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	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
2	Amplified Drought and Seasonal Cycle Modulate Quercus pubescens Leaf Metabolome. Metabolites, 2022, 12, 307.	2.9	7
3	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
4	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
5	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
6	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
7	Bank vole alarm pheromone chemistry and effects in the field. Oecologia, 2021, 196, 667-677.	2.0	1
8	Exposure to (Z)-11-hexadecenal [(Z)-11-16:Ald] increases Brassica nigra susceptibility to subsequent herbivory. Scientific Reports, 2021, 11, 13532.	3.3	4
9	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
10	Dynamics of plant responses to combinations of air pollutants. Plant Biology, 2020, 22, 68-83.	3.8	21
11	The Effects of Ozone on Herbivore-Induced Volatile Emissions of Cultivated and Wild Brassica Rapa. Atmosphere, 2020, 11, 1213.	2.3	6
12	Ozone affects plant, insect, and soil microbial communities: A threat to terrestrial ecosystems and biodiversity. Science Advances, 2020, 6, eabc1176.	10.3	181
13	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
14	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
15	Herbivore Gender Effects on Volatile Induction in Aspen and on Olfactory Responses in Leaf Beetles. Forests, 2020, 11, 638.	2.1	4
16	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
17	Microorganisms in the phylloplane modulate the BVOC emissions of Brassica nigra leaves. Plant Signaling and Behavior, 2020, 15, 1728468.	2.4	5
18	Functional Role of Extrafloral Nectar in Boreal Forest Ecosystems under Climate Change. Forests, 2020, 11, 67.	2.1	6

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19	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
20	Unravelling the functions of biogenic volatiles in boreal and temperate forest ecosystems. European Journal of Forest Research, 2019, 138, 763-787.	2.5	53
21	The effect of elevated ozone on floral chemistry of Brassicaceae species. Environmental Pollution, 2019, 255, 113257.	7.5	49
22	Foliar behaviour of biogenic semi-volatiles: potential applications in sustainable pest management. Arthropod-Plant Interactions, 2019, 13, 193-212.	1.1	38
23	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
24	Understorey Rhododendron tomentosum and Leaf Trichome Density Affect Mountain Birch VOC Emissions in the Subarctic. Scientific Reports, 2018, 8, 13261.	3.3	17
25	Climate Change Effects on Secondary Compounds of Forest Trees in the Northern Hemisphere. Frontiers in Plant Science, 2018, 9, 1445.	3.6	135
26	Biofiltration of airborne VOCs with green wall systems-Microbial and chemical dynamics. Indoor Air, 2018, 28, 697-707.	4.3	30
27	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
28	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
29	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
30	Plant Communication With Herbivores. Advances in Botanical Research, 2017, 82, 281-304.	1.1	9
31	Volatile-Mediated within-Plant Signaling in Hybrid Aspen: Required for Systemic Responses. Journal of Chemical Ecology, 2017, 43, 327-338.	1.8	18
32	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
33	How common is within-plant signaling via volatiles?. Plant Signaling and Behavior, 2017, 12, e1347743.	2.4	9
34	Central Metabolic Responses to Ozone and Herbivory Affect Photosynthesis and Stomatal Closure. Plant Physiology, 2016, 172, 2057-2078.	4.8	29
35	Geographic dialects in volatile communication between sagebrush individuals. Ecology, 2016, 97, 2917-2924.	3.2	36
36	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

