

# Christoph Keel

## List of Publications by Year in descending order

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96  
papers

10,343  
citations

36303

51  
h-index

40979

93  
g-index

100  
all docs

100  
docs citations

100  
times ranked

6918  
citing authors

#	ARTICLE	IF	CITATIONS
1	The secret life of plantâ€beneficial rhizosphere bacteria: insects as alternative hosts. <i>Environmental Microbiology</i> , 2022, 24, 3273-3289.	3.8	19
2	Pivotal role of O-antigenic polysaccharide display in the sensitivity against phage tail-like particles in environmental <i>Pseudomonas</i> kin competition. <i>ISME Journal</i> , 2022, 16, 1683-1693.	9.8	16
3	Live cell dynamics of production, explosive release and killing activity of phage tail-like weapons for <i>Pseudomonas</i> kin exclusion. <i>Communications Biology</i> , 2021, 4, 87.	4.4	34
4	Spatially Restricted Immune Responses Are Required for Maintaining Root Meristematic Activity upon Detection of Bacteria. <i>Current Biology</i> , 2021, 31, 1012-1028.e7.	3.9	46
5	Phylogenetically closely related pseudomonads isolated from arthropods exhibit differential insectâ€killing abilities and genetic variations in insecticidal factors. <i>Environmental Microbiology</i> , 2021, 23, 5378-5394.	3.8	13
6	Induction of Wheat Resistance to STB by the Endophytic Fungus and. <i>Iranian Journal of Biotechnology</i> , 2021, 19, e2762.	0.3	0
7	Transcriptome plasticity underlying plant root colonization and insect invasion by <i>Pseudomonas protegens</i> . <i>ISME Journal</i> , 2020, 14, 2766-2782.	9.8	38
8	Draft Genome Sequence of <i>Pseudomonas</i> sp. Strain LD120, Isolated from the Marine Alga <i>Saccharina latissima</i> . <i>Microbiology Resource Announcements</i> , 2020, 9, .	0.6	1
9	T6SS contributes to gut microbiome invasion and killing of an herbivorous pest insect by plant-beneficial <i>Pseudomonas protegens</i> . <i>ISME Journal</i> , 2019, 13, 1318-1329.	9.8	76
10	Protecting maize from rootworm damage with the combined application of arbuscular mycorrhizal fungi, <i>Pseudomonas</i> bacteria and entomopathogenic nematodes. <i>Scientific Reports</i> , 2019, 9, 3127.	3.3	33
11	Updated Genome Sequence and Annotation for the Full Genome of <i>Pseudomonas protegens</i> CHA0. <i>Microbiology Resource Announcements</i> , 2019, 8, .	0.6	5
12	Persistence of root-colonizing <i>Pseudomonas protegens</i> in herbivorous insects throughout different developmental stages and dispersal to new host plants. <i>ISME Journal</i> , 2019, 13, 860-872.	9.8	35
13	Root-colonizing bacteria enhance the levels of (E)- $\beta$ -caryophyllene produced by maize roots in response to rootworm feeding. <i>Oecologia</i> , 2018, 187, 459-468.	2.0	23
14	Conservation tillage and organic farming induce minor variations in <i>Pseudomonas</i> abundance, their antimicrobial function and soil disease resistance. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	10
15	Genome Sequence of the <i>Pseudomonas protegens</i> Phage $\hat{\Gamma}$ GP100. <i>Genome Announcements</i> , 2018, 6, .	0.8	2
16	Relationships between Root Pathogen Resistance, Abundance and Expression of <i>Pseudomonas</i> Antimicrobial Genes, and Soil Properties in Representative Swiss Agricultural Soils. <i>Frontiers in Plant Science</i> , 2017, 8, 427.	3.6	37
17	Combined Field Inoculations of <i>Pseudomonas</i> Bacteria, Arbuscular Mycorrhizal Fungi, and Entomopathogenic Nematodes and their Effects on Wheat Performance. <i>Frontiers in Plant Science</i> , 2017, 8, 1809.	3.6	45
18	Antimicrobial and Insecticidal: Cyclic Lipopeptides and Hydrogen Cyanide Produced by Plant-Beneficial <i>Pseudomonas</i> Strains CHA0, CMR12a, and PCL1391 Contribute to Insect Killing. <i>Frontiers in Microbiology</i> , 2017, 8, 100.	3.5	84

