Annegret Kohler

List of Publications by Year in descending order

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91 papers 11,058 citations

43 h-index 90 g-index

100 all docs

100 docs citations

100 times ranked

9636 citing authors

#	Article	IF	Citations
1	Evolutionary innovations through gain and loss of genes in the ectomycorrhizal Boletales. New Phytologist, 2022, 233, 1383-1400.	7.3	19
2	Evolutionary transition to the ectomycorrhizal habit in the genomes of a hyperdiverse lineage of mushrooma \in forming fungi. New Phytologist, 2022, 233, 2294-2309.	7.3	21
3	The ectomycorrhizal basidiomycete <i>Laccaria bicolor</i> releases a GH28 polygalacturonase that plays a key role in symbiosis establishment. New Phytologist, 2022, 233, 2534-2547.	7.3	16
4	Molecular basis of differential adventitious rooting competence in poplar genotypes. Journal of Experimental Botany, 2022, 73, 4046-4064.	4.8	14
5	Comparative Transcriptomics Analysis of the Symbiotic Germination of D. officinale (Orchidaceae) With Emphasis on Plant Cell Wall Modification and Cell Wall-Degrading Enzymes. Frontiers in Plant Science, 2022, 13, .	3.6	7
6	Ectomycorrhizal Symbiosis: From Genomics to Trans-Kingdom Molecular Communication and Signaling. Rhizosphere Biology, 2022, , 273-296.	0.6	2
7	Mycorrhizaâ€induced mycocypins of <i>Laccaria bicolor</i> are potent protease inhibitors with nematotoxic and collembola antifeedant activity. Environmental Microbiology, 2022, 24, 4607-4622.	3.8	2
8	Intraâ€species genetic variability drives carbon metabolism and symbiotic host interactions in the ectomycorrhizal fungus ⟨i⟩Pisolithus microcarpus⟨/i⟩. Environmental Microbiology, 2021, 23, 2004-2020.	3.8	14
9	Desert truffle genomes reveal their reproductive modes and new insights into plant–fungal interaction and ectendomycorrhizal lifestyle. New Phytologist, 2021, 229, 2917-2932.	7.3	19
10	Evolution of the Mode of Nutrition in Symbiotic and Saprotrophic Fungi in Forest Ecosystems. Annual Review of Ecology, Evolution, and Systematics, 2021, 52, 385-404.	8.3	26
11	Cryptic genetic structure and copyâ€number variation in the ubiquitous forest symbiotic fungus <scp><i>Cenococcum geophilum</i></scp> . Environmental Microbiology, 2021, 23, 6536-6556.	3.8	5
12	Genetic determinants of endophytism in the Arabidopsis root mycobiome. Nature Communications, 2021, 12, 7227.	12.8	58
13	A Transcriptomic Atlas of the Ectomycorrhizal Fungus Laccaria bicolor. Microorganisms, 2021, 9, 2612.	3.6	11
14	An ectomycorrhizal fungus alters sensitivity to jasmonate, salicylate, gibberellin, and ethylene in host roots. Plant, Cell and Environment, 2020, 43, 1047-1068.	5.7	30
15	Large-scale genome sequencing of mycorrhizal fungi provides insights into the early evolution of symbiotic traits. Nature Communications, 2020, 11, 5125.	12.8	258
16	Alterations in the phenylpropanoid pathway affect poplar ability for ectomycorrhizal colonisation and susceptibility to root-knot nematodes. Mycorrhiza, 2020, 30, 555-566.	2.8	9
17	The mutualism effector MiSSP7 of Laccaria bicolor alters the interactions between the poplar JAZ6 protein and its associated proteins. Scientific Reports, 2020, 10, 20362.	3.3	21
18	Mycorrhizal effector PaMiSSP10b alters polyamine biosynthesis in <i>Eucalyptus</i> root cells and promotes root colonization. New Phytologist, 2020, 228, 712-727.	7.3	24

