Dianne K Newman

List of Publications by Year
in descending order

94 papers	8,344 citations	61857 43 h-index	51492 86 g-index
129 all docs	129 docs citations	129 times ranked	8181 citing authors

#	Article	IF	Citations
1	From the soil to the clinic: the impact of microbial secondary metabolites on antibiotic tolerance and resistance. Nature Reviews Microbiology, 2022, 20, 129-142.	13.6	43
2	Soil bacteria protect fungi from phenazines by acting as toxin sponges. Current Biology, 2022, 32, 275-288.e5.	1.8	8
3	Prevalence and Correlates of Phenazine Resistance in Culturable Bacteria from a Dryland Wheat Field. Applied and Environmental Microbiology, 2022, 88, aem0232021.	1.4	4
4	Microbial communities: The metabolic rate is the trait. Current Biology, 2022, 32, R215-R218.	1.8	2
5	Phenazines and toxoflavin act as interspecies modulators of resilience to diverse antibiotics. Molecular Microbiology, 2022, 117, 1384-1404.	1.2	7
6	Visualization of mRNA Expression in Pseudomonas aeruginosa Aggregates Reveals Spatial Patterns of Fermentative and Denitrifying Metabolism. Applied and Environmental Microbiology, 2022, 88, e0043922.	1.4	5
7	Hopanoids Confer Robustness to Physicochemical Variability in the Niche of the Plant Symbiont Bradyrhizobium diazoefficiens. Journal of Bacteriology, 2022, 204, .	1.0	4
8	Draft Genome Sequence of the Free-Living, Iridescent Bacterium Tenacibaculum mesophilum Strain ECR. Microbiology Resource Announcements, 2021, 10, .	0.3	0
9	Bacterial defenses against a natural antibiotic promote collateral resilience to clinical antibiotics. PLoS Biology, 2021, 19, e3001093.	2.6	31
10	Redox-active antibiotics enhance phosphorus bioavailability. Science, 2021, 371, 1033-1037.	6.0	67
11	Computationally designed pyocyanin demethylase acts synergistically with tobramycin to kill recalcitrant Pseudomonas aeruginosa biofilms. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	31
12	The role of hopanoids in fortifying rhizobia against a changing climate. Environmental Microbiology, 2021, 23, 2906-2918.	1.8	17
13	Spatial transcriptomics of planktonic and sessile bacterial populations at single-cell resolution. Science, 2021, 373, .	6.0	140
14	Nitrate Reduction Stimulates and Is Stimulated by Phenazine-1-Carboxylic Acid Oxidation by Citrobacter portucalensis MBL. MBio, 2021, 12, e0226521.	1.8	6
15	Evidence of a Streamlined Extracellular Electron Transfer Pathway from Biofilm Structure, Metabolic Stratification, and Long-Range Electron Transfer Parameters. Applied and Environmental Microbiology, 2021, 87, e0070621.	1.4	13
16	Model Systems to Study the Chronic, Polymicrobial Infections in Cystic Fibrosis: Current Approaches and Exploring Future Directions. MBio, 2021, 12, e0176321.	1.8	26
17	Keystone metabolites of crop rhizosphere microbiomes. Current Biology, 2020, 30, R1131-R1137.	1.8	28
18	Extracellular DNA Promotes Efficient Extracellular Electron Transfer by Pyocyanin in Pseudomonas aeruginosa Biofilms. Cell, 2020, 182, 919-932.e19.	13.5	166

