James Blande

List of Publications by Year in descending order

77 papers	3,604 citations	117625 34 h-index	138484 58 g-index
78 all docs	78 docs citations	78 times ranked	3381 citing authors

#	Article	IF	Citations
1	Ozone affects plant, insect, and soil microbial communities: A threat to terrestrial ecosystems and biodiversity. Science Advances, 2020, 6, eabc1176.	10.3	181
2	Birch (Betula spp.) leaves adsorb and reâ€rrelease volatiles specific to neighbouring plants â€“ a mechanism for associational herbivore resistance?. New Phytologist, 2010, 186, 722-732.	7.3	165
3	Response of economically important aphids to components ofHemizygia petiolata essential oil. Pest Management Science, 2005, 61, 1115-1121.	3.4	151
4	Plant volatiles in polluted atmospheres: stress responses and signal degradation. Plant, Cell and Environment, 2014, 37, 1892-1904.	5.7	150
5	Plant Volatile Organic Compounds (VOCs) in Ozone (O3) Polluted Atmospheres: The Ecological Effects. Journal of Chemical Ecology, 2010, 36, 22-34.	1.8	148
6	Climate Change Effects on Secondary Compounds of Forest Trees in the Northern Hemisphere. Frontiers in Plant Science, 2018, 9, 1445.	3.6	135
7	Ozone Degrades Common Herbivore-Induced Plant Volatiles: Does This Affect Herbivore Prey Location by Predators and Parasitoids?. Journal of Chemical Ecology, 2007, 33, 683-694.	1.8	128
8	From Plants to Birds: Higher Avian Predation Rates in Trees Responding to Insect Herbivory. PLoS ONE, 2008, 3, e2832.	2.5	128
9	Where do herbivore-induced plant volatiles go?. Frontiers in Plant Science, 2013, 4, 185.	3.6	120
10	Ozone degrades floral scent and reduces pollinator attraction to flowers. New Phytologist, 2016, 209, 152-160.	7.3	106
11	Crossâ€resistance relationships between neonicotinoids and pymetrozine in Bemisia tabaci (Hemiptera: Aleyrodidae). Pest Management Science, 2010, 66, 1186-1190.	3.4	104
12	Atmospheric benzenoid emissions from plants rival those from fossil fuels. Scientific Reports, 2015, 5, 12064.	3.3	104
13	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
14	Emission of herbivore-induced volatile terpenoids from two hybrid aspen (Populus tremula Ã— Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22 Biology, 2007, 13, 2538-2550.	9.5	98
15	Realâ€time monitoring of herbivore induced volatile emissions in the field. Physiologia Plantarum, 2010, 138, 123-133.	5.2	93
16	A Comparison of Semiochemically Mediated Interactions Involving Specialist and Generalist Brassica-feeding Aphids and the Braconid Parasitoid Diaeretiella rapae. Journal of Chemical Ecology, 2007, 33, 767-779.	1.8	92
17	Deciphering the language of plant communication: volatile chemotypes of sagebrush. New Phytologist, 2014, 204, 380-385.	7.3	88
18	Air pollution impedes plantâ€toâ€plant communication by volatiles. Ecology Letters, 2010, 13, 1172-1181.	6.4	83

