Jack C Schultz

List of Publications by Year
in descending order

94 papers	7,527 citations	57719 44 h-index	56687 83 g-index
102 all docs	102 docs citations	102 times ranked	6465 citing authors

#	Article	IF	Citations
1	A tale of two tissues: Probing gene expression in a complex insectâ€induced gall. Molecular Ecology, 2022, , .	2.0	5
2	Impact of chronic stylet-feeder infestation on folivore-induced signaling and defenses in a conifer. Tree Physiology, 2021, 41, 416-427.	1.4	2
3	A Scale to Measure Science Communication Training Effectiveness. Science Communication, 2020, 42, 90-111.	1.8	17
4	Caterpillar Chewing Vibrations Cause Changes in Plant Hormones and Volatile Emissions in Arabidopsis thaliana. Frontiers in Plant Science, 2019, 10, 810.	1.7	28
5	Experientially learning how to communicate science effectively: A case study on decoding science. Journal of Research in Science Teaching, 2019, 56, 1135-1152.	2.0	7
6	A galling insect activates plant reproductive programs during gall development. Scientific Reports, 2019, 9, 1833.	1.6	54
7	Heritable Phytohormone Profiles of Poplar Genotypes Vary in Resistance to a Galling Aphid. Molecular Plant-Microbe Interactions, 2019, 32, 654-672.	1.4	14
8	Decoding Science: Development and Evaluation of a Science Communication Training Program Using a Triangulated Framework. Science Communication, 2018, 40, 3-32.	1.8	25
9	Morphometric analysis of young petiole galls on the narrow-leaf cottonwood, Populus angustifolia, by the sugarbeet root aphid, Pemphigus betae. Protoplasma, 2017, 254, 203-216.	1.0	12
10	The <scp>A</scp>rabidopsis immune regulator <scp><i>SRFR</i></scp><i>1</i> dampens defences against herbivory by <scp><i>S</i></scp><i>podoptera exigua</i> and parasitism by <scp><i>H</i></scp><i>eterodera schachtii</i>. Molecular Plant Pathology, 2016, 17, 588-600.	2.0	11
11	Preface. Journal of Insect Physiology, 2016, 84, 2-3.	0.9	0
12	Shared weapons of blood- and plant-feeding insects: Surprising commonalities for manipulating hosts. Journal of Insect Physiology, 2016, 84, 4-21.	0.9	50
13	Plant Vascular Architecture Determines the Pattern of Herbivore-Induced Systemic Responses in Arabidopsis thaliana. PLoS ONE, 2015, 10, e0123899.	1.1	18
14	Transcriptional and metabolic signatures of Arabidopsis responses to chewing damage by an insect herbivore and bacterial infection and the consequences of their interaction. Frontiers in Plant Science, 2014, 5, 441.	1.7	13
15	Transcriptional responses of Arabidopsis thaliana to chewing and sucking insect herbivores. Frontiers in Plant Science, 2014, 5, 565.	1.7	61
16	Roles for jasmonate- and ethylene-induced transcription factors in the ability of Arabidopsis to respond differentially to damage caused by two insect herbivores. Frontiers in Plant Science, 2014, 5, 407.	1.7	56
17	Flexible resource allocation during plant defense responses. Frontiers in Plant Science, 2013, 4, 324.	1.7	147
18	Temporal Changes in Allocation and Partitioning of New Carbon as 11C Elicited by Simulated Herbivory Suggest that Roots Shape Aboveground Responses in Arabidopsis Â Â. Plant Physiology, 2013, 161, 692-704.	2.3	55

