Andre Kessler

List of Publications by Year
in descending order

96 papers	9,501 citations	76326 40 h-index	48315 88 g-index
100 all docs	100 docs citations	100 times ranked	7312 citing authors

#	Article	IF	Citations
1	Defensive Function of Herbivore-Induced Plant Volatile Emissions in Nature. Science, 2001, 291, 2141-2144.	12.6	1,835
2	PLANTRESPONSES TOINSECTHERBIVORY: The Emerging Molecular Analysis. Annual Review of Plant Biology, 2002, 53, 299-328.	18.7	1,299
3	Silencing the Jasmonate Cascade: Induced Plant Defenses and Insect Populations. Science, 2004, 305, 665-668.	12.6	514
4	Priming of plant defense responses in nature by airborne signaling between Artemisia tridentata and Nicotiana attenuata. Oecologia, 2006, 148, 280-292.	2.0	334
5	Shared signals â€“â€˜alarm callsâ€™ from plants increase apparency to herbivores and their enemies in nature. Ecology Letters, 2008, 11, 24-34.	6.4	250
6	Attracting friends to feast on foes: engineering terpene emission to make crop plants more attractive to herbivore enemies. Current Opinion in Biotechnology, 2003, 14, 169-176.	6.6	245
7	Plant Secondary Metabolite Diversity and Species Interactions. Annual Review of Ecology, Evolution, and Systematics, 2018, 49, 115-138.	8.3	243
8	CONSTITUTIVE AND INDUCED DEFENSES TO HERBIVORY IN ABOVE- AND BELOWGROUND PLANT TISSUES. Ecology, 2008, 89, 392-406.	3.2	238
9	The multiple faces of indirect defences and their agents of natural selection. Functional Ecology, 2011, 25, 348-357.	3.6	233
10	Testing the potential for conflicting selection on floral chemical traits by pollinators and herbivores: predictions and case study. Functional Ecology, 2009, 23, 901-912.	3.6	225
11	Ecophysiological comparison of direct and indirect defenses in Nicotiana attenuata. Oecologia, 2000, 124, 408-417.	2.0	217
12	Herbivore-induced plant vaccination. Part I. The orchestration of plant defenses in nature and their fitness consequences in the wild tobaccoNicotiana attenuata. Plant Journal, 2004, 38, 639-649.	5.7	200
13	Volatile signaling in plantâ€“plantâ€“herbivore interactions: what is real?. Current Opinion in Plant Biology, 2002, 5, 351-354.	7.1	181
14	Herbivory-mediated pollinator limitation: negative impacts of induced volatiles on plantâ€“pollinator interactions. Ecology, 2011, 92, 1769-1780.	3.2	169
15	Physiological integration of roots and shoots in plant defense strategies links aboveâ€•and belowground herbivory. Ecology Letters, 2008, 11, 841-851.	6.4	168
16	Merging molecular and ecological approaches in plantâ€“insect interactions. Current Opinion in Plant Biology, 2001, 4, 351-358.	7.1	165
17	Phenotypic selection to increase floral scent emission, but not flower size or colour in beeâ€pollinated <i>Penstemon digitalis</i>. New Phytologist, 2012, 195, 667-675.	7.3	165
18	Pollinators exert natural selection on flower size and floral display in<i>Penstemon digitalis</i>. New Phytologist, 2010, 188, 393-402.	7.3	141

