Dmitri V Mavrodi

List of Publications by Year
in descending order

85 papers	7,153 citations	81900 39 h-index	66911 78 g-index
89 all docs	89 docs citations	89 times ranked	5929 citing authors

#	Article	IF	Citations
1	Functional Analysis of Genes for Biosynthesis of Pyocyanin and Phenazine-1-Carboxamide from Pseudomonas aeruginosa PAO1. Journal of Bacteriology, 2001, 183, 6454-6465.	2.2	665
2	Complete genome sequence of the plant commensal Pseudomonas fluorescens Pf-5. Nature Biotechnology, 2005, 23, 873-878.	17.5	615
3	Comparative Genomics of Plant-Associated Pseudomonas spp.: Insights into Diversity and Inheritance of Traits Involved in Multitrophic Interactions. PLoS Genetics, 2012, 8, e1002784.	3.5	578
4	Phenazine Compounds in FluorescentPseudomonasSpp. Biosynthesis and Regulation. Annual Review of Phytopathology, 2006, 44, 417-445.	7.8	527
5	Pseudomonas aeruginosa Pyocyanin Is Critical for Lung Infection in Mice. Infection and Immunity, 2004, 72, 4275-4278.	2.2	312
6	Role of 2,4-Diacetylphloroglucinol-Producing FluorescentPseudomonasspp. in the Defense of Plant Roots. Plant Biology, 2007, 9, 4-20.	3.8	259
7	Diversity and Evolution of the Phenazine Biosynthesis Pathway. Applied and Environmental Microbiology, 2010, 76, 866-879.	3.1	241
8	A Seven-Gene Locus for Synthesis of Phenazine-1-Carboxylic Acid by Pseudomonas fluorescens 2-79. Journal of Bacteriology, 1998, 180, 2541-2548.	2.2	241
9	Role of Bacterial Communities in the Natural Suppression of Rhizoctonia solani Bare Patch Disease of Wheat (Triticum aestivum L.). Applied and Environmental Microbiology, 2013, 79, 7428-7438.	3.1	224
10	Induced Systemic Resistance in Arabidopsis thaliana Against Pseudomonas syringae pv. tomato by 2,4-Diacetylphloroglucinol-Producing Pseudomonas fluorescens. Phytopathology, 2012, 102, 403-412.	2.2	190
11	An inclusive Research Education Community (iREC): Impact of the SEA-PHAGES program on research outcomes and student learning. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13531-13536.	7.1	155
12	Genetic Diversity of phlD from 2,4-Diacetylphloroglucinol-Producing Fluorescent Pseudomonas spp.. Phytopathology, 2001, 91, 35-43.	2.2	154
13	A Rapid Polymerase Chain Reaction-Based Assay Characterizing Rhizosphere Populations of 2,4-Diacetylphloroglucinol-Producing Bacteria. Phytopathology, 2001, 91, 44-54.	2.2	152
14	Pseudomonas aeruginosa Exotoxin Pyocyanin Causes Cystic Fibrosis Airway Pathogenesis. American Journal of Pathology, 2009, 175, 2473-2488.	3.8	152
15	phzO , a Gene for Biosynthesis of 2-Hydroxylated Phenazine Compounds in Pseudomonas aureofaciens 30-84. Journal of Bacteriology, 2001, 183, 318-327.	2.2	151
16	Accumulation of the Antibiotic Phenazine-1-Carboxylic Acid in the Rhizosphere of Dryland Cereals. Applied and Environmental Microbiology, 2012, 78, 804-812.	3.1	128
17	Of Two Make One: The Biosynthesis of Phenazines. ChemBioChem, 2009, 10, 2295-2304.	2.6	125
18	Recent insights into the diversity, frequency and ecological roles of phenazines in fluorescent Pseudomonas spp.. Environmental Microbiology, 2013, 15, 675-686.	3.8	119