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19	The small secreted effector protein MiSSP7.6 of <i>Laccaria bicolor</i> is required for the establishment of ectomycorrhizal symbiosis. Environmental Microbiology, 2020, 22, 1435-1446.	3.8	37
20	Molecular Changes Concomitant with Vascular System Development in Mature Galls Induced by Root-Knot Nematodes in the Model Tree Host Populus tremula × P. alba. International Journal of Molecular Sciences, 2020, 21, 406.	4.1	10
21	SIZRT2 Encodes a ZIP Family Zn Transporter With Dual Localization in the Ectomycorrhizal Fungus Suillus luteus. Frontiers in Microbiology, 2019, 10, 2251.	3.5	14
22	Broadâ€specificity GH131 βâ€glucanases are a hallmark of fungi and oomycetes that colonize plants. Environmental Microbiology, 2019, 21, 2724-2739.	3.8	18
23	The ectomycorrhizal basidiomycete <i>Laccaria bicolor</i> releases a secreted βâ€1,4 endoglucanase that plays a key role in symbiosis development. New Phytologist, 2018, 220, 1309-1321.	7.3	49
24	Comparative genomics and transcriptomics depict ericoid mycorrhizal fungi as versatile saprotrophs and plant mutualists. New Phytologist, 2018, 217, 1213-1229.	7.3	185
25	Pezizomycetes genomes reveal the molecular basis of ectomycorrhizal truffle lifestyle. Nature Ecology and Evolution, 2018, 2, 1956-1965.	7.8	95
26	The Hydrophobin-Like OmSSP1 May Be an Effector in the Ericoid Mycorrhizal Symbiosis. Frontiers in Plant Science, 2018, 9, 546.	3.6	20
27	Secretome Analysis from the Ectomycorrhizal Ascomycete Cenococcum geophilum. Frontiers in Microbiology, 2018, 9, 141.	3.5	24
28	Populus trichocarpa encodes small, effector-like secreted proteins that are highly induced during mutualistic symbiosis. Scientific Reports, 2017, 7, 382.	3.3	36
29	The SIZRT1 Gene Encodes a Plasma Membrane-Located ZIP (Zrt-, Irt-Like Protein) Transporter in the Ectomycorrhizal Fungus Suillus luteus. Frontiers in Microbiology, 2017, 8, 2320.	3.5	24
30	Ectomycorrhizal ecology is imprinted in the genome of the dominant symbiotic fungus Cenococcum geophilum. Nature Communications, 2016, 7, 12662.	12.8	156
31	Unearthing the roots of ectomycorrhizal symbioses. Nature Reviews Microbiology, 2016, 14, 760-773.	28.6	317
32	Comparative genomics, proteomics and transcriptomics give new insight into the exoproteome of the basidiomycete <i><scp>H</scp>ebeloma cylindrosporum</i> and its involvement in ectomycorrhizal symbiosis. New Phytologist, 2015, 208, 1169-1187.	7.3	78
33	Diversity and evolution of ABC proteins in mycorrhiza-forming fungi. BMC Evolutionary Biology, 2015, 15, 249.	3.2	19
34	Functional guild classification predicts the enzymatic role of fungi inÂlitter and soil biogeochemistry. Soil Biology and Biochemistry, 2015, 88, 441-456.	8.8	121
35	The effect of elevated carbon dioxide on the interaction between <i><scp>E</scp>ucalyptus grandis</i> and diverse isolates of <i><scp>P</scp>isolithus</i> sp. is associated with a complex shift in the root transcriptome. New Phytologist, 2015, 206, 1423-1436.	7.3	43
36	Convergent losses of decay mechanisms and rapid turnover of symbiosis genes in mycorrhizal mutualists. Nature Genetics, 2015, 47, 410-415.	21.4	870