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19	The Potential for Redox-Active Metabolites To Enhance or Unlock Anaerobic Survival Metabolisms in Aerobes. Journal of Bacteriology, 2020, 202, .	1.0	16
20	Heat-shock proteases promote survival of Pseudomonas aeruginosa during growth arrest. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4358-4367.	3.3	33
21	Draft Genome Sequence of the Redox-Active Enteric Bacterium Citrobacter portucalensis Strain MBL. Microbiology Resource Announcements, 2020, 9, .	0.3	5
22	Global landscape of phenazine biosynthesis and biodegradation reveals species-specific colonization patterns in agricultural soils and crop microbiomes. ELife, 2020, 9, .	2.8	44
23	Aggregation of Nontuberculous Mycobacteria Is Regulated by Carbon-Nitrogen Balance. MBio, 2019, 10, .	1.8	19
24	The dormancyâ€specific regulator, SutA, is intrinsically disordered and modulates transcription initiation in Pseudomonas aeruginosa. Molecular Microbiology, 2019, 112, 992-1009.	1.2	11
25	Extended Hopanoid Loss Reduces Bacterial Motility and Surface Attachment and Leads to Heterogeneity in Root Nodule Growth Kinetics in a Bradyrhizobium-Aeschynomene Symbiosis. Molecular Plant-Microbe Interactions, 2019, 32, 1415-1428.	1.4	9
26	The transcription factors ActR and SoxR differentially affect the phenazine tolerance of Agrobacterium tumefaciens. Molecular Microbiology, 2019, 112, 199-218.	1.2	13
27	Draft Genome Sequence of the Iridescent Marine Bacterium Tenacibaculum discolor Strain IMLK18. Microbiology Resource Announcements, 2019, 8, .	0.3	2
28	Quantitative Visualization of Gene Expression in Mucoid and Nonmucoid Pseudomonas aeruginosa Aggregates Reveals Localized Peak Expression of Alginate in the Hypoxic Zone. MBio, 2019, 10, .	1.8	24
29	Refinement of metabolite detection in cystic fibrosis sputum reveals heme correlates with lung function decline. PLoS ONE, 2019, 14, e0226578.	1.1	15
30	A contractile injection system stimulates tubeworm metamorphosis by translocating a proteinaceous effector. ELife, 2019, 8, .	2.8	52
31	PhdA Catalyzes the First Step of Phenazine-1-Carboxylic Acid Degradation in Mycobacterium fortuitum. Journal of Bacteriology, 2018, 200, .	1.0	17
32	Hopanoid lipids: from membranes to plantâ€“bacteria interactions. Nature Reviews Microbiology, 2018, 16, 304-315.	13.6	147
33	Extracellular Electron Transfer Transcends Microbe-Mineral Interactions. Cell Host and Microbe, 2018, 24, 611-613.	5.1	9
34	A personal tribute to Terry Beveridge. Canadian Journal of Microbiology, 2018, 64, ix-xi.	0.8	0
35	Chlorate Specifically Targets Oxidant-Starved, Antibiotic-Tolerant Populations of Pseudomonas aeruginosa Biofilms. MBio, 2018, 9, .	1.8	20
36	Refining the Application of Microbial Lipids as Tracers of Staphylococcus aureus Growth Rates in Cystic Fibrosis Sputum. Journal of Bacteriology, 2018, 200, .	1.0	13

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37	Towards measuring growth rates of pathogens during infections by D₂Oâ€labeling lipidomics. Rapid Communications in Mass Spectrometry, 2018, 32, 2129-2140.	0.7	13
38	Both toxic and beneficial effects of pyocyanin contribute to the lifecycle of Pseudomonas aeruginosa. Molecular Microbiology, 2018, 110, 995-1010.	1.2	95
39	Need for Laboratory Ecosystems To Unravel the Structures and Functions of Soil Microbial Communities Mediated by Chemistry. MBio, 2018, 9, .	1.8	34
40	Structural and mechanistic analysis of the arsenate respiratory reductase provides insight into environmental arsenic transformations. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8614-E8623.	3.3	74
41	The Pyruvate and Î±-Ketoglutarate Dehydrogenase Complexes of Pseudomonas aeruginosa Catalyze Pyocyanin and Phenazine-1-carboxylic Acid Reduction via the Subunit Dihydrolipoamide Dehydrogenase. Journal of Biological Chemistry, 2017, 292, 5593-5607.	1.6	30
42	Polyphosphate granule biogenesis is temporally and functionally tied to cell cycle exit during starvation in Pseudomonas aeruginosa. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2440-E2449.	3.3	93
43	Pyocyanin degradation by a tautomerizing demethylase inhibits Pseudomonas aeruginosa biofilms. Science, 2017, 355, 170-173.	6.0	53
44	Selective Proteomic Analysis of Antibiotic-Tolerant Cellular Subpopulations in Pseudomonas aeruginosa Biofilms. MBio, 2017, 8, .	1.8	40
45	The Colorful World of Extracellular Electron Shuttles. Annual Review of Microbiology, 2017, 71, 731-751.	2.9	181
46	Identification of Fitness Determinants during Energy-Limited Growth Arrest in Pseudomonas aeruginosa. MBio, 2017, 8, .	1.8	45
47	Exposing the Three-Dimensional Biogeography and Metabolic States of Pathogens in Cystic Fibrosis Sputum via Hydrogel Embedding, Clearing, and rRNA Labeling. MBio, 2016, 7, .	1.8	112
48	Cellular and Molecular Biological Approaches to Interpreting Ancient Biomarkers. Annual Review of Earth and Planetary Sciences, 2016, 44, 493-522.	4.6	39
49	Mapping a multiplexed zoo of mRNA expression. Development (Cambridge), 2016, 143, 3632-3637.	1.2	198
50	The physiology of growth arrest: uniting molecular and environmental microbiology. Nature Reviews Microbiology, 2016, 14, 549-562.	13.6	176
51	Stepwise metamorphosis of the tubeworm Hydroides elegans is mediated by a bacterial inducer and MAPK signaling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10097-10102.	3.3	63
52	Predicting the impact of promoter variability on regulatory outputs. Scientific Reports, 2016, 5, 18238.	1.6	9
53	SutA is a bacterial transcription factor expressed during slow growth in Pseudomonas aeruginosa. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E597-605.	3.3	52
54	Trace incorporation of heavy water reveals slow and heterogeneous pathogen growth rates in cystic fibrosis sputum. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E110-6.	3.3	104