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19	Heavy metal tolerant <i>Pseudomonas protegens</i> isolates from agricultural well water in northeastern Algeria with plant growth promoting, insecticidal and antifungal activities. <i>European Journal of Soil Biology</i> , 2016, 75, 38-46.	3.2	52
20	Specific surface glycan decorations enable antimicrobial peptide resistance in plant-associated beneficial pseudomonads with insect pathogenic properties. <i>Environmental Microbiology</i> , 2016, 18, 4265-4281.	3.8	19
21	Interspecific cooperation: enhanced growth, attachment and strain-specific distribution in biofilms through <i>Azospirillum brasilense</i> - <i>Pseudomonas protegens</i> co-cultivation. <i>FEMS Microbiology Letters</i> , 2016, 363, fnw238.	1.8	11
22	A look into the toolbox of multi-talents: insect pathogenicity determinants of plant-associated beneficial pseudomonads. <i>Environmental Microbiology</i> , 2016, 18, 3207-3209.	3.8	26
23	Insect pathogenicity in plant-beneficial pseudomonads: phylogenetic distribution and comparative genomics. <i>ISME Journal</i> , 2016, 10, 2527-2542.	9.8	127
24	Signaling in the Rhizosphere. <i>Trends in Plant Science</i> , 2016, 21, 187-198.	8.8	465
25	Evolutionary patchwork of an insecticidal toxin shared between plant-associated pseudomonads and the insect pathogens <i>Photorhabdus</i> and <i>Xenorhabdus</i> . <i>BMC Genomics</i> , 2015, 16, 609.	2.8	46
26	Domain Shuffling in a Sensor Protein Contributed to the Evolution of Insect Pathogenicity in Plant-Beneficial <i>Pseudomonas protegens</i> . <i>PLoS Pathogens</i> , 2014, 10, e1003964.	4.7	41
27	Full-Genome Sequence of the Plant Growth-Promoting Bacterium <i>Pseudomonas protegens</i> CHAO. <i>Genome Announcements</i> , 2014, 2, .	0.8	53
28	Control and host-dependent activation of insect toxin expression in a root-associated biocontrol pseudomonad. <i>Environmental Microbiology</i> , 2013, 15, 736-750.	3.8	47
29	Oral insecticidal activity of plant-associated pseudomonads. <i>Environmental Microbiology</i> , 2013, 15, 751-763.	3.8	80
30	Promise for plant pest control: root-associated pseudomonads with insecticidal activities. <i>Frontiers in Plant Science</i> , 2013, 4, 287.	3.6	158
31	Does Wheat Genetically Modified for Disease Resistance Affect Root-Colonizing Pseudomonads and Arbuscular Mycorrhizal Fungi?. <i>PLoS ONE</i> , 2013, 8, e53825.	2.5	20
32	Persistence of a biocontrol <i>Pseudomonas</i> inoculant as high populations of culturable and non-culturable cells in 200-cm-deep soil profiles. <i>Soil Biology and Biochemistry</i> , 2012, 44, 122-129.	8.8	31
33	Bacterial Subfamily of LuxR Regulators That Respond to Plant Compounds. <i>Applied and Environmental Microbiology</i> , 2011, 77, 4579-4588.	3.1	68
34	Pyrrroloquinoline Quinone Biosynthesis Gene <i>pqqC</i> , a Novel Molecular Marker for Studying the Phylogeny and Diversity of Phosphate-Solubilizing Pseudomonads. <i>Applied and Environmental Microbiology</i> , 2011, 77, 7345-7354.	3.1	62
35	Plant- and Microbe-Derived Compounds Affect the Expression of Genes Encoding Antifungal Compounds in a Pseudomonad with Biocontrol Activity. <i>Applied and Environmental Microbiology</i> , 2011, 77, 2807-2812.	3.1	44
36	Plants Respond to Pathogen Infection by Enhancing the Antifungal Gene Expression of Root-Associated Bacteria. <i>Molecular Plant-Microbe Interactions</i> , 2011, 24, 352-358.	2.6	109

