

Richard R BÃ©langer

List of Publications by Year in descending order

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77
papers

6,133
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87723

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85405

71
g-index

78
all docs

78
docs citations

78
times ranked

4188
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon and plant disease resistance against pathogenic fungi. FEMS Microbiology Letters, 2005, 249, 1-6.	0.7	528
2	BIOLOGICALCONTROL INGREENHOUSESYSTEMS. Annual Review of Phytopathology, 2001, 39, 103-133.	3.5	493
3	The controversies of silicon's role in plant biology. New Phytologist, 2019, 221, 67-85.	3.5	439
4	The protective role of silicon in the Arabidopsis-powdery mildew pathosystem. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17554-17559.	3.3	303
5	Silicon Enhances the Accumulation of Diterpenoid Phytoalexins in Rice: A Potential Mechanism for Blast Resistance. Phytopathology, 2004, 94, 177-183.	1.1	264
6	Silicon in Agriculture. , 2015, , .		236
7	Identification and functional characterization of silicon transporters in soybean using comparative genomics of major intrinsic proteins in Arabidopsis and rice. Plant Molecular Biology, 2013, 83, 303-315.	2.0	233
8	Ultrastructural and Cytochemical Aspects of Silicon-Mediated Rice Blast Resistance. Phytopathology, 2003, 93, 535-546.	1.1	191
9	A precise spacing between the <scp>NPA</scp> domains of aquaporins is essential for silicon permeability in plants. Plant Journal, 2015, 83, 489-500.	2.8	191
10	Cloning, functional characterization and heterologous expression of TaLsi1, a wheat silicon transporter gene. Plant Molecular Biology, 2012, 79, 35-46.	2.0	182
11	Soluble Silicon: Its Role in Crop and Disease Management of Greenhouse Crops. Plant Disease, 1995, 79, 329.	0.7	177
12	Silicon induces antifungal compounds in powdery mildew-infected wheat. Physiological and Molecular Plant Pathology, 2005, 66, 108-115.	1.3	172
13	Molecular evolution of aquaporins and silicon influx in plants. Functional Ecology, 2016, 30, 1277-1285.	1.7	149
14	Silicon-mediated resistance of <scp>A</scp>rabidopsis against powdery mildew involves mechanisms other than the salicylic acid (<scp>SA</scp>)â€dependent defence pathway. Molecular Plant Pathology, 2015, 16, 572-582.	2.0	135
15	Computational Prediction of Effector Proteins in Fungi: Opportunities and Challenges. Frontiers in Plant Science, 2016, 7, 126.	1.7	118
16	Discovery of a multigene family of aquaporin silicon transporters in the primitive plant <i>Equisetum arvense</i>. Plant Journal, 2012, 72, 320-330.	2.8	111
17	Induction of systemic resistance toPythiumdampingâ€off in cucumber plants by benzothiadiazole: ultrastructure and cytochemistry of the host response. Plant Journal, 1998, 14, 13-21.	2.8	104
18	Methyl Ester of p-Coumaric Acid: A Phytoalexin-Like Compound from Long English Cucumber Leaves. Journal of Chemical Ecology, 1997, 23, 1517-1526.	0.9	102