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19	Specificity and complexity: the impact of herbivore-induced plant responses on arthropod community structure. Current Opinion in Plant Biology, 2007, 10, 409-414.	7.1	134
20	ECOLOGICAL COSTS AND BENEFITS CORRELATED WITH TRYPSIN PROTEASE INHIBITOR PRODUCTION IN NICOTIANA ATTENUATA. Ecology, 2003, 84, 79-90.	3.2	125
21	Evolutionary Trade-Offs in Plants Mediate the Strength of Trophic Cascades. Science, 2010, 327, 1642-1644.	12.6	114
22	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
23	The information landscape of plant constitutive and induced secondary metabolite production. Current Opinion in Insect Science, 2015, 8, 47-53.	4.4	88
24	The raison d'Ãªtre of chemical ecology. Ecology, 2015, 96, 617-630.	3.2	83
25	Keystone Herbivores and the Evolution of Plant Defenses. Trends in Plant Science, 2016, 21, 477-485.	8.8	83
26	Herbivore exclusion drives the evolution of plant competitiveness via increased allelopathy. New Phytologist, 2013, 198, 916-924.	7.3	82
27	Insect Herbivory Selects for Volatile-Mediated Plant-Plant Communication. Current Biology, 2019, 29, 3128-3133.e3.	3.9	76
28	Differential and Synergistic Functionality of Acylsugars in Suppressing Oviposition by Insect Herbivores. PLoS ONE, 2016, 11, e0153345.	2.5	75
29	Herbivoreâ€specific elicitation of photosynthesis by mirid bug salivary secretions in the wild tobacco <i>Nicotiana attenuata</i>. New Phytologist, 2011, 191, 528-535.	7.3	74
30	MANDUCA QUINQUEMACULATA'S OPTIMIZATION OF INTRA-PLANT OVIPOSITION TO PREDATION, FOOD QUALITY, AND THERMAL CONSTRAINTS. Ecology, 2002, 83, 2346-2354.	3.2	72
31	Phenolic root exudate and tissue compounds vary widely among temperate forest tree species and have contrasting effects on soil microbial respiration. New Phytologist, 2018, 218, 530-541.	7.3	70
32	Fine-root system development and susceptibility to pathogen colonization. Planta, 2014, 239, 325-340.	3.2	67
33	The enemy as ally: herbivoreâ€induced increase in crop yield. Ecological Applications, 2010, 20, 1787-1793.	3.8	63
34	Plant mating system transitions drive the macroevolution of defense strategies. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3973-3978.	7.1	62
35	Soil organic matter attenuates the efficacy of flavonoid-based plant-microbe communication. Science Advances, 2020, 6, eaax8254.	10.3	60
36	Plant chemistry underlies herbivoreâ€mediated inbreeding depression in nature. Ecology Letters, 2013, 16, 252-260.	6.4	58

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37	Solanum nigrum: A model ecological expression system and its tools. Molecular Ecology, 2004, 13, 981-995.	3.9	51
38	A test of genotypic variation in specificity of herbivore-induced responses in Solidago altissima L. (Asteraceae). Oecologia, 2013, 173, 1387-1396.	2.0	48
39	Predictability of Biotic Stress Structures Plant Defence Evolution. Trends in Ecology and Evolution, 2021, 36, 444-456.	8.7	48
40	Exploring plant defense theory in tall goldenrod, <i>Solidago altissima</i>. New Phytologist, 2014, 202, 1357-1370.	7.3	43
41	Spatiotemporal Floral Scent Variation of Penstemon digitalis. Journal of Chemical Ecology, 2015, 41, 641-650.	1.8	43
42	Noisy Communication via Airborne Infochemicals. BioScience, 2015, 65, 667-677.	4.9	43
43	Plant communication in a widespread goldenrod: keeping herbivores on the move. Functional Ecology, 2017, 31, 1049-1061.	3.6	42
44	Interaction diversity explains the maintenance of phytochemical diversity. Ecology Letters, 2021, 24, 1205-1214.	6.4	42
45	Herbivore damage-induced production and specific anti-digestive function of serine and cysteine protease inhibitors in tall goldenrod, Solidago altissima L. (Asteraceae). Planta, 2013, 237, 1287-1296.	3.2	41
46	Pollen defenses negatively impact foraging and fitness in a generalist bee (Bombus impatiens: Apidae). Scientific Reports, 2020, 10, 3112.	3.3	39
47	Natural selection on floral volatile production in<i><i>Penstemon digitalis</i></i>: Highlighting the role of linalool. Plant Signaling and Behavior, 2013, 8, e22704.	2.4	38
48	More Than â€œPushâ€•and â€œPullâ€? Plant-Soil Feedbacks of Maize Companion Cropping Increase Chemical Plant Defenses Against Herbivores. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	37
49	Morphology and foraging behaviour of Siberian Phylloscopus warblers. Journal of Avian Biology, 2001, 32, 127-138.	1.2	36
50	Shifts in plantâ€“microbe interactions over community succession and their effects on plant resistance to herbivores. New Phytologist, 2020, 226, 1144-1157.	7.3	35
51	Herbivore pressure on goldenrod (<i>Solidago altissima</i> L., Asteraceae): its effects on herbivore resistance and vegetative reproduction. Journal of Ecology, 2012, 100, 795-801.	4.0	33
52	Informed herbivore movement and interplant communication determine the effects of induced resistance in an individualâ€based model. Journal of Animal Ecology, 2015, 84, 1273-1285.	2.8	33
53	Quantitative trait loci regulating the fatty acid profile of acylsugars in tomato. Molecular Breeding, 2014, 34, 1201-1213.	2.1	31
54	Combination of Acylglucose QTL reveals additive and epistatic genetic interactions and impacts insect oviposition and virus infection. Molecular Breeding, 2018, 38, 1.	2.1	31

