Ville-Petri Friman

List of Publications by Year in descending order

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80 papers	5,100 citations	109321 35 h-index	102487 66 g-index
90 all docs	90 docs citations	90 times ranked	4839 citing authors

#	Article	IF	Citations
1	Trophic network architecture of root-associated bacterial communities determines pathogen invasion and plant health. Nature Communications, 2015, 6, 8413.	12.8	384
2	Hyperthermophilic Composting Accelerates the Removal of Antibiotic Resistance Genes and Mobile Genetic Elements in Sewage Sludge. Environmental Science & Technology, 2018, 52, 266-276.	10.0	321
3	Initial soil microbiome composition and functioning predetermine future plant health. Science Advances, 2019, 5, eaaw0759.	10.3	314
4	Probiotic Diversity Enhances Rhizosphere Microbiome Function and Plant Disease Suppression. MBio, 2016, 7, .	4.1	264
5	Competition for iron drives phytopathogen control by natural rhizosphere microbiomes. Nature Microbiology, 2020, 5, 1002-1010.	13.3	260
6	Organic amendments increase crop yields by improving microbe-mediated soil functioning of agroecosystems: A meta-analysis. Soil Biology and Biochemistry, 2018, 124, 105-115.	8.8	251
7	Phage combination therapies for bacterial wilt disease in tomato. Nature Biotechnology, 2019, 37, 1513-1520.	17.5	164
8	Effects of Sequential and Simultaneous Applications of Bacteriophages on Populations of Pseudomonas aeruginosa In Vitro and in Wax Moth Larvae. Applied and Environmental Microbiology, 2012, 78, 5646-5652.	3.1	139
9	Ecology and evolution of antimicrobial resistance in bacterial communities. ISME Journal, 2021, 15, 939-948.	9.8	131
10	Ralstonia solanacearum pathogen disrupts bacterial rhizosphere microbiome during an invasion. Soil Biology and Biochemistry, 2018, 118, 8-17.	8.8	120
11	Facilitation promotes invasions in plantâ€associated microbial communities. Ecology Letters, 2019, 22, 149-158.	6.4	100
12	Horizontal gene transfer and shifts in linked bacterial community composition are associated with maintenance of antibiotic resistance genes during food waste composting. Science of the Total Environment, 2019, 660, 841-850.	8.0	99
13	Pathogen invasion indirectly changes the composition of soil microbiome via shifts in root exudation profile. Biology and Fertility of Soils, 2016, 52, 997-1005.	4.3	98
14	Resistance Evolution against Phage Combinations Depends on the Timing and Order of Exposure. MBio, 2019, 10, .	4.1	90
15	A methodological framework to embrace soil biodiversity. Soil Biology and Biochemistry, 2019, 136, 107536.	8.8	88
16	Cross-resistance is modular in bacteriaâ€“phage interactions. PLoS Biology, 2018, 16, e2006057.	5.6	84
17	Preâ€adapting parasitic phages to a pathogen leads to increased pathogen clearance and lowered resistance evolution with Pseudomonas aeruginosa cystic fibrosis bacterial isolates. Journal of Evolutionary Biology, 2016, 29, 188-198.	1.7	83
18	Effects of predation on realâ€time hostâ€“parasite coevolutionary dynamics. Ecology Letters, 2013, 16, 39-46.	6.4	82

