Ramunas Stepanauskas

List of Publications by Year in descending order

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130 21,566 67 132 papers citations h-index g-index

151 151 151 19875
all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Insights into the phylogeny and coding potential of microbial dark matter. Nature, 2013, 499, 431-437.	13.7	2,239
2	Minimum information about a single amplified genome (MISAG) and a metagenome-assembled genome (MIMAG) of bacteria and archaea. Nature Biotechnology, 2017, 35, 725-731.	9.4	1,512
3	Co-selection of antibiotic and metal resistance. Trends in Microbiology, 2006, 14, 176-182.	3 . 5	1,462
4	Assembling Single-Cell Genomes and Mini-Metagenomes From Chimeric MDA Products. Journal of Computational Biology, 2013, 20, 714-737.	0.8	1,235
5	Vertical distribution and phylogenetic characterization of marine planktonic Archaea in the Santa Barbara Channel. Applied and Environmental Microbiology, 1997, 63, 50-56.	1.4	563
6	Predominant archaea in marine sediments degrade detrital proteins. Nature, 2013, 496, 215-218.	13.7	526
7	Widespread occurrence and genetic diversity of marine parasitoids belonging to <i>Syndiniales</i> (<i>Alveolata</i>). Environmental Microbiology, 2008, 10, 3349-3365.	1.8	511
8	Potential for Chemolithoautotrophy Among Ubiquitous Bacteria Lineages in the Dark Ocean. Science, 2011, 333, 1296-1300.	6.0	510
9	Single-Cell Genomics Reveals Hundreds of Coexisting Subpopulations in Wild <i>Prochlorococcus</i>). Science, 2014, 344, 416-420.	6.0	506
10	Study of Genetic Diversity of Eukaryotic Picoplankton in Different Oceanic Regions by Small-Subunit rRNA Gene Cloning and Sequencing. Applied and Environmental Microbiology, 2001, 67, 2932-2941.	1.4	470
11	A genomic catalog of Earth's microbiomes. Nature Biotechnology, 2021, 39, 499-509.	9.4	457
12	Assembling Genomes and Mini-metagenomes from Highly Chimeric Reads. Lecture Notes in Computer Science, 2013, , 158-170.	1.0	439
13	Bacterial Community Structure Associated with a Dimethylsulfoniopropionate-Producing North Atlantic Algal Bloom. Applied and Environmental Microbiology, 2000, 66, 4237-4246.	1.4	402
14	Prevalent genome streamlining and latitudinal divergence of planktonic bacteria in the surface ocean. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11463-11468.	3.3	328
15	Assembling the Marine Metagenome, One Cell at a Time. PLoS ONE, 2009, 4, e5299.	1.1	320
16	A Few Cosmopolitan Phylotypes Dominate Planktonic Archaeal Assemblages in Widely Different Oceanic Provinces. Applied and Environmental Microbiology, 2000, 66, 1777-1787.	1.4	311
17	New Abundant Microbial Groups in Aquatic Hypersaline Environments. Scientific Reports, 2011, 1, 135.	1.6	288
18	Single-Cell Genomics Reveals Organismal Interactions in Uncultivated Marine Protists. Science, 2011, 332, 714-717.	6.0	283

