

Caroline Gutjahr

List of Publications by Year in descending order

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63
papers

5,506
citations

101543

36
h-index

123424

61
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90
all docs

90
docs citations

90
times ranked

5311
citing authors

#	ARTICLE	IF	CITATIONS
1	Cell and Developmental Biology of Arbuscular Mycorrhiza Symbiosis. Annual Review of Cell and Developmental Biology, 2013, 29, 593-617.	9.4	493
2	Strigolactone Signaling and Evolution. Annual Review of Plant Biology, 2017, 68, 291-322.	18.7	470
3	Lipid transfer from plants to arbuscular mycorrhiza fungi. ELife, 2017, 6, .	6.0	329
4	Systems Biology of Plant-Microbiome Interactions. Molecular Plant, 2019, 12, 804-821.	8.3	299
5	Arbuscular Mycorrhizaâ€“Specific Signaling in Rice Transcends the Common Symbiosis Signaling Pathway. Plant Cell, 2008, 20, 2989-3005.	6.6	235
6	Cereal mycorrhiza: an ancient symbiosis in modern agriculture. Trends in Plant Science, 2008, 13, 93-97.	8.8	194
7	Rice perception of symbiotic arbuscular mycorrhizal fungi requires the karrikin receptor complex. Science, 2015, 350, 1521-1524.	12.6	191
8	Partner communication and role of nutrients in the arbuscular mycorrhizal symbiosis. New Phytologist, 2018, 220, 1031-1046.	7.3	188
9	A CCaMK-CYCLOPS-DELLA Complex Activates Transcription of RAM1 to Regulate Arbuscule Branching. Current Biology, 2016, 26, 987-998.	3.9	182
10	Phytohormone signaling in arbuscular mycorrhiza development. Current Opinion in Plant Biology, 2014, 20, 26-34.	7.1	178
11	Auxin Perception Is Required for Arbuscule Development in Arbuscular Mycorrhizal Symbiosis. Plant Physiology, 2014, 166, 281-292.	4.8	163
12	<i>Glomus intraradices</i> induces changes in root system architecture of rice independently of common symbiosis signaling. New Phytologist, 2009, 182, 829-837.	7.3	154
13	Mutation identification by direct comparison of whole-genome sequencing data from mutant and wild-type individuals using k-mers. Nature Biotechnology, 2013, 31, 325-330.	17.5	149
14	Weights in the Balance: Jasmonic Acid and Salicylic Acid Signaling in Root-Biotroph Interactions. Molecular Plant-Microbe Interactions, 2009, 22, 763-772.	2.6	148
15	The half-size ABC transporters STR1 and STR2 are indispensable for mycorrhizal arbuscule formation in rice. Plant Journal, 2012, 69, 906-920.	5.7	131
16	SMAX1/SMXL2 regulate root and root hair development downstream of KAI2-mediated signalling in Arabidopsis. PLoS Genetics, 2019, 15, e1008327.	3.5	122
17	Multiple control levels of root system remodeling in arbuscular mycorrhizal symbiosis. Frontiers in Plant Science, 2013, 4, 204.	3.6	121
18	Genetic Control of Lateral Root Formation in Cereals. Trends in Plant Science, 2016, 21, 951-961.	8.8	107