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19	Efficient reduction of antibiotic residues and associated resistance genes in tylosin antibiotic fermentation waste using hyperthermophilic composting. Environment International, 2019, 133, 105203.	10.0	82
20	FLUCTUATING TEMPERATURE LEADS TO EVOLUTION OF THERMAL GENERALISM AND PREADAPTATION TO NOVEL ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 2013, 67, n/a-n/a.	2.3	78
21	Probiotic Pseudomonas communities enhance plant growth and nutrient assimilation via diversity-mediated ecosystem functioning. Soil Biology and Biochemistry, 2017, 113, 122-129.	8.8	77
22	Bacteriophage selection against a plasmid-encoded sex apparatus leads to the loss of antibiotic-resistance plasmids. Biology Letters, 2011, 7, 902-905.	2.3	69
23	Predation on Multiple Trophic Levels Shapes the Evolution of Pathogen Virulence. PLoS ONE, 2009, 4, e6761.	2.5	69
24	Application of biochar reduces Ralstonia solanacearum infection via effects on pathogen chemotaxis, swarming motility, and root exudate adsorption. Plant and Soil, 2017, 415, 269-281.	3.7	68
25	Herbicide Selection Promotes Antibiotic Resistance in Soil Microbiomes. Molecular Biology and Evolution, 2021, 38, 2337-2350.	8.9	68
26	Availability of prey resources drives evolution of predatorâ€“prey interaction. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1625-1633.	2.6	65
27	High Temperature and Bacteriophages Can Indirectly Select for Bacterial Pathogenicity in Environmental Reservoirs. PLoS ONE, 2011, 6, e17651.	2.5	61
28	Resource availability modulates biodiversityâ€invasion relationships by altering competitive interactions. Environmental Microbiology, 2017, 19, 2984-2991.	3.8	61
29	Long-term fertilization regimes drive the abundance and composition of N-cycling-related prokaryotic groups via soil particle-size differentiation. Soil Biology and Biochemistry, 2018, 116, 213-223.	8.8	52
30	Livestock Manure Type Affects Microbial Community Composition and Assembly During Composting. Frontiers in Microbiology, 2021, 12, 621126.	3.5	52
31	Rapid evolution of bacterial mutualism in the plant rhizosphere. Nature Communications, 2021, 12, 3829.	12.8	51
32	Protist predation can favour cooperation within bacterial species. Biology Letters, 2013, 9, 20130548.	2.3	49
33	Life History Trade-Offs and Relaxed Selection Can Decrease Bacterial Virulence in Environmental Reservoirs. PLoS ONE, 2012, 7, e43801.	2.5	48
34	Organochlorine contamination enriches virus-encoded metabolism and pesticide degradation associated auxiliary genes in soil microbiomes. ISME Journal, 2022, 16, 1397-1408.	9.8	45
35	The effect of microbial inoculant origin on the rhizosphere bacterial community composition and plant growth-promotion. Plant and Soil, 2020, 452, 105-117.	3.7	44
36	Parasites and competitors suppress bacterial pathogen synergistically due to evolutionary trade-offs. Evolution; International Journal of Organic Evolution, 2017, 71, 733-746.	2.3	41

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37	Inter-species interactions alter antibiotic efficacy in bacterial communities. ISME Journal, 2022, 16, 812-821.	9.8	41
38	Human migration activities drive the fluctuation of ARGs: Case study of landfills in Nanjing, eastern China. Journal of Hazardous Materials, 2016, 315, 93-101.	12.4	39
39	Siderophore-Mediated Interactions Determine the Disease Suppressiveness of Microbial Consortia. MSystems, 2020, 5, .	3.8	37
40	Pseudomonas aeruginosa Adaptation to Lungs of Cystic Fibrosis Patients Leads to Lowered Resistance to Phage and Protist Enemies. PLoS ONE, 2013, 8, e75380.	2.5	36
41	Chemical structure predicts the effect of plantâ€derived lowâ€molecular weight compounds on soil microbiome structure and pathogen suppression. Functional Ecology, 2020, 34, 2158-2169.	3.6	34
42	Evaluation of the Stability of Bacteriophages in Different Solutions Suitable for the Production of Magistral Preparations in Belgium. Viruses, 2021, 13, 865.	3.3	34
43	Rapid prey evolution can alter the structure of predatorâ€“prey communities. Journal of Evolutionary Biology, 2014, 27, 374-380.	1.7	32
44	Rapid evolution of generalized resistance mechanisms can constrain the efficacy of phageâ€“antibiotic treatments. Evolutionary Applications, 2018, 11, 1630-1641.	3.1	32
45	Phages can constrain protist predation-driven attenuation of Pseudomonas aeruginosa virulence in multienemy communities. ISME Journal, 2014, 8, 1820-1830.	9.8	31
46	Bacterial competition and quorumâ€sensing signalling shape the ecoâ€evolutionary outcomes of model in vitro phage therapy. Evolutionary Applications, 2017, 10, 161-169.	3.1	31
47	Parallel evolution of Pseudomonas aeruginosa phage resistance and virulence loss in response to phage treatment in vivo and in vitro. ELife, 2022, 11, .	6.0	31
48	The Antimicrobial Activity of a Carbon Monoxide Releasing Molecule (EBOR-CORM-1) Is Shaped by Intraspecific Variation within Pseudomonas aeruginosa Populations. Frontiers in Microbiology, 2018, 9, 195.	3.5	30
49	Compositional and functional succession of bacterial and fungal communities is associated with changes in abiotic properties during pig manure composting. Waste Management, 2021, 131, 350-358.	7.4	30
50	Introduction of probiotic bacterial consortia promotes plant growth via impacts on the resident rhizosphere microbiome. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211396.	2.6	29
51	Pulsed-Resource Dynamics Constrain the Evolution of Predator-Prey Interactions. American Naturalist, 2011, 177, 334-345.	2.1	28
52	Seasonal variation in the biocontrol efficiency of bacterial wilt is driven by temperatureâ€mediated changes in bacterial competitive interactions. Journal of Applied Ecology, 2017, 54, 1440-1448.	4.0	27
53	Carbon resource richness shapes bacterial competitive interactions by alleviating growthâ€antibiosis tradeâ€off. Functional Ecology, 2019, 33, 868-875.	3.6	27
54	Bacterial community richness shifts the balance between volatile organic compound-mediated microbeâ€“pathogen and microbeâ€“plant interactions. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200403.	2.6	27