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19	Molecular Plant Volatile Communication. Advances in Experimental Medicine and Biology, 2012, 739, 17-31.	1.6	75
20	Volatile-mediated plantâ€“plant interactions: volatile organic compounds as modulators of receiver plant defence, growth, and reproduction. Journal of Experimental Botany, 2022, 73, 511-528.	4.8	73
21	Foliar methyl salicylate emissions indicate prolonged aphid infestation on silver birch and black alder. Tree Physiology, 2010, 30, 404-416.	3.1	64
22	Life-history strategies affect aphid preference for yellowing leaves. Biology Letters, 2009, 5, 603-605.	2.3	61
23	Pine weevil feeding on Norway spruce bark has a stronger impact on needle VOC emissions than enhanced ultraviolet-B radiation. Environmental Pollution, 2009, 157, 174-180.	7.5	60
24	Unravelling the functions of biogenic volatiles in boreal and temperate forest ecosystems. European Journal of Forest Research, 2019, 138, 763-787.	2.5	53
25	Feeding of large pine weevil on Scots pine stem triggers localised bark and systemic shoot emission of volatile organic compounds. Environmental and Experimental Botany, 2011, 71, 390-390.	4.2	50
26	The effect of elevated ozone on floral chemistry of Brassicaceae species. Environmental Pollution, 2019, 255, 113257.	7.5	49
27	Biotic stress accelerates formation of climate-relevant aerosols in boreal forests. Atmospheric Chemistry and Physics, 2015, 15, 12139-12157.	4.9	48
28	Associational susceptibility in broccoli: mediated by plant volatiles, impeded by ozone. Global Change Biology, 2015, 21, 1993-2004.	9.5	46
29	Herbivoreâ€induced aspen volatiles temporally regulate two different indirect defences in neighbouring plants. Functional Ecology, 2012, 26, 1176-1185.	3.6	40
30	Atmospheric transformation of plant volatiles disrupts host plant finding. Scientific Reports, 2016, 6, 33851.	3.3	40
31	Attack Rate and Success of the Parasitoid Diaeretiella rapae on Specialist and Generalist Feeding Aphids. Journal of Chemical Ecology, 2004, 30, 1781-1795.	1.8	39
32	Ozone affects growth and development of Pieris brassicae on the wild host plant Brassica nigra. Environmental Pollution, 2015, 199, 119-129.	7.5	39
33	Foliar behaviour of biogenic semi-volatiles: potential applications in sustainable pest management. Arthropod-Plant Interactions, 2019, 13, 193-212.	1.1	38
34	Geographic dialects in volatile communication between sagebrush individuals. Ecology, 2016, 97, 2917-2924.	3.2	36
35	Does application of methyl jasmonate to birch mimic herbivory and attract insectivorous birds in nature?. Arthropod-Plant Interactions, 2014, 8, 143-153.	1.1	35
36	Herbivory by an Outbreaking Moth Increases Emissions of Biogenic Volatiles and Leads to Enhanced Secondary Organic Aerosol Formation Capacity. Environmental Science & Technology, 2016, 50, 11501-11510.	10.0	34

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37	EpichloÃ« Endophytes Alter Inducible Indirect Defences in Host Grasses. PLoS ONE, 2014, 9, e101331.	2.5	33
38	Biofiltration of airborne VOCs with green wall systems-Microbial and chemical dynamics. Indoor Air, 2018, 28, 697-707.	4.3	30
39	Central Metabolic Responses to Ozone and Herbivory Affect Photosynthesis and Stomatal Closure. Plant Physiology, 2016, 172, 2057-2078.	4.8	29
40	Effects of air pollution on plantâ€“insect interactions mediated by olfactory and visual cues. Current Opinion in Environmental Science and Health, 2021, 19, 100228.	4.1	28
41	Manipulation of VOC emissions with methyl jasmonate and carrageenan in the evergreen conifer Pinus sylvestris and evergreen broadleaf Quercus ilex. Plant Biology, 2012, 14, 57-65.	3.8	24
42	Pre-exposure to nitric oxide modulates the effect of ozone on oxidative defenses and volatile emissions in lima bean. Environmental Pollution, 2013, 179, 111-119.	7.5	23
43	Do Insectivorous Birds use Volatile Organic Compounds from Plants as Olfactory Foraging Cues? Three Experimental Tests. Ethology, 2015, 121, 1131-1144.	1.1	23
44	Volatile-Mediated Interactions between Cabbage Plants in the Field and the Impact of Ozone Pollution. Journal of Chemical Ecology, 2017, 43, 339-350.	1.8	23
45	Elevated Ozone Modulates Herbivore-Induced Volatile Emissions of Brassica nigra and Alters a Tritrophic Interaction. Journal of Chemical Ecology, 2016, 42, 368-381.	1.8	22
46	Dynamics of plant responses to combinations of air pollutants. Plant Biology, 2020, 22, 68-83.	3.8	21
47	Resistance of native oak to recurrent drought conditions simulating predicted climatic changes in the <scp>Mediterranean</scp> region. Plant, Cell and Environment, 2018, 41, 2299-2312.	5.7	20
48	Plant-plant interactions affect the susceptibility of plants to oviposition by pests but are disrupted by ozone pollution. Agriculture, Ecosystems and Environment, 2016, 233, 352-360.	5.3	19
49	Volatile-Mediated within-Plant Signaling in Hybrid Aspen: Required for Systemic Responses. Journal of Chemical Ecology, 2017, 43, 327-338.	1.8	18
50	Host foraging for differentially adapted Brassica-feeding aphids by the Braconid parasitoidDiaeretiella rapae. Plant Signaling and Behavior, 2008, 3, 580-582.	2.4	17
51	A Role for Volatiles in Intra- and Inter-Plant Interactions in Birch. Journal of Chemical Ecology, 2014, 40, 1203-1211.	1.8	17
52	Understorey Rhododendron tomentosum and Leaf Trichome Density Affect Mountain Birch VOC Emissions in the Subarctic. Scientific Reports, 2018, 8, 13261.	3.3	17
53	Multitrophic Signalling in Polluted Atmospheres. Tree Physiology, 2013, , 285-314.	2.5	16
54	Passive Adsorption of Volatile Monoterpene in Pest Control: Aided by Proximity and Disrupted by Ozone. Journal of Agricultural and Food Chemistry, 2017, 65, 9579-9586.	5.2	12