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19	Phenazine Biosynthesis inPseudomonasfluorescens:Â Branchpoint from the Primary Shikimate Biosynthetic Pathway and Role of Phenazine-1,6-dicarboxylic Acid. Journal of the American Chemical Society, 2001, 123, 9459-9460.	13.7	115
20	Interactions Between Strains of 2,4-Diacetylphloroglucinol-Producing Pseudomonas fluorescens in the Rhizosphere of Wheat. Phytopathology, 2003, 93, 982-994.	2.2	98
21	Structure and function of the phenazine biosynthetic protein PhzF from Pseudomonas fluorescens. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16431-16436.	7.1	92
22	Mobile genetic elements in the genome of the beneficial rhizobacterium Pseudomonas fluorescens Pf-5. BMC Microbiology, 2009, 9, 8.	3.3	91
23	Activation of the phz Operon of Pseudomonas fluorescens 2-79 Requires the LuxR Homolog PhzR, N -(3-OH-Hexanoyl)- l -Homoserine Lactone Produced by the LuxI Homolog PhzI, and a cis -Acting phz Box. Journal of Bacteriology, 2005, 187, 6517-6527.	2.2	89
24	Chromosomal Insertion of Phenazine-1-Carboxylic Acid Biosynthetic Pathway Enhances Efficacy of Damping-off Disease Control by Pseudomonas fluorescens. Molecular Plant-Microbe Interactions, 2000, 13, 1293-1300.	2.6	88
25	Biological Control of Rhizoctonia Root Rot on Bean by Phenazine- and Cyclic Lipopeptide-Producing Pseudomonas CMR12a. Phytopathology, 2011, 101, 996-1004.	2.2	88
26	Biocontrol and plant growthâ€promoting activity of rhizobacteria from <scp>C</scp>hinese fields with contaminated soils. Microbial Biotechnology, 2015, 8, 404-418.	4.2	83
27	Transformation of Pseudomonas fluorescens with genes for biosynthesis of phenazine-1-carboxylic acid improves biocontrol of rhizoctonia root rot and in situ antibiotic production. FEMS Microbiology Ecology, 2004, 49, 243-251.	2.7	73
28	Long-Term Irrigation Affects the Dynamics and Activity of the Wheat Rhizosphere Microbiome. Frontiers in Plant Science, 2018, 9, 345.	3.6	73
29	PhzA/B Catalyzes the Formation of the Tricycle in Phenazine Biosynthesis. Journal of the American Chemical Society, 2008, 130, 17053-17061.	13.7	71
30	Irrigation Differentially Impacts Populations of Indigenous Antibiotic-Producing Pseudomonas spp. in the Rhizosphere of Wheat. Applied and Environmental Microbiology, 2012, 78, 3214-3220.	3.1	70
31	Antagonistic activity among 2,4-diacetylphloroglucinol-producing fluorescentPseudomonasspp.. FEMS Microbiology Letters, 2005, 242, 249-256.	1.8	64
32	Structural and Functional Analysis of the Type III Secretion System fromPseudomonas fluorescensQ8r1-96. Journal of Bacteriology, 2011, 193, 177-189.	2.2	61
33	Biological Control of Take-All by FluorescentPseudomonasspp. from Chinese Wheat Fields. Phytopathology, 2011, 101, 1481-1491.	2.2	61
34	Root Exudates Alter the Expression of Diverse Metabolic, Transport, Regulatory, and Stress Response Genes in Rhizosphere Pseudomonas. Frontiers in Microbiology, 2021, 12, 651282.	3.5	58
35	phlD-based genetic diversity and detection of genotypes of 2,4-diacetylphloroglucinol-producing Pseudomonas fluorescens. FEMS Microbiology Ecology, 2006, 56, 64-78.	2.7	54
36	Biological Control of Wheat Root Diseases by the CLP-Producing Strain Pseudomonas fluorescens HC1-07. Phytopathology, 2014, 104, 248-256.	2.2	52