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37	Combination of Fluorescent Reporters for Simultaneous Monitoring of Root Colonization and Antifungal Gene Expression by a Biocontrol <i>Pseudomonad</i> on Cereals with Flow Cytometry. <i>Molecular Plant-Microbe Interactions</i> , 2010, 23, 949-961.	2.6	61
38	Characterisation of microbial communities colonising the hyphal surfaces of arbuscular mycorrhizal fungi. <i>ISME Journal</i> , 2010, 4, 752-763.	9.8	215
39	Predator-Prey Chemical Warfare Determines the Expression of Biocontrol Genes by Rhizosphere-Associated <i>Pseudomonas fluorescens</i> . <i>Applied and Environmental Microbiology</i> , 2010, 76, 5263-5268.	3.1	73
40	Association of Hemolytic Activity of <i>Pseudomonas entomophila</i> , a Versatile Soil Bacterium, with Cyclic Lipopeptide Production. <i>Applied and Environmental Microbiology</i> , 2010, 76, 910-921.	3.1	121
41	Interplay between Wheat Cultivars, Biocontrol <i>Pseudomonads</i> , and Soil. <i>Applied and Environmental Microbiology</i> , 2010, 76, 6196-6204.	3.1	55
42	Role of Gluconic Acid Production in the Regulation of Biocontrol Traits of <i>Pseudomonas fluorescens</i> CHA0. <i>Applied and Environmental Microbiology</i> , 2009, 75, 4162-4174.	3.1	178
43	Small RNA-dependent Expression of Secondary Metabolism Is Controlled by Krebs Cycle Function in <i>Pseudomonas fluorescens</i> . <i>Journal of Biological Chemistry</i> , 2009, 284, 34976-34985.	3.4	82
44	Predators promote defence of rhizosphere bacterial populations by selective feeding on non-toxic cheaters. <i>ISME Journal</i> , 2009, 3, 666-674.	9.8	122
45	Functional GacS in <i>Pseudomonas</i> DSS73 prevents digestion by <i>Caenorhabditis elegans</i> and protects the nematode from killer flagellates. <i>ISME Journal</i> , 2009, 3, 770-779.	9.8	22
46	Molecular analysis of a novel gene cluster encoding an insect toxin in plant-associated strains of <i>Pseudomonas fluorescens</i> . <i>Environmental Microbiology</i> , 2008, 10, 2368-2386.	3.8	145
47	Detection of Plant-Modulated Alterations in Antifungal Gene Expression in <i>Pseudomonas fluorescens</i> CHA0 on Roots by Flow Cytometry. <i>Applied and Environmental Microbiology</i> , 2008, 74, 1339-1349.	3.1	51
48	Is the ability of biocontrol fluorescent pseudomonads to produce the antifungal metabolite 2,4-diacetylphloroglucinol really synonymous with higher plant protection?. <i>New Phytologist</i> , 2007, 173, 861-872.	7.3	98
49	Dialogues of root-colonizing biocontrol pseudomonads. <i>European Journal of Plant Pathology</i> , 2007, 119, 311-328.	1.7	62
50	Dialogues of root-colonizing biocontrol pseudomonads. , 2007, , 311-328.		0
51	Two Novel MvaT-Like Global Regulators Control Exoproduct Formation and Biocontrol Activity in Root-Associated <i>Pseudomonas fluorescens</i> CHA0. <i>Molecular Plant-Microbe Interactions</i> , 2006, 19, 313-329.	2.6	44
52	Influence of biocontrol strain <i>Pseudomonas fluorescens</i> CHA0 and its antibiotic overproducing derivative on the diversity of resident root colonizing pseudomonads. <i>FEMS Microbiology Ecology</i> , 2006, 23, 341-352.	2.7	10
53	Characterization of PhLG, a Hydrolase That Specifically Degrades the Antifungal Compound 2,4-Diacetylphloroglucinol in the Biocontrol Agent <i>Pseudomonas fluorescens</i> CHA0. <i>Applied and Environmental Microbiology</i> , 2006, 72, 418-427.	3.1	74
54	RpoN (Íf54) Controls Production of Antifungal Compounds and Biocontrol Activity in <i>Pseudomonas fluorescens</i> CHA0. <i>Molecular Plant-Microbe Interactions</i> , 2005, 18, 260-272.	2.6	54