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19	Matching phylogeny and metabolism in the uncultured marine bacteria, one cell at a time. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9052-9057.	3.3	278
20	Coselection for microbial resistance to metals and antibiotics in freshwater microcosms. Environmental Microbiology, 2006, 8, 1510-1514.	1.8	258
21	Diversity and Distribution of Marine Microbial Eukaryotes in the Arctic Ocean and Adjacent Seas. Applied and Environmental Microbiology, 2006, 72, 3085-3095.	1.4	258
22	Obtaining genomes from uncultivated environmental microorganisms using FACS–based single-cell genomics. Nature Protocols, 2014, 9, 1038-1048.	5.5	243
23	Capturing Single Cell Genomes of Active Polysaccharide Degraders: An Unexpected Contribution of Verrucomicrobia. PLoS ONE, 2012, 7, e35314.	1.1	236
24	Major role of nitrite-oxidizing bacteria in dark ocean carbon fixation. Science, 2017, 358, 1046-1051.	6.0	229
25	Ubiquitous <i>Gammaproteobacteria </i> dominate dark carbon fixation in coastal sediments. ISME Journal, 2016, 10, 1939-1953.	4.4	223
26	Single cell genomics: an individual look at microbes. Current Opinion in Microbiology, 2012, 15, 613-620.	2.3	212
27	Single-cell genomics-based analysis of virus–host interactions in marine surface bacterioplankton. ISME Journal, 2015, 9, 2386-2399.	4.4	207
28	Influence of industrial contamination on mobile genetic elements: class 1 integron abundance and gene cassette structure in aquatic bacterial communities. ISME Journal, 2008, 2, 417-428.	4.4	191
29	Ecology and evolution of viruses infecting uncultivated SUPO5 bacteria as revealed by single-cell- and meta-genomics. ELife, 2014, 3, e03125.	2.8	186
30	Genome sequencing of a single cell of the widely distributed marine subsurface <i>Dehalococcoidia, </i> phylum <i>Chloroflexi </i> ISME Journal, 2014, 8, 383-397.	4.4	172
31	Improved genome recovery and integrated cell-size analyses of individual uncultured microbial cells and viral particles. Nature Communications, 2017, 8, 84.	5.8	169
32	SUMMER INPUTS OF RIVERINE NUTRIENTS TO THE BALTIC SEA: BIOAVAILABILITY AND EUTROPHICATION RELEVANCE. Ecological Monographs, 2002, 72, 579-597.	2.4	168
33	High-throughput single-cell sequencing identifies photoheterotrophs and chemoautotrophs in freshwater bacterioplankton. ISME Journal, 2012, 6, 113-123.	4.4	168
34	SAR202 Genomes from the Dark Ocean Predict Pathways for the Oxidation of Recalcitrant Dissolved Organic Matter. MBio, 2017, 8, .	1.8	168
35	Decontamination of MDA Reagents for Single Cell Whole Genome Amplification. PLoS ONE, 2011, 6, e26161.	1.1	163
36	Elevated Microbial Tolerance to Metals and Antibiotics in Metal-Contaminated Industrial Environments. Environmental Science &	4.6	162

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37	Charting the Complexity of the Marine Microbiome through Single-Cell Genomics. Cell, 2019, 179, 1623-1635.e11.	13.5	158
38	Viral to metazoan marine plankton nucleotide sequences from the Tara Oceans expedition. Scientific Data, 2017, 4, 170093.	2.4	147
39	Organic matter processing by microbial communities throughout the Atlantic water column as revealed by metaproteomics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E400-E408.	3.3	146
40	Rokubacteria: Genomic Giants among the Uncultured Bacterial Phyla. Frontiers in Microbiology, 2017, 8, 2264.	1.5	142
41	Comparative single-cell genomics reveals potential ecological niches for the freshwater acl Actinobacteria lineage. ISME Journal, 2014, 8, 2503-2516.	4.4	137
42	High DON bioavailability in boreal streams during a spring flood. Limnology and Oceanography, 2000, 45, 1298-1307.	1.6	131
43	Hidden Diversity in Honey Bee Gut Symbionts Detected by Single-Cell Genomics. PLoS Genetics, 2014, 10, e1004596.	1.5	131
44	Genomic sequencing of single microbial cells from environmental samples. Current Opinion in Microbiology, 2008, 11, 198-204.	2.3	130
45	Bacterial tolerances to metals and antibiotics in metal-contaminated and reference streams. FEMS Microbiology Ecology, 2006, 58, 293-302.	1.3	127
46	Bioavailability of wetlandâ€derived DON to freshwater and marine bacterioplankton. Limnology and Oceanography, 1999, 44, 1477-1485.	1.6	126
47	Unveiling <i>in situ</i> interactions between marine protists and bacteria through single cell sequencing. ISME Journal, 2012, 6, 703-707.	4.4	124
48	Single-cell enabled comparative genomics of a deep ocean SAR11 bathytype. ISME Journal, 2014, 8, 1440-1451.	4.4	119
49	Phylogenomics suggests oxygen availability as a driving force in Thaumarchaeota evolution. ISME Journal, 2019, 13, 2150-2161.	4.4	108
50	Strategies to improve reference databases for soil microbiomes. ISME Journal, 2017, 11, 829-834.	4.4	106
51	Single-cell genomics of multiple uncultured stramenopiles reveals underestimated functional diversity across oceans. Nature Communications, 2018, 9, 310.	5.8	101
52	Multi-site Analysis Reveals Widespread Antibiotic Resistance in the Marine Pathogen Vibrio vulnificus. Microbial Ecology, 2009, 57, 151-159.	1.4	100
53	Diverse Marinimicrobia bacteria may mediate coupled biogeochemical cycles along eco-thermodynamic gradients. Nature Communications, 2017, 8, 1507.	5.8	99
54	Single-cell genomics shedding light on marine Thaumarchaeota diversification. ISME Journal, 2014, 8, 732-736.	4.4	98