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19	Extensive signal integration by the phytohormone protein network. <i>Nature</i> , 2020, 583, 271-276.	27.8	104
20	Divergence of Evolutionary Ways Among Common sym Genes: CASTOR and CCaMK Show Functional Conservation Between Two Symbiosis Systems and Constitute the Root of a Common Signaling Pathway. <i>Plant and Cell Physiology</i> , 2008, 49, 1659-1671.	3.1	103
21	Cross-kingdom lipid transfer in arbuscular mycorrhiza symbiosis and beyond. <i>Current Opinion in Plant Biology</i> , 2018, 44, 137-144.	7.1	102
22	Transcriptome diversity among rice root types during asymbiosis and interaction with arbuscular mycorrhizal fungi. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6754-6759.	7.1	99
23	Transcriptional Regulation of Arbuscular Mycorrhiza Development. <i>Plant and Cell Physiology</i> , 2018, 59, 678-695.	3.1	86
24	Control of arbuscular mycorrhiza development by nutrient signals. <i>Frontiers in Plant Science</i> , 2014, 5, 462.	3.6	83
25	PHOSPHATE STARVATION RESPONSE transcription factors enable arbuscular mycorrhiza symbiosis. <i>Nature Communications</i> , 2022, 13, 477.	12.8	81
26	Root type and soil phosphate determine the taxonomic landscape of colonizing fungi and the transcriptome of field-grown maize roots. <i>New Phytologist</i> , 2018, 217, 1240-1253.	7.3	80
27	Positive Gene Regulation by a Natural Protective miRNA Enables Arbuscular Mycorrhizal Symbiosis. <i>Cell Host and Microbe</i> , 2017, 21, 106-112.	11.0	79
28	Presymbiotic factors released by the arbuscular mycorrhizal fungus <i>Gigaspora margarita</i> induce starch accumulation in <i>Lotus japonicus</i> roots. <i>New Phytologist</i> , 2009, 183, 53-61.	7.3	72
29	An N-acetylglucosamine transporter required for arbuscular mycorrhizal symbioses in rice and maize. <i>Nature Plants</i> , 2017, 3, 17073.	9.3	72
30	Cholodny's Went revisited: a role for jasmonate in gravitropism of rice coleoptiles. <i>Planta</i> , 2005, 222, 575-585.	3.2	68
31	The karrikin signaling regulator SMAX1 controls <i>Lotus japonicus</i> root and root hair development by suppressing ethylene biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21757-21765.	7.1	53
32	Factors affecting plant responsiveness to arbuscular mycorrhiza. <i>Current Opinion in Plant Biology</i> , 2021, 59, 101994.	7.1	49
33	Calcium Signaling during Reproduction and Biotrophic Fungal Interactions in Plants. <i>Molecular Plant</i> , 2015, 8, 595-611.	8.3	44
34	Lipid Droplets of Arbuscular Mycorrhizal Fungi Emerge in Concert with Arbuscule Collapse. <i>Plant and Cell Physiology</i> , 2014, 55, 1945-1953.	3.1	41
35	Full Establishment of Arbuscular Mycorrhizal Symbiosis in Rice Occurs Independently of Enzymatic Jasmonate Biosynthesis. <i>PLoS ONE</i> , 2015, 10, e0123422.	2.5	41
36	GER1, a GDSL Motif-Encoding Gene from Rice is a Novel Early Light- and Jasmonate-Induced Gene. <i>Plant Biology</i> , 2007, 9, 32-40.	3.8	39

