Colin M Orians

List of Publications by Year
in descending order

74 papers	3,303 citations	109321 35 h-index	155660 55 g-index
74 all docs	74 docs citations	74 times ranked	3263 citing authors

#	Article	IF	Citations
1	Jasmonic acid induces rapid changes in carbon transport and partitioning in Populus. New Phytologist, 2005, 167, 63-72.	7.3	191
2	The effects of hybridization in plants on secondary chemistry: implications for the ecology and evolution of plant-herbivore interactions. American Journal of Botany, 2000, 87, 1749-1756.	1.7	152
3	Methyl jasmonate elicits rapid changes in carbon and nitrogen dynamics in tomato. New Phytologist, 2010, 188, 835-844.	7.3	133
4	Sedum cools soil and can improve neighboring plant performance during water deficit on a green roof. Ecological Engineering, 2011, 37, 1796-1803.	3.6	130
5	Herbivore-induced resource sequestration in plants: why bother?. Oecologia, 2011, 167, 1-9.	2.0	130
6	Testing the growthâ€“differentiation balance hypothesis: dynamic responses of willows to nutrient availability. New Phytologist, 2007, 176, 623-634.	7.3	114
7	Title is missing!. Journal of Chemical Ecology, 2000, 26, 471-485.	1.8	111
8	Seedling herbivory by slugs in a willow hybrid system: developmental changes in damage, chemical defense, and plant performance. Oecologia, 2001, 129, 87-97.	2.0	109
9	Plants as resource mosaics: a functional model for predicting patterns of within-plant resource heterogeneity to consumers based on vascular architecture and local environmental variability. Oikos, 2001, 94, 493-504.	2.7	107
10	Environmental Factors Variably Impact Tea Secondary Metabolites in the Context of Climate Change. Frontiers in Plant Science, 2019, 10, 939.	3.6	102
11	Evolution of Plant Defenses in Nonindigenous Environments. Annual Review of Entomology, 2010, 55, 439-459.	11.8	96
12	Willow hybridization differentially affects preference and performance of herbivorous beetles. Entomologia Experimentalis Et Applicata, 1997, 83, 285-294.	1.4	82
13	Native plant enthusiasm reaches new heights: Perceptions, evidence, and the future of green roofs. Urban Forestry and Urban Greening, 2012, 11, 1-10.	5.3	82
14	Interspecific and temporal variation in herbivore responses to hybrid willows. Oecologia, 1996, 108, 121-129.	2.0	75
15	Herbivore-Induced Changes in Tomato (Solanum lycopersicum) Primary Metabolism: A Whole Plant Perspective. Journal of Chemical Ecology, 2011, 37, 1294-1303.	1.8	73
16	Differential sectoriality in long-distance transport in temperate tree species: evidence from dye flow, 15N transport, and vessel element pitting. Trees - Structure and Function, 2004, 18, 501-509.	1.9	71
17	Secondary chemistry of hybrid and parental willows: Phenolic glycosides and condensed tannins inSalix sericea, S. eriocephala, and their hybrids. Journal of Chemical Ecology, 1995, 21, 1245-1253.	1.8	70
18	LymantriaÂdispar herbivory induces rapid changes in carbon transport and partitioning in PopulusÂnigra. Entomologia Experimentalis Et Applicata, 2008, 128, 117-125.	1.4	69

