Richard R BÃ©langer

List of Publications by Year
in descending order

78 papers	6,133 citations	87888 38 h-index	82547 72 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.	1.8	528
2	BIOLOGICALCONTROL INGREENHOUSESYSTEMS. Annual Review of Phytopathology, 2001, 39, 103-133.	7.8	493
3	The controversies of silicon's role in plant biology. New Phytologist, 2019, 221, 67-85.	7.3	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.	7.1	303
5	Silicon Enhances the Accumulation of Diterpenoid Phytoalexins in Rice: A Potential Mechanism for Blast Resistance. Phytopathology, 2004, 94, 177-183.	2.2	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.	3.9	233
8	Ultrastructural and Cytochemical Aspects of Silicon-Mediated Rice Blast Resistance. Phytopathology, 2003, 93, 535-546.	2.2	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.	5.7	191
10	Cloning, functional characterization and heterologous expression of TaLsi1, a wheat silicon transporter gene. Plant Molecular Biology, 2012, 79, 35-46.	3.9	182
11	Soluble Silicon: Its Role in Crop and Disease Management of Greenhouse Crops. Plant Disease, 1995, 79, 329.	1.4	177
12	Silicon induces antifungal compounds in powdery mildew-infected wheat. Physiological and Molecular Plant Pathology, 2005, 66, 108-115.	2.5	172
13	Molecular evolution of aquaporins and silicon influx in plants. Functional Ecology, 2016, 30, 1277-1285.	3.6	149
14	Siliconâ€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.	4.2	135
15	Computational Prediction of Effector Proteins in Fungi: Opportunities and Challenges. Frontiers in Plant Science, 2016, 7, 126.	3.6	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.	5.7	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.	5.7	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.	1.8	102

#	ARTICLE	IF	CITATIONS
19	Antifungal Activity of Flocculosin, a Novel Glycolipid Isolated from Pseudozyma flocculosa. Antimicrobial Agents and Chemotherapy, 2005, 49, 1597-1599.	3.2	87
20	Analysis of aquaporins in Brassicaceae species reveals high-level of conservation and dynamic role against biotic and abiotic stress in canola. Scientific Reports, 2017, 7, 2771.	3.3	84
21	Genome-wide identification, characterization, and expression profile of aquaporin gene family in flax (Linum usitatissimum). Scientific Reports, 2017, 7, 46137.	3.3	82
22	Silicon protects soybean plants against Phytophthora sojae by interfering with effector-receptor expression. BMC Plant Biology, 2018, 18, 97.	3.6	80
23	Powdery mildew of Arabidopsis thaliana: a pathosystem for exploring the role of silicon in plantâ€"microbe interactions. Physiological and Molecular Plant Pathology, 2004, 64, 189-199.	2.5	79
24	New evidence defining the evolutionary path of aquaporins regulating silicon uptake in land plants. Journal of Experimental Botany, 2020, 71, 6775-6788.	4.8	78
25	Chapter 9 Silicon and disease resistance in dicotyledons. Studies in Plant Science, 2001, , 159-169.	0.5	77
26	Plant Aquaporins: Genome-Wide Identification, Transcriptomics, Proteomics, and Advanced Analytical Tools. Frontiers in Plant Science, 2016, 7, 1896.	3.6	76
27	Editorial: Role of Silicon in Plants. Frontiers in Plant Science, 2017, 8, 1858.	3.6	74
28	Identification and characterization of silicon efflux transporters in horsetail (Equisetum arvense). Journal of Plant Physiology, 2016, 200, 82-89.	3.5	73
29	Studies of silicon distribution in wounded and Pythium ultimum infected cucumber plants. Physiological and Molecular Plant Pathology, 1992, 41, 371-385.	2.5	70
30	Insertional Mutagenesis of a Fungal Biocontrol Agent Led to Discovery of a Rare Cellobiose Lipid with Antifungal Activity. Applied and Environmental Microbiology, 2003, 69, 2595-2602.	3.1	64
31	Silicon Transporters and Effects of Silicon Amendments in Strawberry under High Tunnel and Field Conditions. Frontiers in Plant Science, 2017, 8, 949.	3.6	64
32	Comparative Transcriptomic Analysis of Virulence Factors in Leptosphaeria maculans during Compatible and Incompatible Interactions with Canola. Frontiers in Plant Science, 2016, 7, 1784.	3.6	60
33	The Transition from a Phytopathogenic Smut Ancestor to an Anamorphic Biocontrol Agent Deciphered by Comparative Whole-Genome Analysis. Plant Cell, 2013, 25, 1946-1959.	6.6	59
34	Effect of Silicon Absorption on Soybean Resistance to <i>Phakopsora pachyrhizi</i> in Different Cultivars. Plant Disease, 2012, 96, 37-42.	1.4	54
35	Effectors involved in fungalâ€"fungal interaction lead to a rare phenomenon of hyperbiotrophy in the tritrophic system biocontrol agentâ€"powdery mildewâ€"plant. New Phytologist, 2018, 217, 713-725.	7.3	47
36	Identification of a biosynthesis gene cluster for flocculosin a cellobiose lipid produced by the biocontrol agent <i>Pseudozyma flocculosa</i>. Molecular Microbiology, 2011, 79, 1483-1495.	2.5	46

