Diane McDougald

List of Publications by Year
in descending order

82	5,717	109321 35	82547 72
papers	citations	h-index	g-index

95	95	95	7487
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Should we stay or should we go: mechanisms and ecological consequences for biofilm dispersal. Nature Reviews Microbiology, 2012, 10, 39-50.	28.6	702
2	The genomic basis of trophic strategy in marine bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15527-15533.	7.1	685
3	The biofilm life cycle and virulence of Pseudomonas aeruginosa are dependent on a filamentous prophage. ISME Journal, 2009, 3, 271-282.	9.8	296
4	Biofilm formation and phenotypic variation enhance predation-driven persistence of Vibrio cholerae. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16819-16824.	7.1	288
5	Nonculturability: adaptation or debilitation?. FEMS Microbiology Ecology, 1998, 25, 1-9.	2.7	250
6	Entry into, and resuscitation from, the viable but nonculturable state by Vibrio vulnificus in an estuarine environment. Applied and Environmental Microbiology, 1995, 61, 2624-2630.	3.1	242
7	Environmental reservoirs and mechanisms of persistence of Vibrio cholerae. Frontiers in Microbiology, 2013, 4, 375.	3.5	214
8	Pseudomonas aeruginosa PAO1 Preferentially Grows as Aggregates in Liquid Batch Cultures and Disperses upon Starvation. PLoS ONE, 2009, 4, e5513.	2.5	175
9	Sex, Scavengers, and Chaperones: Transcriptome Secrets of DivergentSymbiodiniumThermal Tolerances. Molecular Biology and Evolution, 2016, 33, 2201-2215.	8.9	149
10	â€˜Big things in small packages: the genetics of filamentous phage and effects on fitness of their hostâ€™. FEMS Microbiology Reviews, 2015, 39, 465-487.	8.6	140
11	Study of integration of forward osmosis and biological process: Membrane performance under elevated salt environment. Desalination, 2011, 283, 123-130.	8.2	139
12	Gravity-driven membrane filtration as pretreatment for seawater reverse osmosis: Linking biofouling layer morphology with flux stabilization. Water Research, 2015, 70, 158-173.	11.3	129
13	Coral community response to bleaching on a highly disturbed reef. Scientific Reports, 2016, 6, 20717.	3.3	111
14	Characterization of biofouling in a lab-scale forward osmosis membrane bioreactor (FOMBR). Water Research, 2014, 58, 141-151.	11.3	91
15	The Rise of Pathogens: Predation as a Factor Driving the Evolution of Human Pathogens in the Environment. Microbial Ecology, 2013, 65, 860-868.	2.8	88
16	SmcR-Dependent Regulation of Adaptive Phenotypes in Vibrio vulnificus. Journal of Bacteriology, 2001, 183, 758-762.	2.2	85
17	Bacterial quorum sensing and interference by naturally occurring biomimics. Analytical and Bioanalytical Chemistry, 2007, 387, 445-453.	3.7	82
18	The impact of flux and spacers on biofilm development on reverse osmosis membranes. Journal of Membrane Science, 2012, 405-406, 219-232.	8.2	82