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55	Use of green fluorescent protein-based reporters to monitor balanced production of antifungal compounds in the biocontrol agent <i>Pseudomonas fluorescens</i> CHA0. <i>Journal of Applied Microbiology</i> , 2005, 99, 24-38.	3.1	94
56	Taking the Fungal Highway: Mobilization of Pollutant-Degrading Bacteria by Fungi. <i>Environmental Science &amp; Technology</i> , 2005, 39, 4640-4646.	10.0	367
57	Cross Talk between 2,4-Diacetylphloroglucinol-Producing Biocontrol <i>Pseudomonads</i> on Wheat Roots. <i>Applied and Environmental Microbiology</i> , 2004, 70, 1990-1998.	3.1	87
58	Potential Role of Pathogen Signaling in Multitrophic Plant-Microbe Interactions Involved in Disease Protection. <i>Applied and Environmental Microbiology</i> , 2004, 70, 1836-1842.	3.1	103
59	RsmY, a small regulatory RNA, is required in concert with RsmZ for GacA-dependent expression of biocontrol traits in <i>Pseudomonas fluorescens</i> CHA0. <i>Molecular Microbiology</i> , 2003, 50, 1361-1379.	2.5	199
60	Characterization of the surface hydrophobicity of filamentous fungi. <i>Environmental Microbiology</i> , 2003, 5, 85-91.	3.8	54
61	REGULATION OF ANTIBIOTIC PRODUCTION IN ROOT-COLONIZING PSEUDOMONAS SPP. AND RELEVANCE FOR BIOLOGICAL CONTROL OF PLANT DISEASE. <i>Annual Review of Phytopathology</i> , 2003, 41, 117-153.	7.8	727
62	GacS Sensor Domains Pertinent to the Regulation of Exoproduct Formation and to the Biocontrol Potential of <i>Pseudomonas fluorescens</i> CHA0. <i>Molecular Plant-Microbe Interactions</i> , 2003, 16, 634-644.	2.6	139
63	Inactivation of the Regulatory Gene <i>algU</i> or <i>gacA</i> Can Affect the Ability of Biocontrol <i>Pseudomonas fluorescens</i> CHA0 To Persist as Culturable Cells in Nonsterile Soil. <i>Applied and Environmental Microbiology</i> , 2002, 68, 2085-2088.	3.1	14
64	Genetically programmed autoinducer destruction reduces virulence gene expression and swarming motility in <i>Pseudomonas aeruginosa</i> PAO1. The GenBank accession number for the <i>aiiA</i> nucleotide sequence is AF397400. The GenBank accession numbers for the nucleotide sequences of the 16S rRNA genes of strains A23 and A24 are AF397398 and AF397399. <i>Microbiology (United Kingdom)</i> , 2002, 148, 923-932.	1.8	239
65	Deleterious Impact of a Virulent Bacteriophage on Survival and Biocontrol Activity of <i>Pseudomonas fluorescens</i> Strain CHA0 in Natural Soil. <i>Molecular Plant-Microbe Interactions</i> , 2002, 15, 567-576.	2.6	52
66	Impact of biocontrol strain <i>Pseudomonas fluorescens</i> CHA0 on rhizosphere bacteria isolated from barley ( <i>Hordeum vulgare</i> L.) with special reference to Cytophaga-like bacteria. <i>Journal of Applied Microbiology</i> , 2002, 93, 1065-1074.	3.1	21
67	Signal transduction in plant-beneficial rhizobacteria with biocontrol properties. <i>Antonie Van Leeuwenhoek</i> , 2002, 81, 385-395.	1.7	72
68	The Sigma Factor <i>AlgU</i> ( <i>AlgT</i> ) Controls Exopolysaccharide Production and Tolerance towards Desiccation and Osmotic Stress in the Biocontrol Agent <i>Pseudomonas fluorescens</i> CHA0. <i>Applied and Environmental Microbiology</i> , 2001, 67, 5683-5693.	3.1	123
69	Characterization of spontaneous <i>gacS</i> and <i>gacA</i> regulatory mutants of <i>Pseudomonas fluorescens</i> biocontrol strain CHA0. <i>Antonie Van Leeuwenhoek</i> , 2001, 79, 327-336.	1.7	70
70	Biocontrol ability of fluorescent pseudomonads genetically dissected: importance of positive feedback regulation. <i>Current Opinion in Biotechnology</i> , 2000, 11, 290-297.	6.6	106
71	Small, Stable Shuttle Vectors Based on the Minimal pVS1 Replicon for Use in Gram-Negative, Plant-Associated Bacteria. <i>Molecular Plant-Microbe Interactions</i> , 2000, 13, 232-237.	2.6	356
72	Autoinduction of 2,4-Diacetylphloroglucinol Biosynthesis in the Biocontrol Agent <i>Pseudomonas fluorescens</i> CHA0 and Repression by the Bacterial Metabolites Salicylate and Pyoluteorin. <i>Journal of Bacteriology</i> , 2000, 182, 1215-1225.	2.2	310