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37	Ligand Binding Induces an Ammonia Channel in 2-Amino-2-desoxyisochorismate (ADIC) Synthase PhzE. Journal of Biological Chemistry, 2011, 286, 18213-18221.	3.4	49
38	Quantification of 2,4-Diacetylphloroglucinol-Producing Pseudomonas fluorescens Strains in the Plant Rhizosphere by Real-Time PCR. Applied and Environmental Microbiology, 2007, 73, 5531-5538.	3.1	45
39	Role of ptsP, orfT, and sss Recombinase Genes in Root Colonization by Pseudomonas fluorescens Q8r1-96. Applied and Environmental Microbiology, 2006, 72, 7111-7122.	3.1	44
40	Identification of Differences in Genome Content among phlD-Positive Pseudomonas fluorescens Strains by Using PCR-Based Subtractive Hybridization. Applied and Environmental Microbiology, 2002, 68, 5170-5176.	3.1	39
41	Population Structure and Diversity of Phenazine-1-Carboxylic Acid Producing Fluorescent Pseudomonas spp. from Dryland Cereal Fields of Central Washington State (USA). Microbial Ecology, 2012, 64, 226-241.	2.8	38
42	Relationships between Root Pathogen Resistance, Abundance and Expression of Pseudomonas Antimicrobial Genes, and Soil Properties in Representative Swiss Agricultural Soils. Frontiers in Plant Science, 2017, 8, 427.	3.6	37
43	Phenazineâ€1â€carboxylic acid and soil moisture influence biofilm development and turnover of rhizobacterial biomass on wheat root surfaces. Environmental Microbiology, 2018, 20, 2178-2194.	3.8	35
44	Molecular classification of IncP-9 naphthalene degradation plasmids. Plasmid, 2006, 56, 1-10.	1.4	31
45	The role of dsbA in colonization of the wheat rhizosphere by Pseudomonas fluorescens Q8r1-96. Microbiology (United Kingdom), 2006, 152, 863-872.	1.8	27
46	Taxonomy and Distribution of Phenazine-Producing Pseudomonas spp. in the Dryland Agroecosystem of the Inland Pacific Northwest, United States. Applied and Environmental Microbiology, 2013, 79, 3887-3891.	3.1	27
47	Rhizosphere plant-microbe interactions under water stress. Advances in Applied Microbiology, 2021, 115, 65-113.	2.4	27
48	Pseudomonas protegens Pf-5 Causes Discoloration and Pitting of Mushroom Caps Due to the Production of Antifungal Metabolites. Molecular Plant-Microbe Interactions, 2014, 27, 733-746.	2.6	26
49	Trapped intermediates in crystals of the FMN-dependent oxidase PhzG provide insight into the final steps of phenazine biosynthesis. Acta Crystallographica Section D: Biological Crystallography, 2013, 69, 1403-1413.	2.5	24
50	Differential Response of Wheat Cultivars toPseudomonas brassicacearumand Take-All Decline Soil. Phytopathology, 2018, 108, 1363-1372.	2.2	23
51	Destruction of Opportunistic Pathogens via Polymer Nanoparticleâ€Mediated Release of Plantâ€Based Antimicrobial Payloads. Advanced Healthcare Materials, 2016, 5, 1094-1103.	7.6	22
52	Comparative Analysis of Rhizosphere Microbiomes of Southern Highbush Blueberry (Vaccinium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14 Frontiers in Microbiology, 2020, 11, 370.	3.5	22
53	Utilization of trehalose, benzoate, valerate, and seed and root exudates by genotypes of 2,4-diacetylphloroglucinol producing Pseudomonas fluorescens. Soil Biology and Biochemistry, 2007, 39, 2712-2722.	8.8	21
54	Pro-Antimicrobial Networks via Degradable Acetals (PANDAs) Using Thiolâ€“Ene Photopolymerization. ACS Macro Letters, 2017, 6, 171-175.	4.8	21