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19	Vibrio cholerae Strains Possess Multiple Strategies for Abiotic and Biotic Surface Colonization. Journal of Bacteriology, 2007, 189, 5348-5360.	2.2	81
20	Glucose Starvation-Induced Dispersal of Pseudomonas aeruginosa Biofilms Is cAMP and Energy Dependent. PLoS ONE, 2012, 7, e42874.	2.5	67
21	Impact of a biofouling layer on the vapor pressure driving force and performance of a membrane distillation process. Journal of Membrane Science, 2013, 438, 140-152.	8.2	65
22	Optimal dosing regimen of nitric oxide donor compounds for the reduction ofPseudomonas aeruginosabiofilm and isolates from wastewater membranes. Biofouling, 2013, 29, 203-212.	2.2	64
23	Quorum sensing-regulated chitin metabolism provides grazing resistance to Vibrio cholerae biofilms. ISME Journal, 2015, 9, 1812-1820.	9.8	59
24	Defences against oxidative stress during starvation in bacteria. Antonie Van Leeuwenhoek, 2002, 81, 3-13.	1.7	58
25	Effect of Pharmaceuticals on the Performance of a Novel Osmotic Membrane Bioreactor (OMBR). Separation Science and Technology, 2012, 47, 543-554.	2.5	55
26	Signal-mediated cross-talk regulates stress adaptation in Vibrio species. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	1.8	54
27	Predation Response of Vibrio fischeri Biofilms to Bacterivorus Protists. Applied and Environmental Microbiology, 2013, 79, 553-558.	3.1	54
28	Dual Role of Mechanisms Involved in Resistance to Predation by Protozoa and Virulence to Humans. Frontiers in Microbiology, 2018, 9, 1017.	3.5	51
29	Dynamic modelling of cell death during biofilm development. Journal of Theoretical Biology, 2012, 295, 23-36.	1.7	48
30	In situ analysis of nucleic acids in cold-induced nonculturable Vibrio vulnificus. Applied and Environmental Microbiology, 1997, 63, 2754-2758.	3.1	48
31	The marine pathogen Vibrio vulnificus encodes a putative homologue of the Vibrio harveyi regulatory gene, luxR: a genetic and phylogenetic comparison. Gene, 2000, 248, 213-221.	2.2	46
32	Biofouling in reverse osmosis processes: The roles of flux, crossflow velocity and concentration polarization in biofilm development. Journal of Membrane Science, 2014, 467, 116-125.	8.2	45
33	Dynamics of biofilm formation under different nutrient levels and the effect on biofouling of a reverse osmosis membrane system. Biofouling, 2013, 29, 319-330.	2.2	44
34	The Common Oceanographer: Crowdsourcing the Collection of Oceanographic Data. PLoS Biology, 2014, 12, e1001947.	5.6	41
35	Analysis of starvation conditions that allow for prolonged culturability of Vibrio vulnificus at low temperature. Microbiology (United Kingdom), 1996, 142, 1675-1684.	1.8	38
36	Succession of biofilm communities responsible for biofouling of membrane bio-reactors (MBRs). PLoS ONE, 2017, 12, e0179855.	2.5	38

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37	Urinary catheter-associated microbiota change in accordance with treatment and infection status. PLoS ONE, 2017, 12, e0177633.	2.5	37
38	Vibrio vulnificus: a physiological and genetic approach to the viable but nonculturable response. Journal of Infection and Chemotherapy, 2000, 6, 115-120.	1.7	35
39	Micro-fabricated polydimethyl siloxane (PDMS) surfaces regulate the development of marine microbial biofilm communities. Biofouling, 2014, 30, 323-335.	2.2	35
40	Relative Contributions of Vibrio Polysaccharide and Quorum Sensing to the Resistance of Vibrio cholerae to Predation by Heterotrophic Protists. PLoS ONE, 2013, 8, e56338.	2.5	32
41	Pyomelanin produced by Vibrio cholerae confers resistance to predation by Acanthamoeba castellanii. FEMS Microbiology Ecology, 2017, 93, .	2.7	31
42	The Impact of Protozoan Predation on the Pathogenicity of Vibrio cholerae. Frontiers in Microbiology, 2020, 11, 17.	3.5	30
43	Environmental cues and genes involved in establishment of the superinfective Pf4 phage of Pseudomonas aeruginosa. Frontiers in Microbiology, 2014, 5, 654.	3.5	28
44	The correlation between biofilm biopolymer composition and membrane fouling in submerged membrane bioreactors. Biofouling, 2014, 30, 1093-1110.	2.2	27
45	Expression stability of 13 housekeeping genes during carbon starvation of Pseudomonas aeruginosa. Journal of Microbiological Methods, 2016, 127, 182-187.	1.6	27
46	Vibrio cholerae residing in food vacuoles expelled by protozoa are more infectious in vivo. Nature Microbiology, 2019, 4, 2466-2474.	13.3	27
47	The role of quorum sensing and the effect of environmental conditions on biofilm formation by strains ofVibrio vulnificus. Biofouling, 2006, 22, 161-172.	2.2	26
48	In situ grazing resistance of Vibrio cholerae in the marine environment. FEMS Microbiology Ecology, 2011, 76, 504-512.	2.7	26
49	Interfaces Between Bacterial and Eukaryotic "Neuroecology". Integrative and Comparative Biology, 2011, 51, 794-806.	2.0	26
50	Biofouling control in reverse osmosis by nitric oxide treatment and its impact on the bacterial community. Journal of Membrane Science, 2018, 550, 313-321.	8.2	24
51	Interactions ofVibriospp. with Zooplankton. Microbiology Spectrum, 2015, 3, .	3.0	23
52	Onset of Microbial Influenced Corrosion (MIC) in Stainless Steel Exposed to Mixed Species Biofilms from Equatorial Seawater. Journal of the Electrochemical Society, 2017, 164, C532-C538.	2.9	21
53	Effect of temperature and plasmid carriage on nonculturability in organisms targeted for release. FEMS Microbiology Ecology, 1995, 17, 229-237.	2.7	19
54	Analysis of microbial community composition in a labâ€scale membrane distillation bioreactor. Journal of Applied Microbiology, 2015, 118, 940-953.	3.1	19