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55	Altering Transplantation Time to Avoid Periods of High Temperature Can Efficiently Reduce Bacterial Wilt Disease Incidence with Tomato. PLoS ONE, 2015, 10, e0139313.	2.5	26
56	Bacterial adaptation to sublethal antibiotic gradients can change the ecological properties of multitrophic microbial communities. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142920.	2.6	26
57	Relative importance of evolutionary dynamics depends on the composition of microbial predatorâ€“prey community. ISME Journal, 2016, 10, 1352-1362.	9.8	23
58	Extended Plant Metarhizobiome: Understanding Volatile Organic Compound Signaling in Plant-Microbe Metapopulation Networks. MSystems, 2021, 6, e0084921.	3.8	22
59	Pulsed-resource dynamics increase the asymmetry of antagonistic coevolution between a predatory protist and a prey bacterium. Journal of Evolutionary Biology, 2011, 24, 2563-2573.	1.7	21
60	Bacterial cellâ€toâ€cell signaling promotes the evolution of resistance to parasitic bacteriophages. Ecology and Evolution, 2017, 7, 1936-1941.	1.9	21
61	The relative importance of soil moisture in predicting bacterial wilt disease occurrence. Soil Ecology Letters, 2021, 3, 356-366.	4.5	19
62	Application of bacteriophages. Microbiology Australia, 2017, 38, 63.	0.4	18
63	Predation and resource fluctuations drive eco-evolutionary dynamics of a bacterial community. Acta Oecologica, 2012, 38, 77-83.	1.1	17
64	Devosia nitraria sp. nov., a novel species isolated from the roots of Nitraria sibirica in China. Antonie Van Leeuwenhoek, 2017, 110, 1475-1483.	1.7	17
65	Coping with multiple enemies: pairwise interactions do not predict evolutionary change in complex multitrophic communities. Oikos, 2019, 128, 1588-1599.	2.7	16
66	Interactive effects between diet and genotypes of host and pathogen define the severity of infection. Ecology and Evolution, 2012, 2, 2347-2356.	1.9	15
67	Microbial eco-evolutionary dynamics in the plant rhizosphere. Current Opinion in Microbiology, 2022, 68, 102153.	5.1	14
68	Combining in vitro and in vivo screening to identify efficient Pseudomonas biocontrol strains against the phytopathogenic bacterium Ralstonia solanacearum. MicrobiologyOpen, 2022, 11, e1283.	3.0	13
69	Mesorhizobium zhangyense sp. nov., isolated from wild Thermopsis lanceolate in northwestern China. Archives of Microbiology, 2018, 200, 603-610.	2.2	11
70	MAUIâ€seq: Metabarcoding using amplicons with unique molecular identifiers to improve error correction. Molecular Ecology Resources, 2021, 21, 703-720.	4.8	11
71	Resource stoichiometry shapes community invasion resistance via productivity-mediated species identity effects. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20182035.	2.6	10
72	Airborne and indigenous microbiomes coâ€drive the rebound of antibiotic resistome during compost storage. Environmental Microbiology, 2021, 23, 7483-7496.	3.8	10

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73	Genetic variation is associated with differences in facilitative and competitive interactions in the Rhizobium leguminosarum species complex. Environmental Microbiology, 2021, , .	3.8	9
74	Metaâ€analysis of diazotrophic signatures across terrestrial ecosystems at the continental scale. Environmental Microbiology, 2022, 24, 2013-2028.	3.8	9
75	Functional diversity increases the efficacy of phage combinations. Microbiology (United Kingdom), 2021, 167, .	1.8	8
76	Seeing the forest for the trees: Use of phages to treat bacterial tree diseases. Plant Pathology, 2021, 70, 1987-2004.	2.4	7
77	Life in cells, hosts, and vectors: Parasite evolution across scales. Infection, Genetics and Evolution, 2013, 13, 344-347.	2.3	6
78	The impact of intra-specific diversity in the rhizobia-legume symbiosis. Microbiology (United Kingdom), 2021, 167, .	1.8	6
79	Nocardioides astragali sp. nov., isolatedÂfromÂa nodule of wild Astragalus chrysopterus in northwestern China. Antonie Van Leeuwenhoek, 2018, 111, 1157-1163.	1.7	4
80	Plant pathogenic bacterium can rapidly evolve tolerance to an antimicrobial plant allelochemical. Evolutionary Applications, 2022, 15, 735-750.	3.1	4