Almuth Hammerbacher

List of Publications by Year
in descending order

56 papers	2,949 citations	159585 30 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	3530 citing authors

#	Article	IF	Citations
1	Pitch canker caused by<i>Fusarium circinatum</i>â€" a growing threat to pine plantations and forests worldwide. Australasian Plant Pathology, 2008, 37, 319.	1.0	219
2	Roles of plant volatiles in defence against microbial pathogens and microbial exploitation of volatiles. Plant, Cell and Environment, 2019, 42, 2827-2843.	5.7	162
3	Bark Beetle Population Dynamics in the Anthropocene: Challenges and Solutions. Trends in Ecology and Evolution, 2019, 34, 914-924.	8.7	159
4	Flavan-3-ols Are an Effective Chemical Defense against Rust Infection. Plant Physiology, 2017, 175, 1560-1578.	4.8	156
5	Deoxyxylulose 5-Phosphate Synthase Controls Flux through the Methylerythritol 4-Phosphate Pathway in Arabidopsis. Plant Physiology, 2014, 165, 1488-1504.	4.8	154
6	A Common Fungal Associate of the Spruce Bark Beetle Metabolizes the Stilbene Defenses of Norway Spruce Â Â Â. Plant Physiology, 2013, 162, 1324-1336.	4.8	150
7	Tree defence and bark beetles in a drying world: carbon partitioning, functioning and modelling. New Phytologist, 2020, 225, 26-36.	7.3	144
8	Inducibility of chemical defenses in Norway spruce bark is correlated with unsuccessful mass attacks by the spruce bark beetle. Oecologia, 2012, 170, 183-198.	2.0	120
9	Biosynthesis of the Major Tetrahydroxystilbenes in Spruce, Astringin and Isorhapontin, Proceeds via Resveratrol and Is Enhanced by Fungal Infection Â Â. Plant Physiology, 2011, 157, 876-890.	4.8	112
10	Salicylic acid activates poplar defense against the biotrophic rust fungus <i>Melampsora laricià€populina</i> via increased biosynthesis of catechin and proanthocyanidins. New Phytologist, 2019, 221, 960-975.	7.3	103
11	Fungal associates of the tree-killing bark beetle, Ips typographus, vary in virulence, ability to degrade conifer phenolics and influence bark beetle tunneling behavior. Fungal Ecology, 2019, 38, 71-79.	1.6	89
12	Eyes on the future â€" evidence for tradeâ€offs between growth, storage and defense in Norway spruce. New Phytologist, 2019, 222, 144-158.	7.3	88
13	Volatile organic compounds influence the interaction of the Eurasian spruce bark beetle (<i>Ips) Tj ETQq1 1 0.784314 rgBT /Overlock 10	9.8	78
14	Catechol dioxygenases catalyzing the first step in Norway spruce phenolic degradation are key virulence factors in the bark beetle-vectored fungus Endoconidiophora polonica. Plant Physiology, 2016, 171, pp.01916.2015.	4.8	75
15	Flavan-3-ols in Norway Spruce: Biosynthesis, Accumulation, and Function in Response to Attack by the Bark Beetle-Associated Fungus <i>Ceratocystis polonica</i> Â Â Â Â. Plant Physiology, 2014, 164, 2107-2122.	4.8	72
16	A Latex Metabolite Benefits Plant Fitness under Root Herbivore Attack. PLoS Biology, 2016, 14, e1002332.	5.6	71
17	The phytopathogenic fungus Sclerotinia sclerotiorum detoxifies plant glucosinolate hydrolysis products via an isothiocyanate hydrolase. Nature Communications, 2020, 11, 3090.	12.8	65
18	Volatile Organic Compounds Emitted by Fungal Associates of Conifer Bark Beetles and their Potential in Bark Beetle Control. Journal of Chemical Ecology, 2016, 42, 952-969.	1.8	61