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37	Ozone degrades floral scent and reduces pollinator attraction to flowers. New Phytologist, 2016, 209, 152-160.	7.3	106
38	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
39	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
40	Deciphering Chemical Language of Plant Communication: Synthesis and Future Research Directions. Signaling and Communication in Plants, 2016, , 319-326.	0.7	3
41	CHEMOTYPIC Variation in Volatiles and Herbivory for Sagebrush. Journal of Chemical Ecology, 2016, 42, 829-840.	1.8	7
42	Atmospheric transformation of plant volatiles disrupts host plant finding. Scientific Reports, 2016, 6, 33851.	3.3	40
43	Biotic stress accelerates formation of climate-relevant aerosols in boreal forests. Atmospheric Chemistry and Physics, 2015, 15, 12139-12157.	4.9	48
44	Do Insectivorous Birds use Volatile Organic Compounds from Plants as Olfactory Foraging Cues? Three Experimental Tests. Ethology, 2015, 121, 1131-1144.	1.1	23
45	Ozone affects growth and development of Pieris brassicae on the wild host plant Brassica nigra. Environmental Pollution, 2015, 199, 119-129.	7.5	39
46	Atmospheric benzenoid emissions from plants rival those from fossil fuels. Scientific Reports, 2015, 5, 12064.	3.3	104
47	Associational susceptibility in broccoli: mediated by plant volatiles, impeded by ozone. Global Change Biology, 2015, 21, 1993-2004.	9.5	46
48	EpichloÃ« Endophytes Alter Inducible Indirect Defences in Host Grasses. PLoS ONE, 2014, 9, e101331.	2.5	33
49	Deciphering the language of plant communication: volatile chemotypes of sagebrush. New Phytologist, 2014, 204, 380-385.	7.3	88
50	A Role for Volatiles in Intra- and Inter-Plant Interactions in Birch. Journal of Chemical Ecology, 2014, 40, 1203-1211.	1.8	17
51	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
52	Plant volatiles in polluted atmospheres: stress responses and signal degradation. Plant, Cell and Environment, 2014, 37, 1892-1904.	5.7	150
53	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
54	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

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55	Where do herbivore-induced plant volatiles go?. Frontiers in Plant Science, 2013, 4, 185.	3.6	120
56	Multitrophic Signalling in Polluted Atmospheres. Tree Physiology, 2013, , 285-314.	2.5	16
57	Molecular Plant Volatile Communication. Advances in Experimental Medicine and Biology, 2012, 739, 17-31.	1.6	75
58	Herbivoreâ€induced aspen volatiles temporally regulate two different indirect defences in neighbouring plants. Functional Ecology, 2012, 26, 1176-1185.	3.6	40
59	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
60	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
61	Air pollution impedes plant-to-plant communication, but what is the signal?. Plant Signaling and Behavior, 2011, 6, 1016-1018.	2.4	4
62	Plant Volatile Organic Compounds (VOCs) in Ozone (O3) Polluted Atmospheres: The Ecological Effects. Journal of Chemical Ecology, 2010, 36, 22-34.	1.8	148
63	Crossâ€resistance relationships between neonicotinoids and pymetrozine in Bemisia tabaci (Hemiptera: Aleyrodidae). Pest Management Science, 2010, 66, 1186-1190.	3.4	104
64	Birch (Betula spp.) leaves adsorb and reâ€release volatiles specific to neighbouring plants â€“ a mechanism for associational herbivore resistance?. New Phytologist, 2010, 186, 722-732.	7.3	165
65	Realâ€time monitoring of herbivore induced volatile emissions in the field. Physiologia Plantarum, 2010, 138, 123-133.	5.2	93
66	Air pollution impedes plantâ€toâ€plant communication by volatiles. Ecology Letters, 2010, 13, 1172-1181.	6.4	83
67	Foliar methyl salicylate emissions indicate prolonged aphid infestation on silver birch and black alder. Tree Physiology, 2010, 30, 404-416.	3.1	64
68	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
69	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
70	Life-history strategies affect aphid preference for yellowing leaves. Biology Letters, 2009, 5, 603-605.	2.3	61
71	From Plants to Birds: Higher Avian Predation Rates in Trees Responding to Insect Herbivory. PLoS ONE, 2008, 3, e2832.	2.5	128
72	Host foraging for differentially adapted Brassica-feeding aphids by the Braconid parasitoidDiaeretiella rapae. Plant Signaling and Behavior, 2008, 3, 580-582.	2.4	17

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73	Emission of herbivore-induced volatile terpenoids from two hybrid aspen (Populus tremula Ã— Tj ETQq1 1 0.784314 rgBT /Overlock 10 Biology, 2007, 13, 2538-2550.	9.5	98
74	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
75	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
76	Response of economically important aphids to components ofHemizygia petiolata essential oil. Pest Management Science, 2005, 61, 1115-1121.	3.4	151
77	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