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55	Genomic and Metabolic Diversity of Marine Group I Thaumarchaeota in the Mesopelagic of Two Subtropical Gyres. PLoS ONE, 2014, 9, e95380.	1.1	95
56	Metabolic potential of a single cell belonging to one of the most abundant lineages in freshwater bacterioplankton. ISME Journal, 2013, 7, 137-147.	4.4	94
57	A virus or more in (nearly) every cell: ubiquitous networks of virus–host interactions in extreme environments. ISME Journal, 2018, 12, 1706-1714.	4.4	94
58	Insights into the metabolism, lifestyle and putative evolutionary history of the novel archaeal phylum â€~Diapherotrites'. ISME Journal, 2015, 9, 447-460.	4.4	89
59	Hydrogen-based metabolism as an ancestral trait in lineages sibling to the Cyanobacteria. Nature Communications, 2019, 10, 463.	5.8	87
60	Capturing diversity of marine heterotrophic protists: one cell at a time. ISME Journal, 2011, 5, 674-684.	4.4	86
61	Diversification and niche adaptations of <i>Nitrospina</i> like bacteria in the polyextreme interfaces of Red Sea brines. ISME Journal, 2016, 10, 1383-1399.	4.4	85
62	What's New Is Old: Resolving the Identity of Leptothrix ochracea Using Single Cell Genomics, Pyrosequencing and FISH. PLoS ONE, 2011, 6, e17769.	1.1	85
63	Telonemia, a new protist phylum with affinity to chromist lineages. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 1833-1842.	1.2	84
64	Insights into the Environmental Resistance Gene Pool from the Genome Sequence of the Multidrug-Resistant Environmental Isolate <i>Escherichia coli</i> SMS-3-5. Journal of Bacteriology, 2008, 190, 6779-6794.	1.0	82
65	Single cell genomes of Prochlorococcus, Synechococcus, and sympatric microbes from diverse marine environments. Scientific Data, 2018, 5, 180154.	2.4	81
66	Antibiotic Resistance in the Shellfish Pathogen Vibrio parahaemolyticus Isolated from the Coastal Water and Sediment of Georgia and South Carolina, USA. Journal of Food Protection, 2008, 71, 2552-2558.	0.8	80
67	Productivity and salinity structuring of the microplankton revealed by comparative freshwater metagenomics. Environmental Microbiology, 2014, 16, 2682-2698.	1.8	80
68	Single-Cell Genome and Group-Specific <i>dsrAB</i> Sequencing Implicate Marine Members of the Class <i>Dehalococcoidia</i> (Phylum <i>Chloroflexi</i>) in Sulfur Cycling. MBio, 2016, 7, .	1.8	78
69	Contrasting patterns of genome-level diversity across distinct co-occurring bacterial populations. ISME Journal, 2018, 12, 742-755.	4.4	76
70	Differential Dissolved Organic Nitrogen Availability and Bacterial Aminopeptidase Activity in Limnic and Marine Waters. Microbial Ecology, 1999, 38, 264-272.	1.4	75
71	Single-cell genomics reveal low recombination frequencies in freshwater bacteria of the SAR11 clade. Genome Biology, 2013, 14, R130.	13.9	74
72	Genomic insights into the uncultivated marine <i>Zetaproteobacteria</i> at Loihi Seamount. ISME Journal, 2015, 9, 857-870.	4.4	69