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37	Aquaporins Mediate Silicon Transport in Humans. PLoS ONE, 2015, 10, e0136149.	2.5	45
38	Identification of a mammalian silicon transporter. American Journal of Physiology - Cell Physiology, 2017, 312, C550-C561.	4.6	45
39	Aconitate and methyl aconitate are modulated by silicon in powdery mildew-infected wheat plants. Journal of Plant Physiology, 2009, 166, 1413-1422.	3.5	44
40	Stable predictive markers for Phytophthora sojae avirulence genes that impair infection of soybean uncovered by whole genome sequencing of 31 isolates. BMC Biology, 2018, 16, 80.	3.8	40
41	Silicon Uptake and Localisation in Date Palm (Phoenix dactylifera) â€“ A Unique Association With Sclerenchyma. Frontiers in Plant Science, 2019, 10, 988.	3.6	37
42	Approaches to molecular characterization of fungal biocontrol agents: some case studies. Canadian Journal of Plant Pathology, 2001, 23, 8-12.	1.4	32
43	Identification and characterization of aquaporin genes in Arachis duranensis and Arachis ipaensis genomes, the diploid progenitors of peanut. BMC Genomics, 2019, 20, 222.	2.8	31
44	Catabolism of flocculosin, an antimicrobial metabolite produced by Pseudozyma flocculosa. Glycobiology, 2009, 19, 995-1001.	2.5	30
45	Editorial: Aquaporins: Dynamic Role and Regulation. Frontiers in Plant Science, 2017, 8, 1420.	3.6	28
46	Mode of action of biocontrol agents: all that glitters is not gold. Canadian Journal of Plant Pathology, 2012, 34, 469-478.	1.4	26
47	Ecological Basis of the Interaction between <i>Pseudozyma flocculosa</i> and Powdery Mildew Fungi. Applied and Environmental Microbiology, 2011, 77, 926-933.	3.1	24
48	A Zoospore Inoculation Method with <i>Phytophthora sojae</i> to Assess the Prophylactic Role of Silicon on Soybean Cultivars. Plant Disease, 2014, 98, 1632-1638.	1.4	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. Journal of Experimental Botany, 2020, 71, 6789-6798.	4.8	24
51	Understanding Aquaporin Transport System in Eelgrass (Zostera marina L.), an Aquatic Plant Species. Frontiers in Plant Science, 2017, 8, 1334.	3.6	23
52	GFP technology for the study of biocontrol agents in tritrophic interactions: A case study with Pseudozyma flocculosa. Journal of Microbiological Methods, 2007, 68, 275-281.	1.6	22
53	Lsi2: A black box in plant silicon transport. Plant and Soil, 2021, 466, 1-20.	3.7	22
54	Nutritional regulation and kinetics of flocculosin synthesis by Pseudozyma flocculosa. Applied Microbiology and Biotechnology, 2008, 80, 307-15.	3.6	21