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55	Does ozone exposure affect herbivore-induced plant volatile emissions differently in wild and cultivated plants?. Environmental Science and Pollution Research, 2020, 27, 30448-30459.	5.3	12
56	Ozone disrupts adsorption of Rhododendron tomentosum volatiles to neighbouring plant surfaces, but does not disturb herbivore repellency. Environmental Pollution, 2018, 240, 775-780.	7.5	11
57	The phytotoxic air-pollutant O3 enhances the emission of herbivore-induced volatile organic compounds (VOCs) and affects the susceptibility of black mustard plants to pest attack. Environmental Pollution, 2020, 265, 115030.	7.5	11
58	Potential of Climate Change and Herbivory to Affect the Release and Atmospheric Reactions of BVOCs from Boreal and Subarctic Forests. Molecules, 2021, 26, 2283.	3.8	10
59	Plant Communication With Herbivores. Advances in Botanical Research, 2017, 82, 281-304.	1.1	9
60	How common is within-plant signaling via volatiles?. Plant Signaling and Behavior, 2017, 12, e1347743.	2.4	9
61	Diurnal variation in BVOC emission and CO2 gas exchange from above- and belowground parts of two coniferous species and their responses to elevated O3. Environmental Pollution, 2021, 278, 116830.	7.5	9
62	Plant-emitted semi-volatiles shape the infochemical environment and herbivore resistance of heterospecific neighbors. Plant Signaling and Behavior, 2010, 5, 1234-1236.	2.4	7
63	CHEMOTYPIC Variation in Volatiles and Herbivory for Sagebrush. Journal of Chemical Ecology, 2016, 42, 829-840.	1.8	7
64	Deposition of Î±-pinene oxidation products on plant surfaces affects plant VOC emission and herbivore feeding and oviposition. Environmental Pollution, 2020, 263, 114437.	7.5	7
65	Amplified Drought and Seasonal Cycle Modulate Quercus pubescens Leaf Metabolome. Metabolites, 2022, 12, 307.	2.9	7
66	The Effects of Ozone on Herbivore-Induced Volatile Emissions of Cultivated and Wild Brassica Rapa. Atmosphere, 2020, 11, 1213.	2.3	6
67	Assessing plant-to-plant communication and induced resistance in sagebrush using the sagebrush specialist Trirhabda pilosa. Arthropod-Plant Interactions, 2020, 14, 327-332.	1.1	6
68	Functional Role of Extrafloral Nectar in Boreal Forest Ecosystems under Climate Change. Forests, 2020, 11, 67.	2.1	6
69	Risk of herbivory negatively correlates with the diversity of volatile emissions involved in plant communication. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211790.	2.6	6
70	Effects of warming climate on early-season carbon allocation and height growth of defoliated mountain birches. Plant Ecology, 2013, 214, 373-383.	1.6	5
71	Microorganisms in the phylloplane modulate the BVOC emissions of Brassica nigra leaves. Plant Signaling and Behavior, 2020, 15, 1728468.	2.4	5
72	Air pollution impedes plant-to-plant communication, but what is the signal?. Plant Signaling and Behavior, 2011, 6, 1016-1018.	2.4	4

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73	Herbivore Gender Effects on Volatile Induction in Aspen and on Olfactory Responses in Leaf Beetles. Forests, 2020, 11, 638.	2.1	4
74	Exposure to (Z)-11-hexadecenal [(Z)-11-16:Ald] increases Brassica nigra susceptibility to subsequent herbivory. Scientific Reports, 2021, 11, 13532.	3.3	4
75	Ozone Mitigates the Adverse Effects of Diesel Exhaust Pollutants on Ground-Active Invertebrates in Wheat. Frontiers in Ecology and Evolution, 2022, 10, .	2.2	4
76	Deciphering Chemical Language of Plant Communication: Synthesis and Future Research Directions. Signaling and Communication in Plants, 2016, , 319-326.	0.7	3
77	Bank vole alarm pheromone chemistry and effects in the field. Oecologia, 2021, 196, 667-677.	2.0	1