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55	Vibrio2005: the First International Conference on the Biology of Vibrios. Journal of Bacteriology, 2006, 188, 4592-4596.	2.2	17
56	Speciality Grand Challenge for â€œBiofilmsâ€• Frontiers in Cellular and Infection Microbiology, 2021, 11, 632429.	3.9	15
57	Nonculturability: adaptation or debilitation?. FEMS Microbiology Ecology, 1998, 25, 1-9.	2.7	15
58	Global analysis of physiological responses in marine bacteria. Electrophoresis, 1997, 18, 1441-1450.	2.4	14
59	Differential Response of the Microbiome of Pocillopora acuta to Reciprocal Transplantation Within Singapore. Microbial Ecology, 2022, 83, 608-618.	2.8	14
60	Adaptation to an amoeba host drives selection of virulence-associated traits in Vibrio cholerae. ISME Journal, 2022, 16, 856-867.	9.8	14
61	The application of nitric oxide to control biofouling of membrane bioreactors. Microbial Biotechnology, 2015, 8, 549-560.	4.2	13
62	Contact- and Water-Mediated Effects of Macroalgae on the Physiology and Microbiome of Three Indo-Pacific Coral Species. Frontiers in Marine Science, 2020, 6, .	2.5	13
63	Adaptive Responses of Vibrios. , 0, , 133-155.		13
64	Adaptation to an Amoeba Host Leads to Pseudomonas aeruginosa Isolates with Attenuated Virulence. Applied and Environmental Microbiology, 2022, 88, aem0232221.	3.1	13
65	A comparative study on nitric oxide and hypochlorite as a membrane cleaning agent to minimise biofilm growth in a membrane bioreactor (MBR) process. Biochemical Engineering Journal, 2019, 148, 9-15.	3.6	12
66	Species-specific patterns in the vulnerability of Âcarbon-starved bacteria to protist grazing. Aquatic Microbial Ecology, 2011, 64, 105-116.	1.8	12
67	The Repressor C Protein, Pf4r, Controls Superinfection of Pseudomonas aeruginosa PAO1 by the Pf4 Filamentous Phage and Regulates Host Gene Expression. Viruses, 2021, 13, 1614.	3.3	11
68	Characterization of the archaeal community fouling a membrane bioreactor. Journal of Environmental Sciences, 2015, 29, 115-123.	6.1	10
69	Comparative analysis of quantitative methodologies for Vibrionaceae biofilms. Folia Microbiologica, 2016, 61, 449-453.	2.3	9
70	Microbial predation accelerates granulation and modulates microbial community composition. BMC Microbiology, 2021, 21, 91.	3.3	9
71	Protozoal food vacuoles enhance transformation in Vibrio cholerae through SOS-regulated DNA integration. ISME Journal, 2022, 16, 1993-2001.	9.8	9
72	Transformation ofVibrio vulnificus by electroporation. Current Microbiology, 1994, 28, 289-291.	2.2	8

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73	Carbon starvation of Pseudomonas aeruginosa biofilms selects for dispersal insensitive mutants. BMC Microbiology, 2021, 21, 255.	3.3	7
74	Quorum-Sensing Inhibition. , 0, , 393-416.		7
75	Loss of the Acetate Switch in Vibrio vulnificus Enhances Predation Defense against Tetrahymena pyriformis. Applied and Environmental Microbiology, 2022, 88, AEM0166521.	3.1	6
76	Draft Genome Sequence of Shewanella sp. Strain CP20. Genome Announcements, 2015, 3, .	0.8	4
77	Detection and Inhibition of Bacterial Cellâ€“Cell Communication. , 2008, 431, 55-68.		4
78	Complete Genome Sequence of Oyster Isolate Vibrio vulnificus Env1. Genome Announcements, 2018, 6, .	0.8	2
79	Protozoa hosts lead to virulence. Nature Microbiology, 2020, 5, 535-535.	13.3	2
80	Effect of temperature and plasmid carriage on nonculturability in organisms targeted for release. FEMS Microbiology Ecology, 1995, 17, 229-237.	2.7	1
81	Bacterial communication: when does a metabolite become a signal?. Microbiology Australia, 2006, 27, 115.	0.4	1
82	Evolution from Bacteria to Mammalia of selected marker genes involved in energy metabolism and stress responses: Bioinformatic approach and applications in coral reef ecology. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2012, 163, S29.	1.8	0