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55	Complete Genome Sequence of Curtobacterium sp. Strain MR_MD2014, Isolated from Topsoil in Woods Hole, Massachusetts. Genome Announcements, 2015, 3, .	0.8	3
56	Complete Genome Sequence of Streptomyces sp. Strain CCM_MD2014, Isolated from Topsoil in Woods Hole, Massachusetts. Genome Announcements, 2015, 3, .	0.8	1
57	Enzymatic Degradation of Phenazines Can Generate Energy and Protect Sensitive Organisms from Toxicity. MBio, 2015, 6, e01520-15.	1.8	52
58	A Conversation with James J. Morgan. Annual Review of Earth and Planetary Sciences, 2015, 43, 1-27.	4.6	26
59	Pediatric Cystic Fibrosis Sputum Can Be Chemically Dynamic, Anoxic, and Extremely Reduced Due to Hydrogen Sulfide Formation. MBio, 2015, 6, e00767.	1.8	137
60	Heavy water and ¹⁵<scp>N</scp> labelling with <scp>N</scp>ano<scp>SIMS</scp> analysis reveals growth rateâ€dependent metabolic heterogeneity in chemostats. Environmental Microbiology, 2015, 17, 2542-2556.	1.8	94
61	Specific Hopanoid Classes Differentially Affect Free-Living and Symbiotic States of Bradyrhizobium diazoefficiens. MBio, 2015, 6, e01251-15.	1.8	60
62	The Ferrous Iron-Responsive BqsRS Two-Component System Activates Genes That Promote Cationic Stress Tolerance. MBio, 2015, 6, e02549.	1.8	33
63	Methylation at the C-2 position of hopanoids increases rigidity in native bacterial membranes. ELife, 2015, 4, .	2.8	38
64	Probing the Subcellular Localization of Hopanoid Lipids in Bacteria Using NanoSIMS. PLoS ONE, 2014, 9, e84455.	1.1	41
65	Diverse capacity for 2-methylhopanoid production correlates with a specific ecological niche. ISME Journal, 2014, 8, 675-684.	4.4	85
66	Phenazine redox cycling enhances anaerobic survival in <scp>P</scp>seudomonas aeruginosa by facilitating generation of <scp>ATP</scp> and a protonâ€motive force. Molecular Microbiology, 2014, 92, 399-412.	1.2	190
67	Marine Tubeworm Metamorphosis Induced by Arrays of Bacterial Phage Tailâ€“Like Structures. Science, 2014, 343, 529-533.	6.0	223
68	Anaerobic Bacteria Grow within Candida albicans Biofilms and Induce Biofilm Formation in Suspension Cultures. Current Biology, 2014, 24, 2411-2416.	1.8	164
69	Covalently linked hopanoid-lipid A improves outer-membrane resistance of a Bradyrhizobium symbiont of legumes. Nature Communications, 2014, 5, 5106.	5.8	88
70	Fosmidomycin Decreases Membrane Hopanoids and Potentiates the Effects of Colistin on Burkholderia multivorans Clinical Isolates. Antimicrobial Agents and Chemotherapy, 2014, 58, 5211-5219.	1.4	30
71	Extraction and Measurement of NAD(P)+ and NAD(P)H. Methods in Molecular Biology, 2014, 1149, 311-323.	0.4	35
72	Identification and quantification of polyfunctionalized hopanoids by high temperature gas chromatographyâ€“mass spectrometry. Organic Geochemistry, 2013, 56, 120-130.	0.9	57