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55	Herbivore release drives parallel patterns of evolutionary divergence in invasive plant phenotypes. Journal of Ecology, 2016, 104, 876-886.	4.0	29
56	Relaxation of herbivoreâ€mediated selection drives the evolution of genetic covariances between plant competitive and defense traits. Evolution; International Journal of Organic Evolution, 2017, 71, 1700-1709.	2.3	24
57	Functional reduction in pollination through herbivore-induced pollinator limitation and its potential in mutualist communities. Nature Communications, 2017, 8, 2031.	12.8	23
58	The ecological consequences of herbivore-induced plant responses on plantâ€"pollinator interactions. Emerging Topics in Life Sciences, 2020, 4, 33-43.	2.6	23
59	Dietary plant phenolic improves survival of bacterial infection in <i><scp>M</scp>anduca sexta</i> caterpillars. Entomologia Experimentalis Et Applicata, 2013, 146, 321-331.	1.4	21
60	The Effect of Polychlorinated Biphenyls on the Song of Two Passerine Species. PLoS ONE, 2013, 8, e73471.	2.5	21
61	Plant mating systems affect adaptive plasticity in response to herbivory. Plant Journal, 2014, 78, 481-490.	5.7	21
62	Simultaneous analysis of tissue- and genotype-specific variation in Solidago altissima (Asteraceae) rhizome terpenoids, and the polyacetylene dehydromatricaria ester. Chemoecology, 2010, 20, 255-264.	1.1	20
63	Overcompensating plants: their expression of resistance traits and effects on herbivore preference and performance. Entomologia Experimentalis Et Applicata, 2012, 143, 245-253.	1.4	20
64	Modification of plantâ€induced responses by an insect ecosystem engineer influences the colonization behaviour of subsequent shelterâ€users. Journal of Ecology, 2016, 104, 1096-1105.	4.0	20
65	Scented nectar and the challenge of measuring honest signals in pollination. Journal of Ecology, 2020, 108, 2132-2144.	4.0	20
66	Effects of Plant Vascular Architecture on Abovegroundâ€"Belowground-Induced Responses to Foliar and Root Herbivores on Nicotiana tabacum. Journal of Chemical Ecology, 2008, 34, 1349-1359.	1.8	19
67	Soil Microbiomes From Fallow Fields Have Species-Specific Effects on Crop Growth and Pest Resistance. Frontiers in Plant Science, 2020, 11, 1171.	3.6	16
68	Eco-evolutionary processes affecting plantâ€"herbivore interactions during early community succession. Oecologia, 2018, 187, 547-559.	2.0	15
69	Contextâ€dependent induction of allelopathy in plants under competition. Oikos, 2019, 128, 1492-1502.	2.7	15
70	New Synthesis: Plant Volatiles as Functional Cues in Intercropping Systems. Journal of Chemical Ecology, 2012, 38, 1341-1341.	1.8	14
71	Geographic isolation, pollination syndromes, and pollinator generalization in Himalayan <i>Roscoea</i> spp. (Zingiberaceae). Ecosphere, 2019, 10, e02943.	2.2	14
72	Plant defences limit herbivore population growth by changing predatorâ€"prey interactions. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171120.	2.6	13