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19	Is polyphenol induction simply a result of altered carbon and nitrogen accumulation?. Plant Signaling and Behavior, 2012, 7, 1498-1500.	1.2	9
20	Effects of jasmonic acid, branching and girdling on carbon and nitrogen transport in poplar. New Phytologist, 2012, 195, 419-426.	3.5	23
21	Novel application of 2-[18F]fluoro-2-deoxy-d-glucose to study plant defenses. Nuclear Medicine and Biology, 2012, 39, 1152-1160.	0.3	28
22	Adaptive Two-Dimensional Microgas Chromatography. Analytical Chemistry, 2012, 84, 4214-4220.	3.2	19
23	Hormaphis hamamelidis Fundatrices Benefit by Manipulating Phenolic Metabolism of Their Host. Journal of Chemical Ecology, 2012, 38, 496-498.	0.9	17
24	Measuring â€˜normalcyâ€™ in plant gene expression after herbivore attack. Molecular Ecology Resources, 2011, 11, 294-304.	2.2	13
25	Red oak responses to nitrogen addition depend on herbivory type, tree family, and site. Forest Ecology and Management, 2010, 259, 1930-1937.	1.4	12
26	Fuzzy cluster analysis of bioinformatics data composed of microarray expression data and gene ontology annotations. , 2008, , .		12
27	Insect Elicitors and Exposure to Green Leafy Volatiles Differentially Upregulate Major Octadecanoids and Transcripts of 12-Oxo Phytodienoic Acid Reductases in Zea mays. Molecular Plant-Microbe Interactions, 2007, 20, 707-716.	1.4	111
28	Biology, Ecology, and Evolution of Gallâ€inducing Arthropods. Volumes 1 and 2. Edited by Anantanarayanan Raman, Carl W Schaefer, and , Toni M Withers. Enfield (New Hampshire): Science Publishers. $148.00 (twoâ€volume set). (1) xxi + 429 p; ill.; no index. (2) xxi + pp 431â€"817; ill.; index to Volumes 1 and 2. ISBN: 1â€57808â€262â€5 (set); 1â€57808â€345â€1 (Volume 1); 1â€57808â€346â€X (Volume 2). 2005.. Quarterly Review of Biology, 2007, 82, 59-60.	0.0	0
29	Within-plant signalling via volatiles overcomes vascular constraints on systemic signalling and primes responses against herbivores. Ecology Letters, 2007, 10, 490-498.	3.0	333
30	Overexpression of CRK13, an Arabidopsis cysteine-rich receptor-like kinase, results in enhanced resistance to Pseudomonas syringae. Plant Journal, 2007, 50, 488-499.	2.8	151
31	ArabidopsisGH3-LIKE DEFENSE GENEâ€ƒ1is required for accumulation of salicylic acid, activation of defense responses and resistance toPseudomonas syringae. Plant Journal, 2007, 51, 234-246.	2.8	112
32	THE GROWTHâ€"DEFENSE TRADE-OFF AND HABITAT SPECIALIZATION BY PLANTS IN AMAZONIAN FORESTS. Ecology, 2006, 87, S150-S162.	1.5	404
33	Gene expression and glucosinolate accumulation in Arabidopsis thaliana in response to generalist and specialist herbivores of different feeding guilds and the role of defense signaling pathways. Phytochemistry, 2006, 67, 2450-2462.	1.4	248
34	BIOCHEMICAL RESPONSES OF CHESTNUT OAK TO A GALLING CYNIPID. Journal of Chemical Ecology, 2005, 31, 151-166.	0.9	86
35	Fertility, Root Reserves and the Cost of Inducible Defenses in the Perennial Plant Solanum carolinense. Journal of Chemical Ecology, 2005, 31, 2263-2288.	0.9	35
36	Major Signaling Pathways Modulate Arabidopsis Glucosinolate Accumulation and Response to Both Phloem-Feeding and Chewing Insects. Plant Physiology, 2005, 138, 1149-1162.	2.3	387