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73	Enhanced production of indole-3-acetic acid by a genetically modified strain of <i>Pseudomonas fluorescens</i> CHA0 affects root growth of cucumber, but does not improve protection of the plant against <i>Pythium</i> root rot. <i>FEMS Microbiology Ecology</i> , 1999, 28, 225-233.	2.7	58
74	Impact of <i>Pseudomonas fluorescens</i> strain CHA0 and a derivative with improved biocontrol activity on the culturable resident bacterial community on cucumber roots. <i>FEMS Microbiology Ecology</i> , 1998, 27, 365-380.	2.7	44
75	Transport of a biocontrol <i>Pseudomonas fluorescens</i> through 2.5-M deep outdoor lysimeters and survival in the effluent water. <i>Soil Biology and Biochemistry</i> , 1998, 30, 621-631.	8.8	23
76	Biocontrol by Phenazine-1-carboxamide-Producing <i>Pseudomonas chlororaphis</i> PCL1391 of Tomato Root Rot Caused by <i>Fusarium oxysporum</i> f. sp. <i>radicis-lycopersici</i> . <i>Molecular Plant-Microbe Interactions</i> , 1998, 11, 1069-1077.	2.6	311
77	Impact of <i>Pseudomonas fluorescens</i> strain CHA0 and a derivative with improved biocontrol activity on the culturable resident bacterial community on cucumber roots. <i>FEMS Microbiology Ecology</i> , 1998, 27, 365-380.	2.7	4
78	Characterization of the <i>hcnABC</i> Gene Cluster Encoding Hydrogen Cyanide Synthase and Anaerobic Regulation by ANR in the Strictly Aerobic Biocontrol Agent <i>Pseudomonas fluorescens</i> CHA0. <i>Journal of Bacteriology</i> , 1998, 180, 3187-3196.	2.2	199
79	Biocontrol strain <i>Pseudomonas fluorescens</i> CHA0 and its genetically modified derivative with enhanced biocontrol capability exert comparable effects on the structure of a <i>Sinorhizobium meliloti</i> population in gnotobiotic systems. <i>Biology and Fertility of Soils</i> , 1997, 25, 240-244.	4.3	13
80	Influence of biocontrol strain <i>Pseudomonas fluorescens</i> CHA0 and its antibiotic overproducing derivative on the diversity of resident root colonizing pseudomonads. <i>FEMS Microbiology Ecology</i> , 1997, 23, 341-352.	2.7	45
81	Interactions between the biocontrol agent <i>Pseudomonas fluorescens</i> CHA0 and <i>Thielaviopsis basicola</i> in tobacco roots observed by immunofluorescence microscopy. <i>Plant Pathology</i> , 1997, 46, 62-71.	2.4	52
82	The global regulator GacA of <i>Pseudomonas fluorescens</i> CHA0 is required for suppression of root diseases in dicotyledons but not in Gramineae. <i>Plant Pathology</i> , 1997, 46, 80-90.	2.4	36
83	Predominance of Nonculturable Cells of the Biocontrol Strain <i>Pseudomonas fluorescens</i> CHA0 in the Surface Horizon of Large Outdoor Lysimeters. <i>Applied and Environmental Microbiology</i> , 1997, 63, 3776-3782.	3.1	55
84	Importance of Preferential Flow and Soil Management in Vertical Transport of a Biocontrol Strain of <i>Pseudomonas fluorescens</i> in Structured Field Soil. <i>Applied and Environmental Microbiology</i> , 1996, 62, 33-40.	3.1	89
85	Conservation of the 2,4-diacetylphloroglucinol biosynthesis locus among fluorescent <i>Pseudomonas</i> strains from diverse geographic locations. <i>Applied and Environmental Microbiology</i> , 1996, 62, 552-563.	3.1	270
86	Amplification of the housekeeping sigma factor in <i>Pseudomonas fluorescens</i> CHA0 enhances antibiotic production and improves biocontrol abilities. <i>Journal of Bacteriology</i> , 1995, 177, 5387-5392.	2.2	179
87	Influence of plant species on disease suppression by <i>Pseudomonas fluorescens</i> strain CHA0 with enhanced antibiotic production. <i>Plant Pathology</i> , 1995, 44, 40-50.	2.4	191
88	Temporally distinct accumulation of transcripts encoding enzymes of the prechorismate pathway in elicitor-treated, cultured tomato cells.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1995, 92, 3166-3170.	7.1	87
89	<i>Pseudomonads</i> as Biocontrol Agents of Diseases Caused by Soil-borne Pathogens. , 1995, , 137-148.		21
90	Tn5-directed cloning of <i>pqq</i> genes from <i>Pseudomonas fluorescens</i> CHA0: mutational inactivation of the genes results in overproduction of the antibiotic pyoluteorin. <i>Applied and Environmental Microbiology</i> , 1995, 61, 3856-3864.	3.1	82