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19	Antifungal Activity of Flocculosin, a Novel Glycolipid Isolated from <i>Pseudozyma flocculosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2005, 49, 1597-1599.	1.4	87
20	Analysis of aquaporins in Brassicaceae species reveals high-level of conservation and dynamic role against biotic and abiotic stress in canola. <i>Scientific Reports</i> , 2017, 7, 2771.	1.6	84
21	Genome-wide identification, characterization, and expression profile of aquaporin gene family in flax (<i>Linum usitatissimum</i>). <i>Scientific Reports</i> , 2017, 7, 46137.	1.6	82
22	Silicon protects soybean plants against <i>Phytophthora sojae</i> by interfering with effector-receptor expression. <i>BMC Plant Biology</i> , 2018, 18, 97.	1.6	80
23	Powdery mildew of <i>Arabidopsis thaliana</i> : a pathosystem for exploring the role of silicon in plant-microbe interactions. <i>Physiological and Molecular Plant Pathology</i> , 2004, 64, 189-199.	1.3	79
24	New evidence defining the evolutionary path of aquaporins regulating silicon uptake in land plants. <i>Journal of Experimental Botany</i> , 2020, 71, 6775-6788.	2.4	78
25	Chapter 9 Silicon and disease resistance in dicotyledons. <i>Studies in Plant Science</i> , 2001, , 159-169.	0.5	77
26	Plant Aquaporins: Genome-Wide Identification, Transcriptomics, Proteomics, and Advanced Analytical Tools. <i>Frontiers in Plant Science</i> , 2016, 7, 1896.	1.7	76
27	Editorial: Role of Silicon in Plants. <i>Frontiers in Plant Science</i> , 2017, 8, 1858.	1.7	74
28	Identification and characterization of silicon efflux transporters in horsetail (<i>Equisetum arvense</i>). <i>Journal of Plant Physiology</i> , 2016, 200, 82-89.	1.6	73
29	Studies of silicon distribution in wounded and <i>Pythium ultimum</i> infected cucumber plants. <i>Physiological and Molecular Plant Pathology</i> , 1992, 41, 371-385.	1.3	70
30	Insertional Mutagenesis of a Fungal Biocontrol Agent Led to Discovery of a Rare Cellobiose Lipid with Antifungal Activity. <i>Applied and Environmental Microbiology</i> , 2003, 69, 2595-2602.	1.4	64
31	Silicon Transporters and Effects of Silicon Amendments in Strawberry under High Tunnel and Field Conditions. <i>Frontiers in Plant Science</i> , 2017, 8, 949.	1.7	64
32	Comparative Transcriptomic Analysis of Virulence Factors in <i>Leptosphaeria maculans</i> during Compatible and Incompatible Interactions with Canola. <i>Frontiers in Plant Science</i> , 2016, 7, 1784.	1.7	60
33	The Transition from a Phytopathogenic Smut Ancestor to an Anamorphic Biocontrol Agent Deciphered by Comparative Whole-Genome Analysis. <i>Plant Cell</i> , 2013, 25, 1946-1959.	3.1	59
34	Effect of Silicon Absorption on Soybean Resistance to <i>Phakopsora pachyrhizi</i> in Different Cultivars. <i>Plant Disease</i> , 2012, 96, 37-42.	0.7	54
35	Effectors involved in fungal-fungal interaction lead to a rare phenomenon of hyperbiotrophy in the tritrophic system biocontrol agent-powdery mildew-plant. <i>New Phytologist</i> , 2018, 217, 713-725.	3.5	47
36	Identification of a biosynthesis gene cluster for flocculosin a cellobiose lipid produced by the biocontrol agent <i>Pseudozyma flocculosa</i> . <i>Molecular Microbiology</i> , 2011, 79, 1483-1495.	1.2	46

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37	Aquaporins Mediate Silicon Transport in Humans. <i>PLoS ONE</i> , 2015, 10, e0136149.	1.1	45
38	Identification of a mammalian silicon transporter. <i>American Journal of Physiology - Cell Physiology</i> , 2017, 312, C550-C561.	2.1	45
39	Aconitate and methyl aconitate are modulated by silicon in powdery mildew-infected wheat plants. <i>Journal of Plant Physiology</i> , 2009, 166, 1413-1422.	1.6	44
40	Stable predictive markers for <i>Phytophthora sojae</i> avirulence genes that impair infection of soybean uncovered by whole genome sequencing of 31 isolates. <i>BMC Biology</i> , 2018, 16, 80.	1.7	40
41	Silicon Uptake and Localisation in Date Palm (<i>Phoenix dactylifera</i>) – A Unique Association With Sclerenchyma. <i>Frontiers in Plant Science</i> , 2019, 10, 988.	1.7	37
42	Approaches to molecular characterization of fungal biocontrol agents: some case studies. <i>Canadian Journal of Plant Pathology</i> , 2001, 23, 8-12.	0.8	32
43	Identification and characterization of aquaporin genes in <i>Arachis duranensis</i> and <i>Arachis ipaensis</i> genomes, the diploid progenitors of peanut. <i>BMC Genomics</i> , 2019, 20, 222.	1.2	31
44	Catabolism of flocculosin, an antimicrobial metabolite produced by <i>Pseudozyma flocculosa</i> . <i>Glycobiology</i> , 2009, 19, 995-1001.	1.3	30
45	Editorial: Aquaporins: Dynamic Role and Regulation. <i>Frontiers in Plant Science</i> , 2017, 8, 1420.	1.7	28
46	Mode of action of biocontrol agents: all that glitters is not gold. <i>Canadian Journal of Plant Pathology</i> , 2012, 34, 469-478.	0.8	26
47	Ecological Basis of the Interaction between <i>Pseudozyma flocculosa</i> and Powdery Mildew Fungi. <i>Applied and Environmental Microbiology</i> , 2011, 77, 926-933.	1.4	24
48	A Zoospore Inoculation Method with <i>Phytophthora sojae</i> to Assess the Prophylactic Role of Silicon on Soybean Cultivars. <i>Plant Disease</i> , 2014, 98, 1632-1638.	0.7	24
49	Effect of Silicon on Crop Growth, Yield and Quality. , 2015, , 209-223.		24
50	The grapevine NIP2;1 aquaporin is a silicon channel. <i>Journal of Experimental Botany</i> , 2020, 71, 6789-6798.	2.4	24
51	Understanding Aquaporin Transport System in Eelgrass (<i>Zostera marina</i> L.), an Aquatic Plant Species. <i>Frontiers in Plant Science</i> , 2017, 8, 1334.	1.7	23
52	GFP technology for the study of biocontrol agents in tritrophic interactions: A case study with <i>Pseudozyma flocculosa</i> . <i>Journal of Microbiological Methods</i> , 2007, 68, 275-281.	0.7	22
53	Lsi2: A black box in plant silicon transport. <i>Plant and Soil</i> , 2021, 466, 1-20.	1.8	22
54	Nutritional regulation and kinetics of flocculosin synthesis by <i>Pseudozyma flocculosa</i> . <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 307-15.	1.7	21