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73	The General Stress Response Factor EcfG Regulates Expression of the C-2 Hopanoid Methylase HpnP in Rhodopseudomonas palustris TIE-1. Journal of Bacteriology, 2013, 195, 2490-2498.	1.0	59
74	The Yin and Yang of Phenazine Physiology. , 2013, , 43-69.		8
75	Bacterial Community Morphogenesis Is Intimately Linked to the Intracellular Redox State. Journal of Bacteriology, 2013, 195, 1371-1380.	1.0	268
76	Phenazine Content in the Cystic Fibrosis Respiratory Tract Negatively Correlates with Lung Function and Microbial Complexity. American Journal of Respiratory Cell and Molecular Biology, 2012, 47, 738-745.	1.4	158
77	Quantifying the Dynamics of Bacterial Secondary Metabolites by Spectral Multiphoton Microscopy. ACS Chemical Biology, 2011, 6, 893-899.	1.6	30
78	Phenazine-1-Carboxylic Acid Promotes Bacterial Biofilm Development via Ferrous Iron Acquisition. Journal of Bacteriology, 2011, 193, 3606-3617.	1.0	196
79	The RND-family transporter, HpnN, is required for hopanoid localization to the outer membrane of Rhodopseudomonas palustris TIE-1. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1045-51.	3.3	58
80	Endogenous Phenazine Antibiotics Promote Anaerobic Survival of Pseudomonas aeruginosa via Extracellular Electron Transfer. Journal of Bacteriology, 2010, 192, 365-369.	1.0	251
81	Phenazines affect biofilm formation by Pseudomonas aeruginosa in similar ways at various scales. Research in Microbiology, 2010, 161, 187-191.	1.0	143
82	Identification of a methylase required for 2-methylhopanoid production and implications for the interpretation of sedimentary hopanes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8537-8542.	3.3	191
83	Hopanoids Play a Role in Membrane Integrity and pH Homeostasis in Rhodopseudomonas palustris TIE-1. Journal of Bacteriology, 2009, 191, 6145-6156.	1.0	189
84	Redox Reactions of Phenazine Antibiotics with Ferric (Hydr)oxides and Molecular Oxygen. Environmental Science & Technology, 2008, 42, 2380-2386.	4.6	246
85	Redox-Active Antibiotics Control Gene Expression and Community Behavior in Divergent Bacteria. Science, 2008, 321, 1203-1206.	6.0	394
86	Pyocyanin Alters Redox Homeostasis and Carbon Flux through Central Metabolic Pathways in Pseudomonas aeruginosa PA14. Journal of Bacteriology, 2007, 189, 6372-6381.	1.0	291
87	Biosynthesis of 2-methylbacteriohopanepolyols by an anoxygenic phototroph. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15099-15104.	3.3	251
88	The phenazine pyocyanin is a terminal signalling factor in the quorum sensing network of Pseudomonas aeruginosa. Molecular Microbiology, 2006, 61, 1308-1321.	1.2	639
89	Rethinking 'secondary' metabolism: physiological roles for phenazine antibiotics. Nature Chemical Biology, 2006, 2, 71-78.	3.9	483
90	Spatiometabolic Stratification of Shewanella oneidensis Biofilms. Applied and Environmental Microbiology, 2006, 72, 7324-7330.	1.4	134

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91	Anaerobic regulation by an atypical Arc system in Shewanella oneidensis. Molecular Microbiology, 2005, 56, 1347-1357.	1.2	62
92	Phenazines and Other Redox-Active Antibiotics Promote Microbial Mineral Reduction. Applied and Environmental Microbiology, 2004, 70, 921-928.	1.4	363
93	Protective Role of tolC in Efflux of the Electron Shuttle Anthraquinone-2,6-Disulfonate. Journal of Bacteriology, 2002, 184, 1806-1810.	1.0	89
94	From Geocycles to Genomes and Back. , 0, , 11-P1.		0