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19	Comparative sectoriality in temperate hardwoods: hydraulics and xylem anatomy. Botanical Journal of the Linnean Society, 2006, 150, 61-71.	1.6	62
20	Genetic and soil-nutrient effects on the abundance of herbivores on willow. Oecologia, 1996, 105, 388-396.	2.0	61
21	Association between Empirically Estimated Monsoon Dynamics and Other Weather Factors and Historical Tea Yields in China: Results from a Yield Response Model. Climate, 2016, 4, 20.	2.8	61
22	Use of carbon-11 in Populus shows that exogenous jasmonic acid increases biosynthesis of isoprene from recently fixed carbon. Plant, Cell and Environment, 2005, 28, 591-602.	5.7	60
23	Vascular architecture and patchy nutrient availability generate withinâ€plant heterogeneity in plant traits important to herbivores. American Journal of Botany, 2002, 89, 270-278.	1.7	58
24	Preserving leaves for tannin and phenolic glycoside analyses: A comparison of methods using three willow taxa. Journal of Chemical Ecology, 1995, 21, 1235-1243.	1.8	56
25	Striking changes in tea metabolites due to elevational effects. Food Chemistry, 2018, 264, 334-341.	8.2	56
26	Exotic herbivores on a shared native host: tissue quality after individual, simultaneous, and sequential attack. Oecologia, 2012, 169, 1015-1024.	2.0	54
27	From shoots to roots: transport and metabolic changes in tomato after simulated feeding by a specialist lepidopteran. Entomologia Experimentalis Et Applicata, 2012, 144, 101-111.	1.4	53
28	Partitioning of New Carbon as 11C in Nicotiana tabacum Reveals Insight into Methyl Jasmonate Induced Changes in Metabolism. Journal of Chemical Ecology, 2010, 36, 1058-1067.	1.8	47
29	Phenolic glycosides and condensed tannins in Salix sericea, S. eriocephala and their F1 hybrids: not all hybrids are created equal. Biochemical Systematics and Ecology, 2000, 28, 619-632.	1.3	46
30	Soil nutrients and water availability interact to influence willow growth and chemistry but not leaf beetle performance. Entomologia Experimentalis Et Applicata, 2003, 107, 69-79.	1.4	46
31	Slugs, willow seedlings and nutrient fertilization: intrinsic vigor inversely affects palatability. Oikos, 2004, 105, 268-278.	2.7	46
32	Effects of water availability and pest pressures on tea (Camellia sinensis) growth and functional quality. AoB PLANTS, 2014, 6, .	2.3	42
33	How are leaves plumbed inside a branch? Differences in leaf-to-leaf hydraulic sectoriality among six temperate tree species. Journal of Experimental Botany, 2005, 56, 2267-2273.	4.8	40
34	Tree responses to an invasive sap-feeding insect. Plant Ecology, 2014, 215, 297-304.	1.6	39
35	Soil warming accelerates decomposition of fine woody debris. Plant and Soil, 2012, 356, 405-417.	3.7	36
36	Preference and performance of a willow-feeding leaf beetle: soil nutrient and flooding effects on host quality. Oecologia, 2003, 136, 402-411.	2.0	35

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37	Combined impacts of prolonged drought and warming on plant size and foliar chemistry. Annals of Botany, 2019, 124, 41-52.	2.9	34
38	Joint species distribution modelling for spatioâ€temporal occurrence and ordinal abundance data. Global Ecology and Biogeography, 2018, 27, 142-155.	5.8	33
39	Local and systemic transcriptome responses to herbivory and jasmonic acid in Populus. Tree Genetics and Genomes, 2009, 5, 459-474.	1.6	30
40	Specificity of Phenolic Glycoside Induction in Willow Seedlings (Salix sericea) in Response to Herbivory. Journal of Chemical Ecology, 2006, 32, 2647-2656.	1.8	28
41	Cues from a specialist herbivore increase tolerance to defoliation in tomato. Functional Ecology, 2014, 28, 395-401.	3.6	27
42	Vascular Constraints and Long Distance Transport in Dicots. , 2005, , 355-371.		26
43	Nest Hydrocarbons as Cues for Philopatry in a Paper Wasp.. Ethology, 2005, 111, 469-477.	1.1	22
44	Changes in Tea Plant Secondary Metabolite Profiles as a Function of Leafhopper Density and Damage. Frontiers in Plant Science, 2020, 11, 636.	3.6	21
45	Use of gaseous ¹³NH₃ administered to intact leaves of Nicotiana tabacum to study changes in nitrogen utilization during defence induction. Plant, Cell and Environment, 2010, 33, 2173-2179.	5.7	20
46	Transient abiotic stresses lead to latent defense and reproductive responses over the Brassica rapa life cycle. Chemoecology, 2012, 22, 239-250.	1.1	20
47	Using hybrid systems to explore the evolution of tolerance to damage. Evolutionary Ecology, 2000, 14, 509-521.	1.2	19
48	Two invasive herbivores on a shared host: patterns and consequences of phytohormone induction. Oecologia, 2018, 186, 973-982.	2.0	19
49	Examining the Role of Cuticular Hydrocarbons in Firefly Species Recognition. Ethology, 2008, 114, 916-924.	1.1	17
50	15N partitioning in tomato: vascular constraints versus tissue demand. Functional Plant Biology, 2006, 33, 457.	2.1	15
51	Chronic impacts of invasive herbivores on a foundational forest species: a wholeâ€tree perspective. Ecology, 2018, 99, 1783-1791.	3.2	15
52	Failure under stress: the effect of the exotic herbivore Adelges tsugae on biomechanics of Tsuga canadensis. Annals of Botany, 2014, 113, 721-730.	2.9	13
53	Asymmetric biotic interactions and abiotic niche differences revealed by a dynamic joint species distribution model. Ecology, 2018, 99, 1018-1023.	3.2	13
54	Associational resistance to a tropical leaf-miner: does neighbour identity matter?. Journal of Tropical Ecology, 2009, 25, 551-554.	1.1	11