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73	Combination of QTL affecting acylsugar chemistry reveals additive and epistatic genetic interactions to increase acylsugar profile diversity. Molecular Breeding, 2017, 37, 1.	2.1	13
74	Lobelia siphilitica Plants That Escape Herbivory in Time Also Have Reduced Latex Production. PLoS ONE, 2012, 7, e37745.	2.5	10
75	A Specialist Herbivore Uses Chemical Camouflage to Overcome the Defenses of an Ant-Plant Mutualism. PLoS ONE, 2014, 9, e102604.	2.5	10
76	Populationâ€wide shifts in herbivore resistance strategies over succession. Ecology, 2020, 101, e03157.	3.2	8
77	Attack and aggregation of a major squash pest: Parsing the role of plant chemistry and beetle pheromones across spatial scales. Journal of Applied Ecology, 2020, 57, 1442-1451.	4.0	8
78	Integrating plant-to-plant communication and rhizosphere microbial dynamics: ecological and evolutionary implications and a call for experimental rigor. ISME Journal, 2022, 16, 5-9.	9.8	8
79	Human-Mediated Land Use Change Drives Intraspecific Plant Trait Variation. Frontiers in Plant Science, 2020, 11, 592881.	3.6	7
80	The scent of danger: Volatile-mediated information transfer and defence priming in plants. Biochemist, 2014, 36, 26-31.	0.5	7
81	High levels of abiotic noise in volatile organic compounds released by a desert perennial: implications for the evolution and ecology of airborne chemical communication. Oecologia, 2018, 188, 367-379.	2.0	6
82	Plant-insect interactions in the era of consolidation in biological sciences. , 2006, , 19-37.		6
83	Introduction to a special feature issue â€" New insights into plant volatiles. New Phytologist, 2018, 220, 655-658.	7.3	5
84	Inducible plant defences and the environmental context. Functional Ecology, 2016, 30, 1738-1739.	3.6	4
85	Introduction to a <i>Virtual Special Issue</i> on plant volatiles. New Phytologist, 2016, 209, 1333-1337.	7.3	4
86	Pollinator-mediated natural selection inPenstemon digitalis. Plant Signaling and Behavior, 2010, 5, 1688-1690.	2.4	2
87	<i>Plant Defense: Warding Off Attack by Pathogens, Herbivores, and Parasitic Plants</i>. By Dale R.ÂWalters. Hoboken (New Jersey): Wileyâ€Blackwell. $89.95 (paper). xi + 236 p.; ill.; index. ISBN: 978â€1â€4051â€7589â€0. 2011.. Quarterly Review of Biology, 2011, 86, 356-357.	0.1	2
88	Arsenic Bioaccumulation by Eruca sativa Is Unaffected by Intercropping or Plant Density. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	2
89	4. Merging microbial and plant profiling to understand the impact of human-generated extreme environments on natural and agricultural systems. , 2019, , 57-92.		2
90	Colonyâ€level chemical profiles do not provide reliable information about colony size in the honey bee. Ecological Entomology, 2020, 45, 679-687.	2.2	1

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91	Comment on "Information arms race explains plant-herbivore chemical communication in ecological communities". , 0, 2, .		1
92	The geographic mosaic of plant chemistry and its effects on community and population genetic diversity. New Phytologist, 2016, 212, 8-10.	7.3	0
93	Stress Responses in Plants: Mechanisms of Toxicity and Tolerance. Edited by Bhumi Nath Tripathi and Maria MÃ¼ller. Cham (Switzerland) and New York: Springer. $189.00. vi + 292 p.; ill.; no index. ISBN: 978-3-319-13367-6 (hc); 978-3-319-13368-3 (eb). 2015.. Quarterly Review of Biology, 2017, 92, 339-339.	0.1	0
94	Chemical information structuring the plant interaction network. , 2016, , .		0
95	Physiological Responses of Plants to Attack. By Dale R. Walters. Hoboken (New Jersey): Wiley Blackwell. $79.99 (paper). xi + 229 p.; ill.; index. ISBN: 978-1-4443-3329-9. 2015.. Quarterly Review of Biology, 2017, 92, 338-339.	0.1	0
96	Plant growth and defense traits in Sorghum bicolorâ€™s response to Chilo partellus in the tropics. Journal of Pest Science, 0, , 1.	3.7	0