Frederick M Cohan

List of Publications by Year
in descending order

78 papers	7,056 citations	87888 38 h-index	82547 72 g-index
84 all docs	84 docs citations	84 times ranked	6188 citing authors

#	Article	IF	Citations
1	Genotyping and Multivariate Regression Trees Reveal Ecological Diversification within the Microcystis aeruginosa Complex along a Wide Environmental Gradient. Applied and Environmental Microbiology, 2022, 88, AEM0147521.	3.1	2
2	Broadscale phage therapy is unlikely to select for widespread evolution of bacterial resistance to virus infection. Virus Evolution, 2020, 6, veaa060.	4.9	14
3	Biogeography of American Northwest Hot Spring A/Bâ€²-Lineage Synechococcus Populations. Frontiers in Microbiology, 2020, 11, 77.	3.5	24
4	Differentiation strategies of soil rare and abundant microbial taxa in response to changing climatic regimes. Environmental Microbiology, 2020, 22, 1327-1340.	3.8	164
5	Systematics: The Cohesive Nature of Bacterial SpeciesÂTaxa. Current Biology, 2019, 29, R169-R172.	3.9	18
6	Transmission in the Origins of Bacterial Diversity, From Ecotypes to Phyla. , 2019, , 311-343.		4
7	Genomic plasticity and rapid host switching can promote the evolution of generalism: a case study in the zoonotic pathogen Campylobacter. Scientific Reports, 2017, 7, 9650.	3.3	34
8	Transmission in the Origins of Bacterial Diversity, From Ecotypes to Phyla. Microbiology Spectrum, 2017, 5, .	3.0	46
9	Bacillus swezeyi sp. nov. and Bacillus haynesii sp. nov., isolated from desert soil. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 2720-2725.	1.7	38
10	Bacterial Speciation: Genetic Sweeps in Bacterial Species. Current Biology, 2016, 26, R112-R115.	3.9	39
11	Bacillus nakamurai sp. nov., a black-pigment-producing strain. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 2987-2991.	1.7	21
12	The molecular dimension of microbial species: 1. Ecological distinctions among, and homogeneity within, putative ecotypes of Synechococcus inhabiting the cyanobacterial mat of Mushroom Spring, Yellowstone National Park. Frontiers in Microbiology, 2015, 6, 590.	3.5	49
13	The molecular dimension of microbial species: 3. Comparative genomics of Synechococcus strains with different light responses and in situ diel transcription patterns of associated putative ecotypes in the Mushroom Spring microbial mat. Frontiers in Microbiology, 2015, 6, 604.	3.5	67
14	Recombination Does Not Hinder Formation or Detection of Ecological Species of Synechococcus Inhabiting a Hot Spring Cyanobacterial Mat. Frontiers in Microbiology, 2015, 6, 1540.	3.5	16
15	Accuracy and efficiency of algorithms for the demarcation of bacterial ecotypes from DNA sequence data. International Journal of Bioinformatics Research and Applications, 2014, 10, 409.	0.2	7
16	Genomic Heterogeneity and Ecological Speciation within One Subspecies of Bacillus subtilis. Applied and Environmental Microbiology, 2014, 80, 4842-4853.	3.1	44
17	Speedy speciation in a bacterial microcosm: new species can arise as frequently as adaptations within a species. ISME Journal, 2013, 7, 1080-1091.	9.8	62
18	The Variable Subdomain of Escherichia coli SecA Functions To Regulate SecA ATPase Activity and ADP Release. Journal of Bacteriology, 2012, 194, 2205-2213.	2.2	12