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55	Modeling the influence of differential sectoriality on the photosynthetic responses of understory saplings to patchy light and water availability. Trees - Structure and Function, 2011, 25, 833-845.	1.9	11
56	How slug herbivory of juvenile hybrid willows alters chemistry, growth and subsequent susceptibility to diverse plant enemies. Annals of Botany, 2013, 112, 757-765.	2.9	11
57	Competitor avoidance drives withinâ€host feeding site selection in a passively dispersed herbivore. Ecological Entomology, 2014, 39, 10-16.	2.2	10
58	Contrasting effects of two exotic invasive hemipterans on wholeâ€plant resource allocation in a declining conifer. Entomologia Experimentalis Et Applicata, 2015, 157, 86-97.	1.4	10
59	Conifer responses to a styletâ€feeding invasive herbivore and induction with methyl jasmonate: impact on the expression of induced defences and a native folivore. Agricultural and Forest Entomology, 2019, 21, 227-234.	1.3	10
60	Is Agricultural Emissions Mitigation on the Menu for Tea Drinkers?. Sustainability, 2019, 11, 4883.	3.2	10
61	2014â€“2016 seasonal rainfall effects on metals in tea (Camelia sinensis (L.) Kuntze). Chemosphere, 2019, 219, 796-803.	8.2	10
62	From plants to herbivores: novel insights into the ecological and evolutionary consequences of plant variation. Oecologia, 2018, 187, 357-360.	2.0	9
63	Facilitation between invasive herbivores: hemlock woolly adelgid increases gypsy moth preference for and performance on eastern hemlock. Ecological Entomology, 2020, 45, 416-422.	2.2	9
64	Editorial: Responses of Tea Plants to Climate Change: From Molecules to Ecosystems. Frontiers in Plant Science, 2020, 11, 594317.	3.6	6
65	Differing nonâ€linear, lagged effects of temperature and precipitation on an insect herbivore and its host plant. Ecological Entomology, 2021, 46, 866-876.	2.2	5
66	Patchy nitrate promotes inter-sector flow and 15N allocation in Ocimum basilicum: a model and an experiment. Functional Plant Biology, 2011, 38, 879.	2.1	4
67	Individual and nonâ€additive effects of exotic sapâ€feeders on root functional and mycorrhizal traits of a shared conifer host. Functional Ecology, 2017, 31, 2024-2033.	3.6	4
68	Does mycorrhizal status alter herbivore-induced changes in whole-plant resource partitioning?. AoB PLANTS, 2018, 10, plx071.	2.3	4
69	Differential Changes in Tea Quality as Influenced by Insect Herbivory. , 2018, , 217-240.		4
70	Partial defoliation and hydraulic integration in Ocimum basilicum (Lamiaceae): Testing a model for sectored xylem flow using ¹⁵ N labeling. American Journal of Botany, 2011, 98, 1816-1824.	1.7	3
71	Seasonal variation in effects of herbivory on foliar nitrogen of a threatened conifer. AoB PLANTS, 2017, 9, plx007.	2.3	2
72	Impact of chronic stylet-feeder infestation on folivore-induced signaling and defenses in a conifer. Tree Physiology, 2021, 41, 416-427.	3.1	2

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73	Does the differential seedling mortality caused by slugs alter the foliar traits and subsequent susceptibility of hybrid willows to a generalist herbivore?. Ecological Entomology, 2007, 32, 070130195410003-???.	2.2	1
74	Seasonal changes in eastern hemlock (Tsuga canadensis) foliar chemistry. Canadian Journal of Forest Research, 2020, 50, 557-564.	1.7	0