Samuel T Wilson

List of Publications by Year
in descending order

56 papers	2,171 citations	270111 25 h-index	274796 44 g-index
69 all docs	69 docs citations	69 times ranked	3082 citing authors

#	Article	IF	Citations
1	Complex marine microbial communities partition metabolism of scarce resources over the diel cycle. Nature Ecology and Evolution, 2022, 6, 218-229.	3.4	21
2	Overlooked and widespread pennate diatom-diazotroph symbioses in the sea. Nature Communications, 2022, 13, 799.	5.8	26
3	A system of coordinated autonomous robots for Lagrangian studies of microbes in the oceanic deep chlorophyll maximum. Science Robotics, 2021, 6, .	9.9	32
4	Evaluation of argonâ€induced hydrogen production as a method to measure nitrogen fixation by cyanobacteria. Journal of Phycology, 2021, 57, 863-873.	1.0	7
5	Phosphate Scavenging During Lavaâ€Seawater Interaction Offshore of KÄ«lauea Volcano, Hawaii. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009754.	1.0	0
6	Light and depth dependency of nitrogen fixation by the nonâ€photosynthetic, symbiotic cyanobacterium UCYNâ€A. Environmental Microbiology, 2021, 23, 4518-4531.	1.8	14
7	UCYN-A/haptophyte symbioses dominate N2 fixation in the Southern California Current System. ISME Communications, 2021, 1, .	1.7	17
8	Autonomous Tracking and Sampling of the Deep Chlorophyll Maximum Layer in an Open-Ocean Eddy by a Long-Range Autonomous Underwater Vehicle. IEEE Journal of Oceanic Engineering, 2020, 45, 1308-1321.	2.1	22
9	Distinct nitrogen cycling and steep chemical gradients in Trichodesmium colonies. ISME Journal, 2020, 14, 399-412.	4.4	19
10	Global reconstruction reduces the uncertainty of oceanic nitrous oxide emissions and reveals a vigorous seasonal cycle. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11954-11960.	3.3	56
11	Phosphonate cycling supports methane and ethylene supersaturation in the phosphateâ€depleted western North Atlantic Ocean. Limnology and Oceanography, 2020, 65, 2443-2459.	1.6	23
12	Metal isotope signatures from lava-seawater interaction during the 2018 eruption of KÄ«lauea. Geochimica Et Cosmochimica Acta, 2020, 282, 340-356.	1.6	17
13	Unusual marine cyanobacteria/haptophyte symbiosis relies on N2 fixation even in N-rich environments. ISME Journal, 2020, 14, 2395-2406.	4.4	58
14	Life and death of Crocosphaera sp. in the Pacific Ocean: Fine scale predatorâ€“prey dynamics. Limnology and Oceanography, 2020, 65, 2603-2617.	1.6	26
15	A critical review of the ¹⁵N₂ tracer method to measure diazotrophic production in pelagic ecosystems. Limnology and Oceanography: Methods, 2020, 18, 129-147.	1.0	59
16	Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. Biogeosciences, 2020, 17, 5809-5828.	1.3	16
17	Mechanistic Model for the Coexistence of Nitrogen Fixation and Photosynthesis in Marine Trichodesmium. MSystems, 2019, 4, .	1.7	23
18	KÄ«lauea lava fuels phytoplankton bloom in the North Pacific Ocean. Science, 2019, 365, 1040-1044.	6.0	35

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19	A Harmonized Nitrous Oxide (N2O) Ocean Observation Network for the 21st Century. Frontiers in Marine Science, 2019, 6, .	1.2	32
20	Quantifying Oxygen Management and Temperature and Light Dependencies of Nitrogen Fixation by Crocosphaera watsonii. MSphere, 2019, 4, .	1.3	26
21	Effects of nutrient enrichment on surface microbial community gene expression in the oligotrophic North Pacific Subtropical Gyre. ISME Journal, 2019, 13, 374-387.	4.4	17
22	Control of net community production by microbial community respiration at Station ALOHA. Journal of Marine Systems, 2018, 184, 28-35.	0.9	3
23	Editorial: Microbial Ecology in the North Pacific Subtropical Gyre. Frontiers in Marine Science, 2018, 5, .	1.2	1
24	An intercomparison of oceanic methane and nitrous oxide measurements. Biogeosciences, 2018, 15, 5891-5907.	1.3	42
25	Dynamics of Prochlorococcus Diversity and Photoacclimation During Short-Term Shifts in Water Column Stratification at Station ALOHA. Frontiers in Marine Science, 2018, 5, .	1.2	17
26	Synergy among Microbiota and Their Hosts: Leveraging the Hawaiian Archipelago and Local Collaborative Networks To Address Pressing Questions in Microbiome Research. MSystems, 2018, 3, .	1.7	0
27	Production of methane and ethylene from plastic in the environment. PLoS ONE, 2018, 13, e0200574.	1.1	310
28	Nitrogen fixation rates diagnosed from diurnal changes in elemental stoichiometry. Limnology and Oceanography, 2018, 63, 1911-1923.	1.6	5
29	Interannual Variability of Methane and Nitrous Oxide in the North Pacific Subtropical Gyre. Geophysical Research Letters, 2017, 44, 9885-9892.	1.5	18
30	Coordinated regulation of growth, activity and transcription in natural populations of the unicellular nitrogen-fixing cyanobacterium Crocosphaera. Nature Microbiology, 2017, 2, 17118.	5.9	122
31	Temporal variability of nitrogen fixation and particulate nitrogen export at Station ALOHA. Limnology and Oceanography, 2017, 62, 200-216.	1.6	110
32	Chemical microenvironments and single-cell carbon and nitrogen uptake in field-collected colonies of Trichodesmium under different pCO2. ISME Journal, 2017, 11, 1305-1317.	4.4	47
33	Particle export fluxes to the oxygen minimum zone of the eastern tropical North Atlantic. Biogeosciences, 2017, 14, 1825-1838.	1.3	31
34	Variable depth distribution of Trichodesmium clades in the North Pacific Ocean. Environmental Microbiology Reports, 2016, 8, 1058-1066.	1.0	16
35	Metabolic balance in the mixed layer of the oligotrophic North Pacific Ocean from diel changes in O₂/Ar saturation ratios. Geophysical Research Letters, 2015, 42, 3421-3430.	1.5	27
36	Quantifying subtropical North Pacific gyre mixed layer primary productivity from Seaglider observations of diel oxygen cycles. Geophysical Research Letters, 2015, 42, 4032-4039.	1.5	39