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91	Contribution of the Global Regulator Gene <i>gacA</i> to Persistence and Dissemination of <i>Pseudomonas fluorescens</i> Biocontrol Strain CHA0 Introduced into Soil Microcosms. <i>Applied and Environmental Microbiology</i> , 1994, 60, 2553-2560.	3.1	91
92	Global control in <i>Pseudomonas fluorescens</i> mediating antibiotic synthesis and suppression of black root rot of tobacco. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1992, 89, 1562-1566.	7.1	388
93	Suppression of Root Diseases by <i>Pseudomonas fluorescens</i> CHA0: Importance of the Bacterial Secondary Metabolite 2,4-Diacetylphloroglucinol. <i>Molecular Plant-Microbe Interactions</i> , 1992, 5, 4.	2.6	513
94	Cyanide production by <i>Pseudomonas fluorescens</i> helps suppress black root rot of tobacco under gnotobiotic conditions. <i>EMBO Journal</i> , 1989, 8, 351-358.	7.8	528
95	Iron Sufficiency, a Prerequisite for the Suppression of Tobacco Black Root Rot by <i>Pseudomonas fluorescens</i> Strain CHA0 under Gnotobiotic Conditions. <i>Phytopathology</i> , 1989, 79, 584.	2.2	146
96	Cyanide production by <i>Pseudomonas fluorescens</i> helps suppress black root rot of tobacco under gnotobiotic conditions. <i>EMBO Journal</i> , 1989, 8, 351-8.	7.8	176