Christelle Am Robert

List of Publications by Year
in descending order

59 papers	4,428 citations	126907 33 h-index	128289 60 g-index
71 all docs	71 docs citations	71 times ranked	4377 citing authors

#	Article	IF	Citations
1	Root exudate metabolites drive plant-soil feedbacks on growth and defense by shaping the rhizosphere microbiota. Nature Communications, 2018, 9, 2738.	12.8	861
2	Indole is an essential herbivore-induced volatile priming signal in maize. Nature Communications, 2015, 6, 6273.	12.8	349
3	The maize lipoxygenase, <i>Zm<scp>LOX</scp>10</i>, mediates green leaf volatile, jasmonate and herbivoreâ€induced plant volatile production for defense against insect attack. Plant Journal, 2013, 74, 59-73.	5.7	217
4	Sequence of arrival determines plantâ€mediated interactions between herbivores. Journal of Ecology, 2011, 99, 7-15.	4.0	160
5	Herbivoreâ€induced plant volatiles mediate host selection by a root herbivore. New Phytologist, 2012, 194, 1061-1069.	7.3	152
6	Leafâ€herbivore attack reduces carbon reserves and regrowth from the roots via jasmonate and auxin signaling. New Phytologist, 2013, 200, 1234-1246.	7.3	150
7	Metabolomics reveals herbivoreâ€induced metabolites of resistance and susceptibility in maize leaves and roots. Plant, Cell and Environment, 2013, 36, 621-639.	5.7	149
8	A specialist root herbivore exploits defensive metabolites to locate nutritious tissues. Ecology Letters, 2012, 15, 55-64.	6.4	146
9	Whole-genome-based revisit of Photorhabdus phylogeny: proposal for the elevation of most Photorhabdus subspecies to the species level and description of one novel species Photorhabdus bodei sp. nov., and one novel subspecies Photorhabdus laumondii subsp. clarkei subsp. nov.. International Journal of Systematic and Evolutionary Microbiology, 2018, 68, 2664-2681.	1.7	132
10	Induced Jasmonate Signaling Leads to Contrasting Effects on Root Damage and Herbivore Performance. Plant Physiology, 2015, 167, 1100-1116.	4.8	104
11	Plant iron acquisition strategy exploited by an insect herbivore. Science, 2018, 361, 694-697.	12.6	98
12	Genetically engineered maize plants reveal distinct costs and benefits of constitutive volatile emissions in the field. Plant Biotechnology Journal, 2013, 11, 628-639.	8.3	90
13	Biosynthesis of 8-O-methylated benzoxazinoid defense compounds in maize. Plant Cell, 2016, 28, tpc.00065.2016.	6.6	87
14	Herbivore intoxication as a potential primary function of an inducible volatile plant signal. Journal of Ecology, 2016, 104, 591-600.	4.0	83
15	Synergies and tradeâ€offs between insect and pathogen resistance in maize leaves and roots. Plant, Cell and Environment, 2011, 34, 1088-1103.	5.7	82
16	Systemic root signalling in a belowground, volatileâ€mediated tritrophic interaction. Plant, Cell and Environment, 2011, 34, 1267-1275.	5.7	80
17	Fineâ€tuning the â€˜plant domesticationâ€reduced defenseâ€™ hypothesis: specialist vs generalist herbivores. New Phytologist, 2018, 217, 355-366.	7.3	79
18	Sequestration of plant secondary metabolites by insect herbivores: molecular mechanisms and ecological consequences. Current Opinion in Insect Science, 2016, 14, 8-11.	4.4	78

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19	Highly localized and persistent induction of <i>Bx1</i>â€dependent herbivore resistance factors in maize. Plant Journal, 2016, 88, 976-991.	5.7	76
20	A specialist root herbivore reduces plant resistance and uses an induced plant volatile to aggregate in a densityâ€dependent manner. Functional Ecology, 2012, 26, 1429-1440.	3.6	75
21	A Latex Metabolite Benefits Plant Fitness under Root Herbivore Attack. PLoS Biology, 2016, 14, e1002332.	5.6	71
22	Fungal resistance mediated by maize wallâ€associated kinase Zm<scp>WAK</scp>â€<scp>RLK</scp>1 correlates with reduced benzoxazinoid content. New Phytologist, 2019, 221, 976-987.	7.3	71
23	Auxin Is Rapidly Induced by Herbivore Attack and Regulates a Subset of Systemic, Jasmonate-Dependent Defenses. Plant Physiology, 2016, 172, 521-532.	4.8	69
24	Sequestration and activation of plant toxins protect the western corn rootworm from enemies at multiple trophic levels. ELife, 2017, 6, .	6.0	68
25	Induced Immunity Against Belowground Insect Herbivores- Activation of Defenses in the Absence of a Jasmonate Burst. Journal of Chemical Ecology, 2012, 38, 629-640.	1.8	66
26	Selinene Volatiles Are Essential Precursors for Maize Defense Promoting Fungal Pathogen Resistance. Plant Physiology, 2017, 175, 1455-1468.	4.8	61
27	Induced carbon reallocation and compensatory growth as root herbivore tolerance mechanisms. Plant, Cell and Environment, 2014, 37, 2613-2622.	5.7	60
28	Oviposition by a moth suppresses constitutive and herbivore-induced plant volatiles in maize. Planta, 2011, 234, 207-215.	3.2	59
29	Convergent evolution of a metabolic switch between aphid and caterpillar resistance in cereals. Science Advances, 2018, 4, eaat6797.	10.3	58
30	Plant defense resistance in natural enemies of a specialist insect herbivore. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23174-23181.	7.1	53
31	New frontiers in belowground ecology for plant protection from root-feeding insects. Applied Soil Ecology, 2016, 108, 96-107.	4.3	49
32	The Role of Plant Primary and Secondary Metabolites in Root-Herbivore Behaviour, Nutrition and Physiology. Advances in Insect Physiology, 2013, 45, 53-95.	2.7	44
33	A physiological and behavioral mechanism for leaf-herbivore induced systemic root resistance. Plant Physiology, 2015, 169, pp.00759.2015.	4.8	44
34	Direct and Indirect Plant Defenses are not Suppressed by Endosymbionts of a Specialist Root Herbivore. Journal of Chemical Ecology, 2013, 39, 507-515.	1.8	36
35	Carbon-11 Reveals Opposing Roles of Auxin and Salicylic Acid in Regulating Leaf Physiology, Leaf Metabolism, and Resource Allocation Patterns that Impact Root Growth in Zea mays. Journal of Plant Growth Regulation, 2014, 33, 328-339.	5.1	34
36	A mechanism for sequence specificity in plantâ€mediated interactions between herbivores. New Phytologist, 2017, 214, 169-179.	7.3	34