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19	Demarcation of bacterial ecotypes from DNA sequence data: A comparative analysis of four algorithms. , 2012, , .		4
20	Functional Genomics in an Ecological and Evolutionary Context: Maximizing the Value of Genomes in Systems Biology. Advances in Photosynthesis and Respiration, 2012, , 1-16.	1.0	7
21	Prokaryotic Sex: Eukaryote-like Qualities of Recombination in an Archaean Lineage. Current Biology, 2012, 22, R601-R602.	3.9	13
22	Diversity of Bacteria and Archaea in hypersaline sediment from Death Valley National Park, California. MicrobiologyOpen, 2012, 1, 135-148.	3.0	21
23	The quorum sensing diversity within and between ecotypes of <i>Bacillus subtilis</i>. Environmental Microbiology, 2012, 14, 1378-1389.	3.8	49
24	Science Needs More Moneyball. American Scientist, 2012, 100, 182.	0.1	5
25	Fine-Scale Distribution Patterns of Synechococcus Ecological Diversity in Microbial Mats of Mushroom Spring, Yellowstone National Park. Applied and Environmental Microbiology, 2011, 77, 7689-7697.	3.1	72
26	A Theory-Based Pragmatism for Discovering and Classifying Newly Divergent Bacterial Species. , 2011, , 21-41.		14
27	Origins of bacterial diversity through horizontal genetic transfer and adaptation to new ecological niches. FEMS Microbiology Reviews, 2011, 35, 957-976.	8.6	517
28	Microbial Genomics: E.Âcoli Relatives Out of Doors and Out of Body. Current Biology, 2011, 21, R587-R589.	3.9	16
29	Community ecology of hot spring cyanobacterial mats: predominant populations and their functional potential. ISME Journal, 2011, 5, 1262-1278.	9.8	206
30	Influence of Molecular Resolution on Sequence-Based Discovery of Ecological Diversity among <i>Synechococcus</i> Populations in an Alkaline Siliceous Hot Spring Microbial Mat. Applied and Environmental Microbiology, 2011, 77, 1359-1367.	3.1	44
31	Synthetic Biology: Now that We're Creators, What Should We Create?. Current Biology, 2010, 20, R675-R677.	3.9	9
32	Ecology of Speciation in the Genus <i>Bacillus</i>. Applied and Environmental Microbiology, 2010, 76, 1349-1358.	3.1	97
33	The Origins of Ecological Diversity in Prokaryotes. Current Biology, 2008, 18, R1024-R1034.	3.9	159
34	Identifying the fundamental units of bacterial diversity: A paradigm shift to incorporate ecology into bacterial systematics. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2504-2509.	7.1	286
35	Population level functional diversity in a microbial community revealed by comparative genomic and metagenomic analyses. ISME Journal, 2007, 1, 703-713.	9.8	216
36	Mass spectrometric analysis of lipopeptides from Bacillus strains isolated from diverse geographical locations. FEMS Microbiology Letters, 2007, 271, 83-89.	1.8	94

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37	A Systematics for Discovering the Fundamental Units of Bacterial Diversity. Current Biology, 2007, 17, R373-R386.	3.9	236
38	Estimating Bacterial Diversity from Environmental DNA: A Maximum Likelihood Approach. , 2007, , 133-144.		0
39	Identifying the Fundamental Units of Diversity Among Bacillus Isolates From "Evolution Canyon" III. Israel Journal of Ecology and Evolution, 2006, 52, 543-552.	0.6	7
40	Towards a conceptual and operational union of bacterial systematics, ecology, and evolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1985-1996.	4.0	187
41	Cyanobacterial ecotypes in the microbial mat community of Mushroom Spring (Yellowstone National) Tj ETQq1 1 0.784314 rgBT /Overlo function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1997-2008.	4.0	183
42	Re-evaluating prokaryotic species. Nature Reviews Microbiology, 2005, 3, 733-739.	28.6	1,019
43	Periodic Selection and Ecological Diversity in Bacteria. , 2005, , 78-93.		28
44	Gradual evolution in bacteria: evidence from Bacillus systematics. Microbiology (United Kingdom), 2003, 149, 3565-3573.	1.8	40
45	What are Bacterial Species?. Annual Review of Microbiology, 2002, 56, 457-487.	7.3	660
46	Sexual Isolation and Speciation in Bacteria. Genetica, 2002, 116, 359-370.	1.1	72
47	Sexual isolation and speciation in bacteria. Contemporary Issues in Genetics and Evolution, 2002, , 359-370.	0.9	6
48	Sexual isolation and speciation in bacteria. Genetica, 2002, 116, 359-70.	1.1	38
49	Bacterial Species and Speciation. Systematic Biology, 2001, 50, 513-524.	5.6	339
50	Bacterial Species and Speciation. Systematic Biology, 2001, 50, 513-524.	5.6	24
51	Barriers to Genetic Exchange between Bacterial Species: Streptococcus pneumoniae Transformation. Journal of Bacteriology, 2000, 182, 1016-1023.	2.2	194
52	Note: Relationship of Bacillus subtilis clades associated with strains 168 and W23: A proposal for Bacillus subtilis subsp. subtilis subsp. nov. and Bacillus subtilis subsp. spizizenii subsp. nov.. International Journal of Systematic and Evolutionary Microbiology, 1999, 49, 1211-1215.	1.7	177
53	Adapt Globally, Act Locally: The Effect of Selective Sweeps on Bacterial Sequence Diversity. Genetics, 1999, 152, 1459-1474.	2.9	83
54	DNA Sequence Similarity Requirements for Interspecific Recombination in Bacillus. Genetics, 1999, 153, 1525-1533.	2.9	142