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73	Tuning fresh: radiation through rewiring of central metabolism in streamlined bacteria. ISME Journal, 2016, 10, 1902-1914.	4.4	66
74	Occurrence and degradation of peptidoglycan in aquatic environments. FEMS Microbiology Ecology, 2003, 46, 269-280.	1.3	64
75	Nanoarchaeota, Their Sulfolobales Host, and Nanoarchaeota Virus Distribution across Yellowstone National Park Hot Springs. Applied and Environmental Microbiology, 2015, 81, 7860-7868.	1.4	63
76	Ancestral Absence of Electron Transport Chains in Patescibacteria and DPANN. Frontiers in Microbiology, 2020, 11, 1848.	1.5	62
77	Single cell genomics indicates horizontal gene transfer and viral infections in a deep subsurface Firmicutes population. Frontiers in Microbiology, 2015, 6, 349.	1.5	61
78	Landscape scale controls on the vascular plant component of dissolved organic carbon across a freshwater delta. Geochimica Et Cosmochimica Acta, 2007, 71, 5968-5984.	1.6	59
79	Assessing the contribution of wetlands and subsided islands to dissolved organic matter and disinfection byproduct precursors in the Sacramento–San Joaquin River Delta: A geochemical approach. Organic Geochemistry, 2008, 39, 1302-1318.	0.9	59
80	Emergence of trait variability through the lens of nitrogen assimilation in Prochlorococcus. ELife, 2019, 8, .	2.8	57
81	Fundamental differences in diversity and genomic population structure between Atlantic and Pacific <i>Prochlorococcus</i> . ISME Journal, 2017, 11, 1997-2011.	4.4	56
82	Evolutionary analysis of a streamlined lineage of surface ocean Roseobacters. ISME Journal, 2014, 8, 1428-1439.	4.4	55
83	Single-cell genomics of a rare environmental alphaproteobacterium provides unique insights into Rickettsiaceae evolution. ISME Journal, 2015, 9, 2373-2385.	4.4	51
84	Ecological Genomics of the Uncultivated Marine Roseobacter Lineage CHAB-I-5. Applied and Environmental Microbiology, 2016, 82, 2100-2111.	1.4	50
85	Genomic comparisons of a bacterial lineage that inhabits both marine and terrestrial deep subsurface systems. Peerl, 2017, 5, e3134.	0.9	50
86	Cell sorting analysis of geographically separated hypersaline environments. Extremophiles, 2013, 17, 265-275.	0.9	46
87	Single-cell genomics of co-sorted Nanoarchaeota suggests novel putative host associations and diversification of proteins involved in symbiosis. Microbiome, 2018, 6, 161.	4.9	44
88	Insights into the dynamics between viruses and their hosts in a hot spring microbial mat. ISME Journal, 2020, 14, 2527-2541.	4.4	42
89	Excess of non-conservative amino acid changes in marine bacterioplankton lineages with reduced genomes. Nature Microbiology, 2017, 2, 17091.	5.9	41
90	Sources, bioavailability, and photoreactivity of dissolved organic carbon in the Sacramento–San Joaquin River Delta. Biogeochemistry, 2005, 74, 131-149.	1.7	40

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91	Genomic exploration of individual giant ocean viruses. ISME Journal, 2017, 11, 1736-1745.	4.4	40
92	Genomics insights into ecotype formation of ammoniaâ€oxidizing archaea in the deep ocean. Environmental Microbiology, 2019, 21, 716-729.	1.8	39
93	Pangenomics Analysis Reveals Diversification of Enzyme Families and Niche Specialization in Globally Abundant SAR202 Bacteria. MBio, 2020, 11 , .	1.8	39
94	Diversification of methanogens into hyperalkaline serpentinizing environments through adaptations to minimize oxidant limitation. ISME Journal, 2021, 15, 1121-1135.	4.4	37
95	Single cell genomics yields a wide diversity of small planktonic protists across major ocean ecosystems. Scientific Reports, 2019, 9, 6025.	1.6	35
96	Analysis of Environmental 18S Ribosomal RNA Sequences reveals Unknown Diversity of the Cosmopolitan Phylum Telonemia. Protist, 2007, 158, 173-180.	0.6	34
97	Unexpected genomic features in widespread intracellular bacteria: evidence for motility of marine chlamydiae. ISME Journal, 2017, 11, 2334-2344.	4.4	34
98	Flow-Cytometric Cell Sorting and Subsequent Molecular Analyses for Culture-Independent Identification of Bacterioplankton Involved in Dimethylsulfoniopropionate Transformations. Applied and Environmental Microbiology, 2005, 71, 1405-1416.	1.4	33
99	Carboxydotrophy potential of uncultivated Hydrothermarchaeota from the subseafloor crustal biosphere. ISME Journal, 2019, 13, 1457-1468.	4.4	31
100	Phosphonate production by marine microbes: Exploring new sources and potential function. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2113386119.	3.3	31
101	Comparing effective population sizes of dominant marine alphaproteobacteria lineages. Environmental Microbiology Reports, 2014, 6, 167-172.	1.0	27
102	Single Cell Genomics Reveals Viruses Consumed by Marine Protists. Frontiers in Microbiology, 2020, 11, 524828.	1.5	26
103	129I in Swedish rivers: distribution and sources. Science of the Total Environment, 2003, 309, 161-172.	3.9	25
104	Report of the workshop for life detection in samples from Mars. Life Sciences in Space Research, 2014, 2, 1-5.	1.2	24
105	Wiretapping into microbial interactions by single cell genomics. Frontiers in Microbiology, 2015, 6, 258.	1.5	23
106	Four Draft Single-Cell Genome Sequences of Novel, Nearly Identical <i>Kiritimatiellaeota</i> Strains Isolated from the Continental Deep Subsurface. Microbiology Resource Announcements, 2019, 8, .	0.3	23
107	Evolutionary stasis of a deep subsurface microbial lineage. ISME Journal, 2021, 15, 2830-2842.	4.4	23
108	Targeted Sorting of Single Virus-Infected Cells of the Coccolithophore Emiliania huxleyi. PLoS ONE, 2011, 6, e22520.	1.1	23