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37	The <i>Lotus japonicus</i> acyl carrier protein thioesterase FatM is required for mycorrhiza formation and lipid accumulation of <i>Rhizophagus irregularis</i> . <i>Plant Journal</i> , 2018, 95, 219-232.	5.7	39
38	KAI2 promotes <i>Arabidopsis</i> root hair elongation at low external phosphate by controlling local accumulation of AUX1 and PIN2. <i>Current Biology</i> , 2022, 32, 228-236.e3.	3.9	29
39	Sculpting the soil microbiota. <i>Plant Journal</i> , 2022, 109, 508-522.	5.7	28
40	<i>Lotus japonicus</i> karrikin receptors display divergent ligand-binding specificities and organ-dependent redundancy. <i>PLoS Genetics</i> , 2020, 16, e1009249.	3.5	26
41	Cell Biology: Control of Partner Lifetime in a Plant-Fungus Relationship. <i>Current Biology</i> , 2017, 27, R420-R423.	3.9	20
42	Editorial: Rhizosphere Functioning and Structural Development as Complex Interplay Between Plants, Microorganisms and Soil Minerals. <i>Frontiers in Environmental Science</i> , 2019, 7, .	3.3	19
43	KARRIKIN UP-REGULATED F-BOX 1 (KUF1) imposes negative feedback regulation of karrikin and KAI2 ligand metabolism in <i>Arabidopsis thaliana</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2112820119.	7.1	19
44	Structural and functional analyses explain Pea KAI2 receptor diversity and reveal stereoselective catalysis during signal perception. <i>Communications Biology</i> , 2022, 5, 126.	4.4	18
45	Two <i>Lotus japonicus</i> symbiosis mutants impaired at distinct steps of arbuscule development. <i>Plant Journal</i> , 2013, 75, 117-129.	5.7	15
46	KARRIKIN INSENSITIVE2 regulates leaf development, root system architecture and arbuscular mycorrhizal symbiosis in <i>Brachypodium distachyon</i> . <i>Plant Journal</i> , 2022, 109, 1559-1574.	5.7	15
47	Root starch accumulation in response to arbuscular mycorrhizal colonization differs among <i>Lotus japonicus</i> starch mutants. <i>Planta</i> , 2011, 234, 639-646.	3.2	14
48	The Role of Strigolactones in Plant-Microbe Interactions. , 2019, , 121-142.		11
49	Acrylamide inhibits gravitropism and affects microtubules in rice coleoptiles. <i>Protoplasma</i> , 2006, 227, 211-222.	2.1	10
50	Old dog, new trick: The PHR-SPX system regulates arbuscular mycorrhizal symbiosis. <i>Molecular Plant</i> , 2022, 15, 225-227.	8.3	10
51	Controlled Assays for Phenotyping the Effects of Strigolactone-Like Molecules on Arbuscular Mycorrhiza Development. <i>Methods in Molecular Biology</i> , 2021, 2309, 157-177.	0.9	9
52	KAI2 regulates seedling development by mediating light-induced remodelling of auxin transport. <i>New Phytologist</i> , 2022, 235, 126-140.	7.3	9
53	Bioassays for the Effects of Strigolactones and Other Small Molecules on Root and Root Hair Development. <i>Methods in Molecular Biology</i> , 2021, 2309, 129-142.	0.9	7
54	The Molecular Components of Nutrient Exchange in Arbuscular Mycorrhizal Interactions. , 2008, , 37-59.		6

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55	Acidovorax pan-genome reveals specific functional traits for plant beneficial and pathogenic plant-associations. <i>Microbial Genomics</i> , 2021, 7, .	2.0	6
56	A Flexible, Low-Cost Hydroponic Co-Cultivation System for Studying Arbuscular Mycorrhiza Symbiosis. <i>Frontiers in Plant Science</i> , 2020, 11, 63.	3.6	4
57	MAX2-independent transcriptional responses to rac-GR24 in <i>Lotus japonicus</i> roots. <i>Plant Signaling and Behavior</i> , 2021, 16, 1840852.	2.4	4
58	Ramf: An Open-Source R Package for Statistical Analysis and Display of Quantitative Root Colonization by Arbuscular Mycorrhiza Fungi. <i>Frontiers in Plant Science</i> , 2019, 10, 1184.	3.6	3
59	Tracking Lipid Transfer by Fatty Acid Isotopolog Profiling from Host Plants to Arbuscular Mycorrhiza Fungi. <i>Bio-protocol</i> , 2018, 8, e2786.	0.4	3
60	Changes in soil chemistry associated with the establishment of forest gardens on eroded, acidified grassland soils in Sri Lanka. <i>Biology and Fertility of Soils</i> , 2007, 44, 163-170.	4.3	2
61	Symbiosis: Plasmodesmata Link Root-Nodule Organogenesis with Infection. <i>Current Biology</i> , 2018, 28, R1400-R1403.	3.9	2
62	Quantitative Mapping of Flavor and Pharmacologically Active Compounds in European Licorice Roots (<i>Glycyrrhiza glabra</i> L.) in Response to Growth Conditions and Arbuscular Mycorrhiza Symbiosis. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 13173-13189.	5.2	1
63	Editorial overview: Nothing in plant–microbial interactions makes sense. <i>Current Opinion in Plant Biology</i> , 2018, 44, iii-vi.	7.1	0