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55	The Effect of Mismatch Repair and Heteroduplex Formation on Sexual Isolation in Bacillus. Genetics, 1998, 148, 13-18.	2.9	95
56	Homology among nearly all plasmids infecting three Bacillus species. Journal of Bacteriology, 1996, 178, 191-198.	2.2	34
57	RECOMBINATION AND MIGRATION RATES IN NATURAL POPULATIONS OF<i>BACILLUS SUBTILIS</i>AND<i>BACILLUS MOJAVENSIS</i>. Evolution; International Journal of Organic Evolution, 1995, 49, 1081-1094.	2.3	107
58	DOES RECOMBINATION CONSTRAIN NEUTRAL DIVERGENCE AMONG BACTERIAL TAXA?. Evolution; International Journal of Organic Evolution, 1995, 49, 164-175.	2.3	26
59	Recombination and Migration Rates in Natural Populations of Bacillus subtilis and Bacillus mojavensis. Evolution; International Journal of Organic Evolution, 1995, 49, 1081.	2.3	45
60	Does Recombination Constrain Neutral Divergence Among Bacterial Taxa?. Evolution; International Journal of Organic Evolution, 1995, 49, 164.	2.3	12
61	Genetic exchange and evolutionary divergence in prokaryotes. Trends in Ecology and Evolution, 1994, 9, 175-180.	8.7	101
62	Amelioration of the Deleterious Pleiotropic Effects of an Adaptive Mutation in Bacillus subtilis. Evolution; International Journal of Organic Evolution, 1994, 48, 81.	2.3	34
63	The Effects of Rare but Promiscuous Genetic Exchange on Evolutionary Divergence in Prokaryotes. American Naturalist, 1994, 143, 965-986.	2.1	94
64	AMELIORATION OF THE DELETERIOUS PLEIOTROPIC EFFECTS OF AN ADAPTIVE MUTATION IN<i>BACILLUS SUBTILIS</i>. Evolution; International Journal of Organic Evolution, 1994, 48, 81-95.	2.3	62
65	The Potential for Genetic Exchange by Transformation within a Natural Population of Bacillus subtilis. Evolution; International Journal of Organic Evolution, 1991, 45, 1393.	2.3	26
66	THE POTENTIAL FOR GENETIC EXCHANGE BY TRANSFORMATION WITHIN A NATURAL POPULATION OF<i>BACILLUS SUBTILIS</i>. Evolution; International Journal of Organic Evolution, 1991, 45, 1393-1421.	2.3	47
67	A TEST OF THE ROLE OF EPISTASIS IN DIVERGENCE UNDER UNIFORM SELECTION. Evolution; International Journal of Organic Evolution, 1989, 43, 766-774.	2.3	32
68	Uniform Selection as a Diversifying Force in Evolution: Evidence from Drosophila. American Naturalist, 1989, 134, 613-637.	2.1	83
69	Olfactory responses ofDrosophila melanogaster selected for knockdown resistance to ethanol. Behavior Genetics, 1987, 17, 307-312.	2.1	6
70	Genetic divergence under uniform selection. III. Selection for knockdown resistance to ethanol in Drosophila pseudoobscura populations and their replicate lines. Heredity, 1987, 58, 425-433.	2.6	43
71	GENETIC DIVERGENCE UNDER UNIFORM SELECTION. II. DIFFERENT RESPONSES TO SELECTION FOR KNOCKDOWN RESISTANCE TO ETHANOL AMONG <i>DROSOPHILA MELANOGASTER</i> POPULATIONS AND THEIR REPLICATE LINES. Genetics, 1986, 114, 145-164.	2.9	105
72	LATITUDINAL CLINE IN<i>DROSOPHILA MELANOGASTER</i>FOR KNOCKDOWN RESISTANCE TO ETHANOL FUMES AND FOR RATES OF RESPONSE TO SELECTION FOR FURTHER RESISTANCE. Evolution; International Journal of Organic Evolution, 1985, 39, 278-293.	2.3	57

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73	Ethanol tolerances of Drosophila melanogaster populations selected on different concentrations of ethanol supplemented media. Theoretical and Applied Genetics, 1985, 69-69, 603-608.	3.6	16
74	Latitudinal Cline in Drosophila melanogaster for Knockdown Resistance to Ethanol Fumes and for Rates of Response to Selection for Further Resistance. Evolution; International Journal of Organic Evolution, 1985, 39, 278.	2.3	27
75	Genetic Divergence Under Uniform Selection. I. Similarity Among Populations of Drosophila melanogaster in Their Responses to Artificial Selection for Modifiers of ci D. Evolution; International Journal of Organic Evolution, 1984, 38, 55.	2.3	15
76	Can Uniform Selection Retard Random Genetic Divergence Between Isolated Conspecific Populations?. Evolution; International Journal of Organic Evolution, 1984, 38, 495.	2.3	37
77	Sequence-Based Discovery of Ecological Diversity within Legionella. , 0, , 367-376.		8
78	Are Species Cohesive?-A View from Bacteriology. , 0, , 43-65.		13