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55	Genomic Profiling of Virulence in the Soybean Cyst Nematode Using Single-Nematode Sequencing. <i>Phytopathology</i> , 2021, 111, 137-148.	1.1	20
56	Beta Hydroxylation of Glycolipids from <i>Ustilago maydis</i> and <i>Pseudozyma flocculosa</i> by an NADPH-Dependent Î²-Hydroxylase. <i>Applied and Environmental Microbiology</i> , 2011, 77, 7823-7829.	1.4	18
57	Integrated QTL mapping, gene expression and nucleotide variation analyses to investigate complex quantitative traits: a case study with the soybeanâ€“ <i>Phytophthora sojae</i> interaction. <i>Plant Biotechnology Journal</i> , 2020, 18, 1492-1494.	4.1	18
58	Si permeability of a deficient <i>Lsi1</i> aquaporin in tobacco can be enhanced through a conserved residue substitution. <i>Plant Direct</i> , 2019, 3, e00163.	0.8	16
59	Discovery of new group I-D introns leads to creation of subtypes and link to an adaptive response of the mitochondrial genome in fungi. <i>RNA Biology</i> , 2020, 17, 1252-1260.	1.5	14
60	Identification and Detection of <i>Fusarium striatum</i> as a New Record of Pathogen to Greenhouse Tomato in Northeastern America. <i>Plant Disease</i> , 2014, 98, 292-298.	0.7	13
61	Discriminant haplotypes of avirulence genes of <i>Phytophthora sojae</i> lead to a molecular assay to predict phenotypes. <i>Molecular Plant Pathology</i> , 2020, 21, 318-329.	2.0	12
62	Molecular Assessment of Pathotype Diversity of <i>Phytophthora sojae</i> in Canada Highlights Declining Sources of Resistance in Soybean. <i>Plant Disease</i> , 2021, 105, 4006-4013.	0.7	12
63	A Molecular Assay Allows the Simultaneous Detection of 12 Fungi Causing Fruit Rot in Cranberry. <i>Plant Disease</i> , 2019, 103, 2843-2850.	0.7	11
64	Silicon influences the localization and expression of <i>Phytophthora sojae</i> effectors in interaction with soybean. <i>Journal of Experimental Botany</i> , 2020, 71, 6844-6855.	2.4	11
65	Mapping of partial resistance to <i>Phytophthora sojae</i> in soybean PIs using whole-genome sequencing reveals a major QTL. <i>Plant Genome</i> , 2022, 15, e20184.	1.6	11
66	In defence of the selective transport and role of silicon in plants. <i>New Phytologist</i> , 2019, 223, 514-516.	3.5	9
67	RXLR effector gene <i>Avr3a</i> from <i>Phytophthora sojae</i> is recognized by <i>Rps8</i> in soybean. <i>Molecular Plant Pathology</i> , 2022, 23, 693-706.	2.0	9
68	History and Introduction of Silicon Research. , 2015, , 1-18.		7
69	Silicon Uptake and Transport in Plants: Physiological and Molecular Aspects. , 2015, , 69-82.		5
70	A new gold standard approach to characterize the transport of Si across cell membranes in animals. <i>Journal of Cellular Physiology</i> , 2018, 233, 6369-6376.	2.0	5
71	A reassessment of flocculosin-mediated biocontrol activity of <i>Pseudozyma flocculosa</i> through CRISPR/Cas9 gene editing. <i>Fungal Genetics and Biology</i> , 2021, 153, 103573.	0.9	4
72	New Insights into the Fungal Diversity of Cranberry Fruit Rot in QuÃ©bec Farms Through a Large-Scale Molecular Analysis. <i>Plant Disease</i> , 2022, 106, 215-222.	0.7	4

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73	Coinfection of soybean plants with <i>Phytophthora sojae</i> and soybean cyst nematode does not alter the efficacy of resistance genes. <i>Plant Pathology</i> , 2020, 69, 1437-1444.	1.2	3
74	Silicon and Plantâ€™Pathogen Interactions. , 2015, , 181-196.		2
75	First Report of <i>Godronia cassandrae</i> as a Major Cranberry Fruit Rot Pathogen in Eastern Canada. <i>Plant Disease</i> , 2021, 105, 495-495.	0.7	1
76	First Report of Powdery Mildew Caused by <i>Golovinomyces ambrosiae</i> on <i>Cannabis sativa</i> (Marijuana) in Quebec, Canada. <i>Plant Disease</i> , 2022, 106, 2747.	0.7	1
77	The SoyaGen Project: Putting Genomics to Work for Soybean Breeders. <i>Frontiers in Plant Science</i> , 2022, 13, 887553.	1.7	1