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37	Shortâ€term variability in euphotic zone biogeochemistry and primary productivity at Station ALOHA: A case study of summer 2012. Global Biogeochemical Cycles, 2015, 29, 1145-1164.	1.9	22
38	Functional group-specific traits drive phytoplankton dynamics in the oligotrophic ocean. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5972-9.	3.3	118
39	Biological Components and Bioelectronic Interfaces of Water Splitting Photoelectrodes for Solar Hydrogen Production. Chemistry - A European Journal, 2015, 21, 4188-4199.	1.7	8
40	Measurements of nitrogen fixation in the oligotrophic North Pacific Subtropical Gyre using a free-drifting submersible incubation device. Journal of Plankton Research, 2015, 37, 727-739.	0.8	18
41	Evaluation of the utility of xanthophyll cycle pigment dynamics for assessing upper ocean mixing processes at Station ALOHA. Journal of Plankton Research, 2014, 36, 1423-1433.	0.8	18
42	Dissolved hydrogen and methane in the oceanic basaltic biosphere. Earth and Planetary Science Letters, 2014, 405, 62-73.	1.8	43
43	Ecogenomic sensor reveals controls on N2-fixing microorganisms in the North Pacific Ocean. ISME Journal, 2014, 8, 1175-1185.	4.4	70
44	A role for nitrite in the production of nitrous oxide in the lower euphotic zone of the oligotrophic North Pacific Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2014, 85, 47-55.	0.6	28
45	Dissolved hydrogen and nitrogen fixation in the oligotrophic <scp>N</scp>orth <scp>P</scp>acific <scp>S</scp>ubtropical <scp>G</scp>yre. Environmental Microbiology Reports, 2013, 5, 697-704.	1.0	12
46	Metatranscriptomic and functional metagenomic analysis of methylphosphonate utilization by marine bacteria. Frontiers in Microbiology, 2013, 4, 340.	1.5	63
47	Dissolved hydrogen and nitrogen fixation in the oligotrophic North Pacific Subtropical Gyre. Environmental Microbiology Reports, 2013, 5, 697-704.	1.0	5
48	Bacterial Dimethylsulfoniopropionate Degradation Genes in the Oligotrophic North Pacific Subtropical Gyre. Applied and Environmental Microbiology, 2012, 78, 2775-2782.	1.4	39
49	Direct measurement of the oceanic carbon monoxide flux by eddy correlation. Atmospheric Measurement Techniques, 2012, 5, 3069-3075.	1.2	23
50	Comparative Assessment of Nitrogen Fixation Methodologies, Conducted in the Oligotrophic North Pacific Ocean. Applied and Environmental Microbiology, 2012, 78, 6516-6523.	1.4	155
51	NITROGEN FIXATION, HYDROGEN CYCLING, AND ELECTRON TRANSPORT KINETICS IN TRICHODESMIUM ERYTHRAEUM (CYANOBACTERIA) STRAIN IMS101¹. Journal of Phycology, 2012, 48, 595-606.	1.0	21
52	Identification of putative methylotrophic and hydrogenotrophic methanogens within sedimenting material and copepod faecal pellets. Aquatic Microbial Ecology, 2012, 67, 151-160.	0.9	34
53	Hydrogen Cycling by the Unicellular Marine Diazotroph Crocosphaera watsonii Strain WH8501. Applied and Environmental Microbiology, 2010, 76, 6797-6803.	1.4	22
54	Hydrogen production by Trichodesmium erythraeum Cyanothece sp. and Crocosphaera watsonii. Aquatic Microbial Ecology, 2010, 59, 197-206.	0.9	35

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55	Red coralline algae as a source of marine biogenic dimethylsulphoniopropionate. Marine Ecology - Progress Series, 2008, 372, 61-66.	0.9	28
56	Particulate dimethylsulphoxide and dimethylsulphoniopropionate in phytoplankton cultures and Scottish coastal waters. Aquatic Sciences, 2007, 69, 330-340.	0.6	59