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55	Genomic Profiling of Virulence in the Soybean Cyst Nematode Using Single-Nematode Sequencing. Phytopathology, 2021, 111, 137-148.	2.2	20
56	Beta Hydroxylation of Glycolipids from Ustilago maydis and Pseudozyma flocculosa by an NADPH-Dependent Î²-Hydroxylase. Applied and Environmental Microbiology, 2011, 77, 7823-7829.	3.1	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. Plant Biotechnology Journal, 2020, 18, 1492-1494.	8.3	18
58	Si permeability of a deficient Lsi1 aquaporin in tobacco can be enhanced through a conserved residue substitution. Plant Direct, 2019, 3, e00163.	1.9	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. RNA Biology, 2020, 17, 1252-1260.	3.1	14
60	Identification and Detection of <i>Fusarium striatum</i> as a New Record of Pathogen to Greenhouse Tomato in Northeastern America. Plant Disease, 2014, 98, 292-298.	1.4	13
61	Discriminant haplotypes of avirulence genes of <i>Phytophthora sojae</i> lead to a molecular assay to predict phenotypes. Molecular Plant Pathology, 2020, 21, 318-329.	4.2	12
62	Molecular Assessment of Pathotype Diversity of <i>Phytophthora sojae</i> in Canada Highlights Declining Sources of Resistance in Soybean. Plant Disease, 2021, 105, 4006-4013.	1.4	12
63	A Molecular Assay Allows the Simultaneous Detection of 12 Fungi Causing Fruit Rot in Cranberry. Plant Disease, 2019, 103, 2843-2850.	1.4	11
64	Silicon influences the localization and expression of<i>Phytophthora sojae</i>effectors in interaction with soybean. Journal of Experimental Botany, 2020, 71, 6844-6855.	4.8	11
65	Mapping of partial resistance to <i>Phytophthora sojae</i> in soybean PIs using wholeâ€genome sequencing reveals a major QTL. Plant Genome, 2022, 15, e20184.	2.8	11
66	In defence of the selective transport and role of silicon in plants. New Phytologist, 2019, 223, 514-516.	7.3	9
67	RXLR effector gene <i>Avr3a</i> from <i>Phytophthora sojae</i> is recognized by <i>Rps8</i> in soybean. Molecular Plant Pathology, 2022, 23, 693-706.	4.2	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. Journal of Cellular Physiology, 2018, 233, 6369-6376.	4.1	5
71	A reassessment of flocculosin-mediated biocontrol activity of Pseudozyma flocculosa through CRISPR/Cas9 gene editing. Fungal Genetics and Biology, 2021, 153, 103573.	2.1	4
72	New Insights into the Fungal Diversity of Cranberry Fruit Rot in QuÃ©bec Farms Through a Large-Scale Molecular Analysis. Plant Disease, 2022, 106, 215-222.	1.4	4

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73	Coinfection of soybean plants with Phytophthora sojae and soybean cyst nematode does not alter the efficacy of resistance genes. Plant Pathology, 2020, 69, 1437-1444.	2.4	3
74	Silicon and Plantâ€"Pathogen Interactions. , 2015, , 181-196.		2
75	Protoplast preparation and regeneration from spores of the biocontrol fungus Pseudozyma flocculosa. FEMS Microbiology Letters, 2000, 190, 287-291.	1.8	2
76	First Report of Godronia cassandrae as a Major Cranberry Fruit Rot Pathogen in Eastern Canada. Plant Disease, 2021, 105, 495-495.	1.4	1
77	First Report of Powdery Mildew Caused by <i>Golovinomyces ambrosiae</i> on <i>Cannabis sativa</i> (Marijuana) in Quebec, Canada. Plant Disease, 2022, 106, 2747.	1.4	1
78	The SoyaGen Project: Putting Genomics to Work for Soybean Breeders. Frontiers in Plant Science, 2022, 13, 887553.	3.6	1