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19	Can insect egg deposition â€˜warnâ€™ a plant of future feeding damage by herbivorous larvae?. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 101-108.	2.6	58
20	Flavanone-3-Hydroxylase Plays an Important Role in the Biosynthesis of Spruce Phenolic Defenses Against Bark Beetles and Their Fungal Associates. Frontiers in Plant Science, 2019, 10, 208.	3.6	54
21	Leaf rust infection reduces herbivoreâ€induced volatile emission in black poplar and attracts a generalist herbivore. New Phytologist, 2018, 220, 760-772.	7.3	52
22	Identification of Norway Spruce MYB-bHLH-WDR Transcription Factor Complex Members Linked to Regulation of the Flavonoid Pathway. Frontiers in Plant Science, 2017, 8, 305.	3.6	51
23	Specific Polyphenols and Tannins are Associated with Defense Against Insect Herbivores in the Tropical Oak Quercus oleoides. Journal of Chemical Ecology, 2014, 40, 458-467.	1.8	50
24	Localization of Phenolics in Phloem Parenchyma Cells of Norway Spruce (<i>Picea abies</i>). ChemBioChem, 2012, 13, 2707-2713.	2.6	49
25	Overexpression of PaNAC03, a stress induced NAC gene family transcription factor in Norway spruce leads to reduced flavonol biosynthesis and aberrant embryo development. BMC Plant Biology, 2017, 17, 6.	3.6	45
26	Storage of carbon reserves in spruce trees is prioritized over growth in the face of carbon limitation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	45
27	<i>Sclerotinia sclerotiorum</i> Circumvents Flavonoid Defenses by Catabolizing Flavonol Glycosides and Aglycones. Plant Physiology, 2019, 180, 1975-1987.	4.8	42
28	IMA Genome-F 6. IMA Fungus, 2016, 7, 217-227.	3.8	39
29	Draft genome sequence of Annulohypoxylon stygium, Aspergillus mulundensis, Berkeleyomyces basicola (syn. Thielaviopsis basicola), Ceratocystis smalleyi, two Cercospora beticola strains, Coleophoma cylindrospora, Fusarium fracticaudum, Phialophora cf. hyalina, and Morchella septimelata. IMA Fungus, 2018, 9, 199-223.	3.8	37
30	Different alleles of a gene encoding leucoanthocyanidin reductase (PaLAR3) influence resistance against the fungus Heterobasidion parviporum in Picea abies. Plant Physiology, 2016, 171, pp.00685.2016.	4.8	34
31	Accumulation of Catechin and Proanthocyanidins in Black Poplar Stems After Infection by Plectosphaerella populi: Hormonal Regulation, Biosynthesis and Antifungal Activity. Frontiers in Plant Science, 2019, 10, 1441.	3.6	32
32	Draft genome sequences for Ceratocystis fagacearum, C. harringtonii, Grosmannia penicillata, and Huntiella bhutanensis. IMA Fungus, 2016, 7, 317-323.	3.8	31
33	Increasing carbon availability stimulates growth and secondary metabolites via modulation of phytohormones in winter wheat. Journal of Experimental Botany, 2017, 68, 1251-1263.	4.8	29
34	Gallocatechin biosynthesis via a flavonoid 3â€²,5â€²-hydroxylase is a defense response in Norway spruce against infection by the bark beetle-associated sap-staining fungus Endoconidiophora polonica. Phytochemistry, 2018, 148, 78-86.	2.9	28
35	Herbivory meets fungivory: insect herbivores feed on plant pathogenic fungi for their own benefit. Ecology Letters, 2020, 23, 1073-1084.	6.4	23
36	Salivary cues: simulated roe deer browsing induces systemic changes in phytohormones and defence chemistry in wildâ€grown maple and beech saplings. Functional Ecology, 2017, 31, 340-349.	3.6	20