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37	Induced Plant Signaling and its Implications for Environmental Sensing. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2004, 67, 819-834.	1.1	19
38	Carbohydrate translocation determines the phenolic content of Populus foliage: a test of the sinkâ€“source model of plant defense. New Phytologist, 2004, 164, 157-164.	3.5	118
39	Nitrogen cycling in a northern hardwood forest: Do species matter?. Biogeochemistry, 2004, 67, 289-308.	1.7	348
40	Differential Activity of Peroxidase Isozymes in Response to Wounding, Gypsy Moth, and Plant Hormones in Northern Red Oak (Quercus rubra L.). Journal of Chemical Ecology, 2004, 30, 1363-1379.	0.9	76
41	CROSS-KINGDOM CROSS-TALK: HORMONES SHARED BY PLANTS AND THEIR INSECT HERBIVORES. Ecology, 2004, 85, 70-77.	1.5	45
42	Enhanced Invertase Activities in the Galls of Hormaphis hamamelidis. Journal of Chemical Ecology, 2003, 29, 2703-2720.	0.9	36
43	Shared Signals and the Potential for Phylogenetic Espionage Between Plants and Animals. Integrative and Comparative Biology, 2002, 42, 454-462.	0.9	46
44	Why do Cranberries reduce incidence of urinary tract infections?. Journal of Ethnopharmacology, 2002, 80, 211.	2.0	5
45	Induced sink strength as a prerequisite for induced tannin biosynthesis in developing leaves of Populus. Oecologia, 2002, 130, 585-593.	0.9	126
46	Biochemical ecology: How plants fight dirty. Nature, 2002, 416, 267-267.	13.7	32
47	Fitness costs of jasmonic acid-induced defense in tomato, Lycopersicon esculentum. Oecologia, 2001, 126, 380-385.	0.9	140
48	Hormaphis hamamelidis and gall size: a test of the plant vigor hypothesis. Oikos, 2001, 95, 94-104.	1.2	30
49	Limitations of Folin assays of foliar phenolics in ecological studies. Journal of Chemical Ecology, 2001, 27, 761-778.	0.9	133
50	Once again, insects worked it out first. Nature, 2001, 414, 147-148.	13.7	4
51	Exploring Cost Constraints on Stem Elongation in Plants Using Phenotypic Manipulation. American Naturalist, 1999, 153, 236-242.	1.0	50
52	Shield Defense of a Larval Tortoise Beetle. Journal of Chemical Ecology, 1999, 25, 549-566.	0.9	71
53	Ecological and Chemical Associations Among Late-Season Squash Pests. Environmental Entomology, 1998, 27, 39-44.	0.7	14
54	Impact of dietary allelochemicals on gypsy moth (Lymantria dispar) caterpillars: importance of midgut alkalinity. Journal of Insect Physiology, 1997, 43, 1169-1175.	0.9	29

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55	Wind and trees. Trends in Ecology and Evolution, 1997, 12, 276-277.	4.2	1
56	Multiple Defenses and Signals in Plant Defense against Pathogens and Herbivores. , 1996, , 121-154.		22
57	Fertilization Mitigates Chemical Induction and Herbivore Responses Within Damaged Oak Trees. Ecology, 1995, 76, 1226-1232.	1.5	95
58	Oak Tannins Reduce Effectiveness of Thuricide (Bacillus thuringiensis) in the Gypsy Moth (Lepidoptera:) Tj ETQq0 0 0 rgBT /Overlock 10	0.8	54
59	Evaluation of Resistance to Tufted Apple Bud Moth (Lepidoptera: Tortricidae) Within and Among Apple Cultivars. Environmental Entomology, 1994, 23, 282-291.	0.7	11
60	Induced plant defenses breached? Phytochemical induction protects an herbivore from disease. Oecologia, 1993, 94, 195-203.	0.9	133
61	Modelling Gypsy Moth--Virus--Leaf Chemistry Interactions: Implications of Plant Quality for Pest and Pathogen Dynamics. Journal of Animal Ecology, 1992, 61, 509.	1.3	39
62	Reassessment of interaction between gut detergents and tannins in lepidoptera and significance for gypsy moth larvae. Journal of Chemical Ecology, 1992, 18, 1437-1453.	0.9	45
63	Activity of Phenolics in Insects: The Role of Oxidation. , 1992, , 609-620.		11
64	Antimicrobial Activity of Polyphenols Mediates Plant-Herbivore Interactions. , 1992, , 621-637.		29
65	Factoring Natural Enemies into Plant Tissue Availability to Herbivores. , 1992, , 175-197.		12
66	Leaf phenolic inhibition of gypsy moth nuclear polyhedrosis virus Role of polyhedral inclusion body aggregation. Journal of Chemical Ecology, 1990, 16, 1445-1457.	0.9	60
67	Chemical defense production in Lotus corniculatus L. II. Trade-offs among growth, reproduction and defense. Oecologia, 1990, 83, 32-37.	0.9	80
68	Ecology and Management of Forest Pests. Ecology, 1990, 71, 1634-1635.	1.5	0
69	How-to Book for Phenolics Lovers. Ecology, 1990, 71, 2030-2030.	1.5	0
70	Interactions among leaf toughness, chemistry, and harvesting by attine ants. Ecological Entomology, 1990, 15, 311-320.	1.1	68
71	Growth Responses of Tropical Shrubs to Treefall Gap Environments. Ecology, 1990, 71, 165-179.	1.5	301
72	Variation in leaf quality of two oak species: implications for stand susceptibility to gypsy moth defoliation. Canadian Journal of Forest Research, 1989, 19, 1445-1450.	0.8	12