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55	Construction of a recombinant strain of Pseudomonas fluorescens producing both phenazine-1-carboxylic acid and cyclic lipopeptide for the biocontrol of take-all disease of wheat. European Journal of Plant Pathology, 2017, 149, 683-694.	1.7	21
56	Rhizosphere Microbial Communities of Spartina alterniflora and Juncus roemerianus From Restored and Natural Tidal Marshes on Deer Island, Mississippi. Frontiers in Microbiology, 2018, 9, 3049.	3.5	20
57	Antimicrobial Activity of, and Cellular Pathways Targeted by, p -Anisaldehyde and Epigallocatechin Gallate in the Opportunistic Human Pathogen Pseudomonas aeruginosa. Applied and Environmental Microbiology, 2020, 86, .	3.1	17
58	A bio-based pro-antimicrobial polymer network via degradable acetal linkages. Acta Biomaterialia, 2018, 67, 196-205.	8.3	13
59	Pseudomonas synxantha 2-79 Transformed with Pyrrolnitrin Biosynthesis Genes Has Improved Biocontrol Activity Against Soilborne Pathogens of Wheat and Canola. Phytopathology, 2020, 110, 1010-1017.	2.2	13
60	The purification, crystallization and preliminary structural characterization of PhzF, a key enzyme in the phenazine-biosynthesis pathway fromPseudomonas fluorescens2-79. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 184-186.	2.5	12
61	pA506, a Conjugative Plasmid of the Plant Epiphyte Pseudomonas fluorescens A506. Applied and Environmental Microbiology, 2013, 79, 5272-5282.	3.1	12
62	Exploring the Pathogenicity of Pseudomonas brassicacearum Q8r1-96 and Other Strains of the Pseudomonas fluorescens Complex on Tomato. Plant Disease, 2020, 104, 1026-1031.	1.4	10
63	Functional Analysis of Phenazine Biosynthesis Genes in Burkholderia spp.. Applied and Environmental Microbiology, 2021, 87, .	3.1	10
64	The purification, crystallization and preliminary structural characterization of FAD-dependent monooxygenase PhzS, a phenazine-modifying enzyme fromPseudomonas aeruginosa. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 989-992.	0.7	9
65	Draft genome sequences of strains Salinicola socius SMB35T, Salinicola sp. MH3R3â€“1 and Chromohalobacter sp. SMB17 from the Verkhnekamsk potash mining region of Russia. Standards in Genomic Sciences, 2017, 12, 39.	1.5	9
66	Effect of rock dust-amended compost on the soil properties, soil microbial activity, and fruit production in an apple orchard from the Jiangsu province of China. Archives of Agronomy and Soil Science, 2021, 67, 1313-1326.	2.6	9
67	The purification, crystallization and preliminary structural characterization of PhzM, a phenazine-modifying methyltransferase fromPseudomonas aeruginosa. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 887-890.	0.7	8
68	Using Aldehyde Synergism To Direct the Design of Degradable Pro-Antimicrobial Networks. ACS Applied Bio Materials, 2018, 1, 1983-1991.	4.6	7
69	Systematic overexpression of genes encoded by mycobacteriophage Waterfoul reveals novel inhibitors of mycobacterial growth. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	7
70	Identification of the Key Genes of Naphthalene Catabolism in Soil DNA. Microbiology, 2003, 72, 597-604.	1.2	6
71	Overexpression, purification and crystallization of PhzA, the first enzyme of the phenazine biosynthesis pathway ofPseudomonas fluorescens2-79. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1129-1131.	2.5	6
72	The Role of 2,4-Diacetylphloroglucinol- and Phenazine-1-Carboxylic Acid-Producing Pseudomonas spp. in Natural Protection of Wheat from Soilborne Pathogens. , 2011, , 267-283.		5

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73	Draft Genome Sequence of the Phenazine-Producing Pseudomonas fluorescens Strain 2-79. Genome Announcements, 2015, 3, .	0.8	5
74	Genomics of Pseudomonas fluorescens Pf-5. , 2007, , 3-30.		5
75	Control of Pseudomonas amygdali pv. loropetali on Metal, Wood, and Loropetalum chinense Stem Surfaces. Plant Health Progress, 2019, 20, 270-277.	1.4	4
76	SELECTING, MONITORING, AND ENHANCING THE PERFORMANCE OF BACTERIAL BIOCONTROL AGENTS: PRINCIPLES, PITFALLS, AND PROGRESS. , 2007, , 87-105.		3
77	Phenazines and Bacterial Biofilms. , 2013, , 71-87.		2
78	Discovery and Characterization of Bacteriophage LuckyBarnes. Microbiology Resource Announcements, 2019, 8, .	0.6	2
79	Genome Sequence of Mycobacterium Phage Waterfoul. Genome Announcements, 2016, 4, .	0.8	1
80	Genome Sequences of Mycobacteriophages Amgine, Amohnition, Bella96, Cain, DarthP, Hammy, Krueger, LastHope, Peanam, PhelpsODU, Phrank, SirPhilip, Slimphazie, and Unicorn. Genome Announcements, 2017, 5, .	0.8	1
81	Draft Genome Sequences of Xylella fastidiosa subsp. fastidiosa Strains OK3, VB11, and NOB1, Isolated from Bunch and Muscadine Grapes Grown in Southern Mississippi. Microbiology Resource Announcements, 2020, 9, .	0.6	1
82	Draft Genome Sequences of Six Strains Isolated from the Rhizosphere of Wheat Grown in Cadmium-Contaminated Soil. Microbiology Resource Announcements, 2020, 9, .	0.6	0
83	Structural characterization of the aromatic monooxygenases PhzO and TcpA. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s147-s147.	0.3	0
84	Structural and functional studies of phenazine biosynthesis protein PhzE, a 2-amino-2-desoxyisochorismate synthase. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s147-s148.	0.3	0
85	Detoxification of Copper and Chromium via Dark Hydrogen Fermentation of Potato Waste by Clostridium butyricum Strain 92. Processes, 2022, 10, 170.	2.8	0