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37	Study of nitrogen and carbon transfer from soil organic matter to Tuber melanosporum mycorrhizas and ascocarps using 15N and 13C soil labelling and whole-genome oligoarrays. Plant and Soil, 2015, 395, 351-373.	3.7	26
38	Pta <scp>RHE</scp> 1, a <i>Populus tremula</i> Â×Â <i>Populus alba </i> <scp>RING</scp> â€H2 protein of the <scp>ATL</scp> family, has a regulatory role in secondary phloem fibre development. Plant Journal, 2015, 82, 978-990.	5.7	17
39	Development of the Poplar <i>-Laccaria bicolor</i> - Ectomycorrhiza Modifies Root Auxin Metabolism, Signaling, and Response. Plant Physiology, 2015, 169, 890-902.	4.8	70
40	The Mutualist <i>Laccaria bicolor</i> Expresses a Core Gene Regulon During the Colonization of Diverse Host Plants and a Variable Regulon to Counteract Host-Specific Defenses. Molecular Plant-Microbe Interactions, 2015, 28, 261-273.	2.6	82
41	Expanding genomics of mycorrhizal symbiosis. Frontiers in Microbiology, 2014, 5, 582.	3 . 5	25
42	Exploring the Transcriptome of Mycorrhizal Interactions. Advances in Botanical Research, 2014, 70, 53-78.	1.1	8
43	Transcriptomic profiles of <scp><i>H</i></scp> <i>eterobasidion annosum</i> under abiotic stresses and during saprotrophic growth in bark, sapwood and heartwood. Environmental Microbiology, 2014, 16, 1654-1667.	3.8	19
44	Effector MiSSP7 of the mutualistic fungus <i>Laccaria bicolor</i> stabilizes the <i>Populus</i> JAZ6 protein and represses jasmonic acid (JA) responsive genes. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8299-8304.	7.1	329
45	Ethylene and jasmonic acid act as negative modulators during mutualistic symbiosis between <i><scp>L</scp>accaria bicolor</i> and <i><scp>P</scp>opulus</i> roots. New Phytologist, 2014, 202, 270-286.	7.3	87
46	Genomic and transcriptomic analysis of Laccaria bicolor CAZome reveals insights into polysaccharides remodelling during symbiosis establishment. Fungal Genetics and Biology, 2014, 72, 168-181.	2.1	81
47	Transcriptomic Responses of Phanerochaete chrysosporium to Oak Acetonic Extracts: Focus on a New Glutathione Transferase. Applied and Environmental Microbiology, 2014, 80, 6316-6327.	3.1	34
48	<i>Populus trichocarpa</i> and <i>Populus deltoides</i> Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus <i>Laccaria bicolor</i> Molecular Plant-Microbe Interactions, 2014, 27, 546-556.	2.6	69
49	Genome of an arbuscular mycorrhizal fungus provides insight into the oldest plant symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20117-20122.	7.1	717
50	Laser microdissection and microarray analysis of <i><scp>T</scp>uber melanosporum</i> ectomycorrhizas reveal functional heterogeneity between mantle and <scp>H</scp> artig net compartments. Environmental Microbiology, 2013, 15, 1853-1869.	3.8	62
51	Transcriptome analysis of poplar rust telia reveals overwintering adaptation and tightly coordinated karyogamy and meiosis processes. Frontiers in Plant Science, 2013, 4, 456.	3.6	30
52	RNA-Seq of Early-Infected Poplar Leaves by the Rust Pathogen Melampsora larici-populina Uncovers PtSultr3;5, a Fungal-Induced Host Sulfate Transporter. PLoS ONE, 2012, 7, e44408.	2.5	57
53	A Comprehensive Analysis of Genes Encoding Small Secreted Proteins Identifies Candidate Effectors in <i>Melampsora larici-populina</i> (Poplar Leaf Rust). Molecular Plant-Microbe Interactions, 2012, 25, 279-293.	2.6	150
54	Genome sequence of the button mushroom <i>Agaricus bisporus</i> reveals mechanisms governing adaptation to a humic-rich ecological niche. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17501-17506.	7.1	359

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55	Secretome of the Free-living Mycelium from the Ectomycorrhizal Basidiomycete <i>Laccaria bicolor</i> . Journal of Proteome Research, 2012, 11, 157-171.	3.7	47
56	Insight into tradeâ€off between wood decay and parasitism from the genome of a fungal forest pathogen. New Phytologist, 2012, 194, 1001-1013.	7.3	210
57	Phylogenetic, genomic organization and expression analysis of hydrophobin genes in the ectomycorrhizal basidiomycete Laccaria bicolor. Fungal Genetics and Biology, 2012, 49, 199-209.	2.1	47
58	The <i>AINTEGUMENTA LIKE1</i> Homeotic Transcription Factor <i>PtAIL1</i> Controls the Formation of Adventitious Root Primordia in Poplar Â. Plant Physiology, 2012, 160, 1996-2006.	4.8	118
59	The Paleozoic Origin of Enzymatic Lignin Decomposition Reconstructed from 31 Fungal Genomes. Science, 2012, 336, 1715-1719.	12.6	1,424
60	Genome-wide analysis of cell wall-related genes in Tuber melanosporum. Current Genetics, 2012, 58, 165-177.	1.7	30
61	<i>Melampsora larici-populina</i> Transcript Profiling During Germination and Timecourse Infection of Poplar Leaves Reveals Dynamic Expression Patterns Associated with Virulence and Biotrophy. Molecular Plant-Microbe Interactions, 2011, 24, 808-818.	2.6	80
62	Obligate biotrophy features unraveled by the genomic analysis of rust fungi. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9166-9171.	7.1	640
63	The Perigord black truffle responds to cold temperature with an extensive reprogramming of its transcriptional activity. Fungal Genetics and Biology, 2011, 48, 585-591.	2.1	45
64	Genome-wide inventory of metal homeostasis-related gene products including a functional phytochelatin synthase in the hypogeous mycorrhizal fungus Tuber melanosporum. Fungal Genetics and Biology, 2011, 48, 573-584.	2.1	56
65	Hyphal and cytoskeleton polarization in Tuber melanosporum: A genomic and cellular analysis. Fungal Genetics and Biology, 2011, 48, 561-572.	2.1	16
66	Tapping Genomics to Unravel Ectomycorrhizal Symbiosis. Methods in Molecular Biology, 2011, 722, 249-281.	0.9	11
67	Genomeâ€wide search and functional identification of transcription factors in the mycorrhizal fungus <i>Tuber melanosporum</i> . New Phytologist, 2011, 189, 736-750.	7.3	35
68	A Secreted Effector Protein of Laccaria bicolor Is Required for Symbiosis Development. Current Biology, 2011, 21, 1197-1203.	3.9	447
69	The Plant Cell Wall–Decomposing Machinery Underlies the Functional Diversity of Forest Fungi. Science, 2011, 333, 762-765.	12.6	512
70	Périgord black truffle genome uncovers evolutionary origins and mechanisms of symbiosis. Nature, 2010, 464, 1033-1038.	27.8	641
71	Laser Capture Microdissection of Uredinia Formed by <i>Melampsora larici-populina</i> Revealed a Transcriptional Switch Between Biotrophy and Sporulation. Molecular Plant-Microbe Interactions, 2010, 23, 1275-1286.	2.6	58
72	Defense and Nutrient Mutualisms in Populus. , 2010, , 247-277.		8