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37	Quantifying the Metabolites of the Methylerythritol 4-Phosphate (MEP) Pathway in Plants and Bacteria by Liquid Chromatographyâ€"Triple Quadrupole Mass Spectrometry. Methods in Enzymology, 2016, 576, 225-249.	1.0	18
38	Release of resource constraints allows greater carbon allocation to secondary metabolites and storage in winter wheat. Plant, Cell and Environment, 2017, 40, 672-685.	5.7	18
39	<i>Sclerotinia</i> <i>sclerotiorum</i> Infection Triggers Changes in Primary and Secondary Metabolism in <i>Arabidopsis thaliana</i>. Phytopathology, 2021, 111, 559-569.	2.2	15
40	Canditate metabolites for ash dieback tolerance in Fraxinus excelsior. Journal of Experimental Botany, 2020, 71, 6074-6083.	4.8	13
41	Rust Infection of Black Poplar Trees Reduces Photosynthesis but Does Not Affect Isoprene Biosynthesis or Emission. Frontiers in Plant Science, 2018, 9, 1733.	3.6	11
42	Heterothallism revealed in the root rot fungi Berkeleyomyces basicola and B.Ârouxiae. Fungal Biology, 2018, 122, 1031-1040.	2.5	11
43	African elephants can detect water from natural and artificial sources via olfactory cues. Animal Cognition, 2022, 25, 53-61.	1.8	10
44	The Eurasian spruce bark beetle in a warming climate: Phenology, behavior, and biotic interactions. , 2022, , 89-131.		10
45	Comparative Genomic and Metabolomic Analysis of <i>Termitomyces</i> Species Provides Insights into the Terpenome of the Fungal Cultivar and the Characteristic Odor of the Fungus Garden of <i>Macrotermes natalensis</i> Termites. MSystems, 2022, 7, e0121421.	3.8	8
46	Combining QTL Mapping and Transcriptomics to Decipher the Genetic Architecture of Phenolic Compounds Metabolism in the Conifer White Spruce. Frontiers in Plant Science, 2021, 12, 675108.	3.6	7
47	Factors affecting pine pitch canker modelled on Michaelisâ€"Menten kineticsThis article is one of a collection of papers based on a presentation from the<i>Stem and Shoot Fungal Pathogens and Parasitic Plants: the Values of Biological Diversity</i>session of the XXII International Union of Forestry Research Organization World Congress meeting held in Brisbane, Queensland, Australia, in 2005.. Botany, 2009, 87, 36-42.	1.0	4
48	Spruce Phenolics: Biosynthesis and Ecological Functions. Compendium of Plant Genomes, 2020, , 193-214.	0.5	4
49	Bark Beetle Attack History Does Not Influence the Induction of Terpene and Phenolic Defenses in Mature Norway Spruce (Picea abies) Trees by the Bark Beetle-Associated Fungus Endoconidiophora polonica. Frontiers in Plant Science, 2022, 13, .	3.6	4
50	Fungal diversity associated with the mycorrhizosphere soil of Brachycorythis conica subsp. transvaalensis, a critically endangered and endemic terrestrial orchid from South Africa. South African Journal of Botany, 2022, , .	2.5	3
51	Phenolic compound degradation by Pseudomonas syringae phylogroup 2 strains. Journal of Plant Pathology, 2018, 100, 279-286.	1.2	2
52	Phenolic degradation by catechol dioxygenases is associated with pathogenic fungi with a necrotrophic lifestyle in the Ceratocystidaceae. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	2
53	Comparison of the Infection Biology of <i>Teratosphaeria destructans</i> and <i>Teratosphaeria epicoccoides</i> on <i>Eucalyptus</i>. Plant Disease, 2022, 106, 1944-1951.	1.4	2
54	Chemical Composition and Antimicrobial Activity of Populus nigra Shoot Resin. Natural Product Communications, 2016, 11, 1934578X1601100.	0.5	1

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55	Uncovering the mycorrhizal community of two Habenaria orchids in South Africa. South African Journal of Botany, 2022, 146, 856-863.	2.5	1
56	Characterization of the Ergosterol Biosynthesis Pathway in Ceratocystidaceae. Journal of Fungi (Basel, Switzerland), 2021, 7, 237.	3.5	0