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73	Leaf Toughness Affects Leaf Harvesting by the Leaf Cutter Ant, Atta cephalotes (L.) (Hymenoptera:) Tj ETQq1 1 0.784314 rgBT /Overlo	0.8	69
74	Tannin-Insect Interactions. , 1989, , 417-433.		64
75	Phylogeny and the patterns of leaf phenolics in gap-and forest-adapted Piper and Miconia understory shrubs. Oecologia, 1988, 75, 105-109.	0.9	31
76	Plant responses induced by herbivores. Trends in Ecology and Evolution, 1988, 3, 45-49.	4.2	99
77	Relationships among Defoliation, Red Oak Phenolics, and Gypsy Moth Growth and Reproduction. Ecology, 1988, 69, 267-277.	1.5	252
78	The General and Specific in Plant Defense Studies. Ecology, 1988, 69, 1640-1641.	1.5	0
79	Relationship Between Susceptibility of Gypsy Moth Larvae (Lepidoptera: Lymantriidae) to a Baculovirus and Host Plant Foliage Constituents. Environmental Entomology, 1988, 17, 952-958.	0.7	107
80	Many Factors Influence the Evolution of Herbivore Diets, But Plant Chemistry is Central. Ecology, 1988, 69, 896-897.	1.5	134
81	Ecology of Forest Insects. Ecology, 1988, 69, 549-549.	1.5	0
82	Bioassays of nutrient limitation in a tropical rain forest soil. Oecologia, 1987, 74, 370-376.	0.9	99
83	Patterns and sources of leaf tannin variation in yellow birch (Betula allegheniensis) and sugar maple (Acer saccharum). Journal of Chemical Ecology, 1987, 13, 1069-1078.	0.9	59
84	Hostplant, larval age, and feeding behavior influence midgut pH in the gypsy moth (Lymantria dispar). Oecologia, 1986, 71, 133-137.	0.9	102
85	Mutagenicity tests with gallic and tannic acid in the<i>salmonella</i>/mammalian microsome assay. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 1985, 20, 153-165.	0.7	20
86	Tannins lost from sugar maple (Acer saccharum marsh) and yellow birch (Betula allegheniensis britt.) leaf litter. Soil Biology and Biochemistry, 1984, 16, 421-422.	4.2	12
87	A Diversity of Insect Responses to Host Plants. Ecology, 1984, 65, 671-672.	1.5	0
88	Rapid Changes in Tree Leaf Chemistry Induced by Damage: Evidence for Communication Between Plants. Science, 1983, 221, 277-279.	6.0	507
89	Impact of Variable Plant Defensive Chemistry on Susceptibility of Insects to Natural Enemies. ACS Symposium Series, 1983, , 37-54.	0.5	79
90	Habitat Selection and Foraging Tactics of Caterpillars in Heterogeneous Trees. , 1983, , 61-90.		157

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91	SEASONAL AND INDIVIDUAL VARIATION IN LEAF QUALITY OF TWO NORTHERN HARDWOODS TREE SPECIES. American Journal of Botany, 1982, 69, 753-759.	0.8	116
92	Oak Leaf Quality Declines in Response to Defoliation by Gypsy Moth Larvae. Science, 1982, 217, 149-151.	6.0	438
93	SEASONAL AND INDIVIDUAL VARIATION IN LEAF QUALITY OF TWO NORTHERN HARDWOODS TREE SPECIES. , 1982, 69, 753.		50
94	Hemoglobin as a binding substrate in the quantitative analysis of plant tannins. Journal of Agricultural and Food Chemistry, 1981, 29, 823-826.	2.4	75