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109	The cyanobacterium $\langle i \rangle$ Prochlorococcus $\langle i \rangle$ has divergent light-harvesting antennae and may have evolved in a low-oxygen ocean. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	20
110	Genomic Comparison of Two Family-Level Groups of the Uncultivated NAG1 Archaeal Lineage from Chemically and Geographically Disparate Hot Springs. Frontiers in Microbiology, 2017, 8, 2082.	1.5	19
111	Phylogenetically and functionally diverse microorganisms reside under the Ross Ice Shelf. Nature Communications, 2022, 13, 117.	5. 8	17
112	Dissecting the dominant hot spring microbial populations based on community-wide sampling at single-cell genomic resolution. ISME Journal, 2022, 16, 1337-1347.	4.4	15
113	Single Cell Genomics-Based Analysis of Gene Content and Expression of Prophages in a Diffuse-Flow Deep-Sea Hydrothermal System. Frontiers in Microbiology, 2019, 10, 1262.	1.5	14
114	Genomic Characterization of Candidate Division LCP-89 Reveals an Atypical Cell Wall Structure, Microcompartment Production, and Dual Respiratory and Fermentative Capacities. Applied and Environmental Microbiology, 2019, 85, .	1.4	14
115	Biomass of pelagic fungi in Baltic rivers. Hydrobiologia, 2009, 623, 105-112.	1.0	13
116	Genomic Analysis of the Yet-Uncultured Binatota Reveals Broad Methylotrophic, Alkane-Degradation, and Pigment Production Capacities. MBio, 2021, 12, .	1.8	13
117	Microbial Diversity and Function in Shallow Subsurface Sediment and Oceanic Lithosphere of the Atlantis Massif. MBio, 2021, 12, e0049021.	1.8	13
118	Characterization of Two Cryptic Plasmids Isolated in Haiti from Clinical Vibrio cholerae Non-O1/Non-O139. Frontiers in Microbiology, 2017, 8, 2283.	1.5	11
119	Single-cell genomics reveals metabolic strategies for microbial growth and survival in an oligotrophic aquifer. Microbiology (United Kingdom), 2014, 160, 362-372.	0.7	10
120	Exploring Microdiversity in Novel Kordia sp. (Bacteroidetes) with Proteorhodopsin from the Tropical Indian Ocean via Single Amplified Genomes. Frontiers in Microbiology, 2017, 8, 1317.	1.5	7
121	Prokaryotic Super Program Advisory Committee DOE Joint Genome Institute, Walnut Creek, CA, March 27, 2013. Standards in Genomic Sciences, 2013, 8, 561-570.	1.5	5
122	Hiding in Plain Sight: The Globally Distributed Bacterial Candidate Phylum PAUC34f. Frontiers in Microbiology, 2020, 11, 376.	1.5	5
123	Synthase-Selective Exploration of a Tunicate Microbiome by Activity-Guided Single-Cell Genomics. ACS Chemical Biology, 2021, 16, 813-819.	1.6	4
124	Genomic Variation Influences Methanothermococcus Fitness in Marine Hydrothermal Systems. Frontiers in Microbiology, 2021, 12, 714920.	1.5	3
125	Lifting the Lid: Nitrifying Archaea Sustain Diverse Microbial Communities Below the Ross Ice Shelf. SSRN Electronic Journal, 0, , .	0.4	3
126	Single cell genome sequencing of laboratory mouse microbiota improves taxonomic and functional resolution of this model microbial community. PLoS ONE, 2022, 17, e0261795.	1.1	3

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127	Novel Integrative Elements and Genomic Plasticity in Ocean Ecosystems. SSRN Electronic Journal, 0, , .	0.4	2
128	De novo synthesis and functional analysis of the phosphatase-encoding gene acl-B of uncultured Actinobacteria from Lake Stechlin (NE Germany). International Microbiology, 2015, 18, 39-47.	1.1	2
129	Reâ€defining microbial diversity from its singleâ€celled building blocks. Environmental Microbiology Reports, 2015, 7, 36-37.	1.0	1
130	Oceanic Crustal Fluid Single Cell Genomics Complements Metagenomic and Metatranscriptomic Surveys With Orders of Magnitude Less Sample Volume. Frontiers in Microbiology, 2021, 12, 738231.	1.5	1