States. Scientific Data, 2020, 7, 240.	2.4	8
101	Topâ€down network analysis characterizes hidden termiteâ€“termite interactions. Ecology and Evolution, 2016, 6, 6178-6188.	0.8	7
102	Trade-offs between defenses against herbivores in goldenrod (Solidago altissima). Arthropod-Plant Interactions, 2019, 13, 279-287.	0.5	7
103	Fertilizing Corn With Manure Decreases Caterpillar Performance but Increases Slug Damage. Environmental Entomology, 2020, 49, 141-150.	0.7	6
104	Toxicity of clothianidin to common Eastern North American fireflies. PeerJ, 2021, 9, e12495.	0.9	6
105	Evaluation of biorational insecticides and DNA barcoding as tools to improve insect pest management in lablab bean (Lablab purpureus) in Bangladesh. Journal of Asia-Pacific Entomology, 2018, 21, 1326-1336.	0.4	5
106	Ground Predator Activity-Density and Predation Rates Are Weakly Supported by Dry-Stack Cow Manure and Wheat Cover Crops in No-Till Maize. Environmental Entomology, 2021, 50, 46-57.	0.7	5
107	Wheat intraspecific diversity suppressed diseases with subdued yield, economic return and arthropod predation services. Agriculture, Ecosystems and Environment, 2021, 315, 107438.	2.5	5
108	Life History, Biology, and Distribution of Pterostichus melanarius (Coleoptera: Carabidae) in North America. Environmental Entomology, 2021, , .	0.7	5

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109	The Influence of Marking Methods on Mobility, Survivorship, and Field Recovery of Halyomorpha halys (Hemiptera: Pentatomidae) Adults and Nymphs. Environmental Entomology, 2020, 49, 1026-1031.	0.7	4
110	Parasitoids, Nematodes, and Protists in Populations of Striped Cucumber Beetle (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	0.7	4
111	Consequences of Habitat Fragmentation for the Prairie-Endemic Weevil Haplorhynchites aeneus. Environmental Entomology, 2011, 40, 1388-1396.	0.7	3
112	Are polycultures for silage pragmatic medleys or gallimaufries?. Agronomy Journal, 2021, 113, 1205-1221.	0.9	2
113	Giant polyploid epidermal cells and male pheromone production in the tephritid fruit fly Eurosta solidaginis (Diptera: Tephritidae). Journal of Insect Physiology, 2021, 130, 104210.	0.9	2
114	Corn pith weevil, <scp>G</scp>eraeus penicillus (<scp>C</scp>oleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (<scp>C Journal of Applied Entomology, 2013, 137, 668-672.	0.8	1
115	Sensory coâ€evolution: The sex attractant of a gallâ€making fly primes plant defences, but female flies recognize resulting changes in hostâ€plant quality. Journal of Ecology, 2021, 109, 99-108.	1.9	1
116	Preventative pest management in field crops influences the biological control potential of epigeal arthropods and soil-borne entomopathogenic fungi. Field Crops Research, 2021, 272, 108265.	2.3	1
117	Planted-green cover crops in maize/soybean rotations confer stronger bottom-up than top-down control of slugs. Agriculture, Ecosystems and Environment, 2022, 334, 107980.	2.5	1
118	Plant-Provided Food for Carnivorous Insects: A Protective Mutualism and its Applications F. L. WÃckers, P. C. J. van Rijn, J. Bruin . 2005. Plant-Provided Food for Carnivorous Insects: A Protective Mutualism and its Applications. Cambridge University Press.xii+. 356 17.5 Ã— 25 cm, hardcover, US$130.00. ISBN: 0-521-81941-5.. Ecoscience, 2006, 13, 428-429.	0.6	0
119	Neotropical Insect Galls. Edited by Geraldo Wilson Fernandes and Jean Carlos Santos. New York: Springer. $189.00. ix + 550 p.; ill.; no index. ISBN: 978-94-017-8782-6 (hc); 978-94-017-8783-3 (eb). 2014.. Quarterly Review of Biology, 2015, 90, 210-211.	0.0	0
120	Silent Sparks: The Wondrous World of Fireflies Sara Lewis. American Entomologist, 2017, 63, 133-134.	0.1	0