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73	The Ectomycorrhizal Fungus <i>Laccaria bicolor</i> Stimulates Lateral Root Formation in Poplar and Arabidopsis through Auxin Transport and Signaling. Plant Physiology, 2009, 151, 1991-2005.	4.8	244
74	Development and validation of an oligonucleotide microarray to characterise ectomycorrhizal fungal communities. BMC Microbiology, 2009, 9, 241.	3.3	11
75	Gene expression analysis of Populus deltoides roots subjected to copper stress. Environmental and Experimental Botany, 2009, 67, 335-344.	4.2	28
76	Fatty acid metabolism in the ectomycorrhizal fungus <i>Laccaria bicolor</i> . New Phytologist, 2009, 182, 950-964.	7.3	30
77	Expansion of signal pathways in the ectomycorrhizal fungus <i>Laccaria bicolor</i> àê" evolution of nucleotide sequences and expression patterns in families of protein kinases and RAS small GTPases. New Phytologist, 2009, 183, 365-379.	7.3	19
78	Genome-wide identification of NBS resistance genes in Populus trichocarpa. Plant Molecular Biology, 2008, 66, 619-636.	3.9	247
79	Comparison of the thiolâ€dependent antioxidant systems in the ectomycorrhizal <i>Laccaria bicolor</i> and the saprotrophic <i>Phanerochaete chrysosporium</i> . New Phytologist, 2008, 180, 391-407.	7.3	27
80	Gene organization of the mating type regions in the ectomycorrhizal fungus <i>Laccaria bicolor</i> reveals distinct evolution between the two mating type loci. New Phytologist, 2008, 180, 329-342.	7.3	59
81	A gene repertoire for nitrogen transporters in <i>Laccaria bicolor</i> . New Phytologist, 2008, 180, 343-364.	7.3	73
82	Transcript Profiling of Poplar Leaves upon Infection with Compatible and Incompatible Strains of the Foliar Rust Melampsora larici-populina Â. Plant Physiology, 2007, 144, 347-366.	4.8	156
83	Living in harmony in the wood underground: ectomycorrhizal genomics. Current Opinion in Plant Biology, 2007, 10, 204-210.	7.1	90
84	Mapping the proteome of poplar and application to the discovery of drought-stress responsive proteins. Proteomics, 2006, 6, 6509-6527.	2.2	155
85	Identification of Genes Differentially Expressed in Extraradical Mycelium and Ectomycorrhizal Roots during Paxillus involutus-Betula pendula Ectomycorrhizal Symbiosis. Applied and Environmental Microbiology, 2005, 71, 382-391.	3.1	62
86	Cloning and expression of multiple metallothioneins from hybrid poplar. New Phytologist, 2004, 164, 83-93.	7.3	123
87	Analysis of expressed sequence tags from the ectomycorrhizal basidiomycetes Laccaria bicolor and Pisolithus microcarpus. New Phytologist, 2003, 159, 117-129.	7.3	67
88	The poplar root transcriptome: analysis of 7000 expressed sequence tags. FEBS Letters, 2003, 542, 37-41.	2.8	89
89	Poplar Metal Tolerance Protein 1 Confers Zinc Tolerance and Is an Oligomeric Vacuolar Zinc Transporter with an Essential Leucine Zipper Motif. Plant Cell, 2003, 15, 2911-2928.	6.6	170
90	Transfer of hydroxycinnamoyl residues to microsomal proteins from parsley. Phytochemistry, 1997, 44, 225-228.	2.9	12

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91	Biosynthesis of ferulic acid esters of plant cell wall polysaccharides in endomembranes from parsley cells. FEBS Letters, 1991, 290, 209-212.	2.8	41