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37	Engineering bacterial symbionts of nematodes improves their biocontrol potential to counter the western corn rootworm. Nature Biotechnology, 2020, 38, 600-608.	17.5	27
38	Dynamic Precision Phenotyping Reveals Mechanism of Crop Tolerance to Root Herbivory. Plant Physiology, 2016, 172, pp.00735.2016.	4.8	23
39	Soil chemistry determines whether defensive plant secondary metabolites promote or suppress herbivore growth. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	22
40	Entomopathogenic nematodes increase predation success by inducing cadaver volatiles that attract healthy herbivores. ELife, 2019, 8, .	6.0	21
41	Entomopathogenic nematodes from Mexico that can overcome the resistance mechanisms of the western corn rootworm. Scientific Reports, 2020, 10, 8257.	3.3	20
42	Chemical host-seeking cues of entomopathogenic nematodes. Current Opinion in Insect Science, 2021, 44, 72-81.	4.4	20
43	Belowground herbivore tolerance involves delayed overcompensatory root regrowth in maize. Entomologia Experimentalis Et Applicata, 2015, 157, 113-120.	1.4	15
44	The plant metabolome guides fitness-relevant foraging decisions of a specialist herbivore. PLoS Biology, 2021, 19, e3001114.	5.6	15
45	Impact of Seasonal and Temperature-Dependent Variation in Root Defense Metabolites on Herbivore Preference in Taraxacum officinale. Journal of Chemical Ecology, 2020, 46, 63-75.	1.8	14
46	Western Corn Rootworm, Plant and Microbe Interactions: A Review and Prospects for New Management Tools. Insects, 2021, 12, 171.	2.2	14
47	A Differential Role of Volatiles from Conspecific and Heterospecific Competitors in the Selection of Oviposition Sites by the Aphidophagous Hoverfly Sphaerophoria rueppellii. Journal of Chemical Ecology, 2015, 41, 493-500.	1.8	13
48	Influence of drought on plant performance through changes in belowground tritrophic interactions. Ecology and Evolution, 2018, 8, 6756-6765.	1.9	12
49	Induction of root-resistance by leaf-herbivory follows a vertical gradient. Journal of Plant Interactions, 2011, 6, 133-136.	2.1	11
50	A conserved pattern in plantâ€mediated interactions between herbivores. Ecology and Evolution, 2016, 6, 1032-1040.	1.9	10
51	Herbivoreâ€induced plant volatiles mediate defense regulation in maize leaves but not in maize roots. Plant, Cell and Environment, 2021, 44, 2672-2686.	5.7	10
52	Using plant chemistry to improve interactions between plants, herbivores and their natural enemies: challenges and opportunities. Current Opinion in Biotechnology, 2021, 70, 262-265.	6.6	8
53	A beta-glucosidase of an insect herbivore determines both toxicity and deterrence of a dandelion defense metabolite. ELife, 2021, 10, .	6.0	8
54	Adapted dandelions trade dispersal for germination upon root herbivore attack. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20192930.	2.6	7

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55	Natural enemies of herbivores maintain their biological control potential under shortâ€term exposure to future CO₂, temperature, and precipitation patterns. Ecology and Evolution, 2021, 11, 4182-4192.	1.9	7
56	Climate Change Modulates Multitrophic Interactions Between Maize, A Root Herbivore, and Its Enemies. Journal of Chemical Ecology, 2021, 47, 889-906.	1.8	6
57	Correlated Induction of Phytohormones and Glucosinolates Shapes Insect Herbivore Resistance of Cardamine Species Along Elevational Gradients. Journal of Chemical Ecology, 2019, 45, 638-648.	1.8	5
58	Volatileâ€mediated defence regulation occurs in maize leaves but not in maize root. Plant, Cell and Environment, 2020, , .	5.7	4
59	ZEITLUPE facilitates the rhythmic movements of <i>Nicotiana attenuata</i> flowers. Plant Journal, 2020, 103, 308-322.	5.7	2