

# Lucas J Stal

## List of Publications by Year in descending order

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47  
papers

4,079  
citations

201658

27  
h-index

223791

46  
g-index

50  
all docs

50  
docs citations

50  
times ranked

4546  
citing authors

#	ARTICLE	IF	CITATIONS
1	How rising CO <sub>2</sub> and global warming may stimulate harmful cyanobacterial blooms. <i>Harmful Algae</i> , 2016, 54, 145-159.	4.8	439
2	Physiological ecology of cyanobacteria in microbial mats and other communities. <i>New Phytologist</i> , 1995, 131, 1-32.	7.3	378
3	Adaptive divergence in pigment composition promotes phytoplankton biodiversity. <i>Nature</i> , 2004, 432, 104-107.	27.8	258
4	Comparative structure, primary production and biogenic stabilization of cohesive and non-cohesive marine sediments inhabited by microphytobenthos. <i>Estuarine, Coastal and Shelf Science</i> , 1994, 39, 565-582.	2.1	252
5	Colourful coexistence of red and green picocyanobacteria in lakes and seas. <i>Ecology Letters</i> , 2007, 10, 290-298.	6.4	226
6	Structure and development of a benthic marine microbial mat. <i>FEMS Microbiology Letters</i> , 1985, 31, 111-125.	1.8	223
7	Exopolysaccharide production by the epipellic diatom <i>Cylindrotheca closterium</i> : effects of nutrient conditions. <i>Journal of Experimental Marine Biology and Ecology</i> , 2000, 249, 13-27.	1.5	176
8	The selective advantage of buoyancy provided by gas vesicles for planktonic cyanobacteria in the Baltic Sea. <i>New Phytologist</i> , 1997, 136, 407-417.	7.3	164
9	Analysis of bacterial and archaeal diversity in coastal microbial mats using massive parallel 16S rRNA gene tag sequencing. <i>ISME Journal</i> , 2011, 5, 1701-1712.	9.8	157
10	Molecular ecology of microbial mats. <i>FEMS Microbiology Ecology</i> , 2014, 90, 335-50.	2.7	154
11	Microphytobenthos as a biogeomorphological force in intertidal sediment stabilization. <i>Ecological Engineering</i> , 2010, 36, 236-245.	3.6	140
12	Cyanobacterial Mats and Stromatolites. , 2012, , 65-125.		136
13	Nitrogenase activity in the non-heterocystous cyanobacterium <i>Oscillatoria</i> sp. grown under alternating light-dark cycles. <i>Archives of Microbiology</i> , 1985, 143, 67-71.	2.2	130
14	Colorful microdiversity of <i>Synechococcus</i> strains (picocyanobacteria) isolated from the Baltic Sea. <i>ISME Journal</i> , 2009, 3, 397-408.	9.8	115
15	Phenotypic and genetic diversification of <i>Pseudanabaena</i> spp. (cyanobacteria). <i>ISME Journal</i> , 2009, 3, 31-46.	9.8	103
16	Horizontal transfer of the nitrogen fixation gene cluster in the cyanobacterium <i>Microcoleus chthonoplastes</i> . <i>ISME Journal</i> , 2010, 4, 121-130.	9.8	102
17	Microbial diversity in the hypersaline Lake Meyghan, Iran. <i>Scientific Reports</i> , 2017, 7, 11522.	3.3	76
18	Coastal Microbial Mat Diversity along a Natural Salinity Gradient. <i>PLoS ONE</i> , 2013, 8, e63166.	2.5	71

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19	Fermentation in cyanobacteria1. FEMS Microbiology Reviews, 2006, 21, 179-211.	8.6	70
20	Oxygen protection of nitrogenase in the aerobically nitrogen fixing, non-heterocystous cyanobacterium <i>Oscillatoria</i> sp.. Archives of Microbiology, 1985, 143, 72-76.	2.2	64
21	Light dependency of nitrogen fixation in a coastal cyanobacterial mat. ISME Journal, 2008, 2, 1077-1088.	9.8	53
22	Composition and heterogeneity of the microbial community in a coastal microbial mat as revealed by the analysis of pigments and phospholipid-derived fatty acids. Journal of Sea Research, 2010, 63, 62-70.	1.6	50
23	Dominance of unicellular cyanobacteria in the diazotrophic community in the Atlantic Ocean. Limnology and Oceanography, 2014, 59, 623-637.	3.1	46
24	Effect of salinity on nitrogenase activity and composition of the active diazotrophic community in intertidal microbial mats. Archives of Microbiology, 2012, 194, 483-491.	2.2	43
25	Tracing carbon flow from microphytobenthos to major bacterial groups in an intertidal marine sediment by using an in situ <sup>13</sup> C pulse-chase method. Limnology and Oceanography, 2014, 59, 1275-1287.	3.1	40
26	Bioremediation of chromium contaminated water by diatoms with concomitant lipid accumulation for biofuel production. Journal of Environmental Management, 2018, 227, 313-320.	7.8	39
27	Isolation, characterization and localization of extracellular polymeric substances from the cyanobacterium <i>Arthrospira platensis</i> strain MMG-9. European Journal of Phycology, 2014, 49, 143-150.	2.0	32
28	Sulphate-limited growth in the N <sub>2</sub> -fixing unicellular cyanobacterium <i>Gloeotheca</i> ( <i>N</i> ägeli) sp. PCC 6909. New Phytologist, 1994, 128, 273-281.	7.3	29
29	Dinitrogen fixation in a unicellular chlorophyll <i>d</i> -containing cyanobacterium. ISME Journal, 2012, 6, 1367-1377.	9.8	29
30	Phototrophic marine benthic microbiomes: the ecophysiology of these biological entities. Environmental Microbiology, 2019, 21, 1529-1551.	3.8	29
31	Nitrification and Nitrifying Bacteria in a Coastal Microbial Mat. Frontiers in Microbiology, 2015, 6, 1367.	3.5	27
32	Seasonal development of a coastal microbial mat. Scientific Reports, 2019, 9, 9035.	3.3	26
33	EFFECT OF TEMPERATURE ON THE SENSITIVITY OF NITROGENASE TO OXYGEN IN TWO HETEROCYSTOUS CYANOBACTERIA <sup>1</sup> . Journal of Phycology, 2010, 46, 1172-1179.	2.3	22
34	Nitrogen fixation rates in algal turf communities of a degraded versus less degraded coral reef. Coral Reefs, 2014, 33, 1003-1015.	2.2	21
35	Drivers of the dynamics of diazotrophs and denitrifiers in North Sea bottom waters and sediments. Frontiers in Microbiology, 2015, 6, 738.	3.5	21
36	The biogeochemistry of two eutrophic marine lagoons and its effect on microphytobenthic communities. Hydrobiologia, 1996, 329, 185-198.	2.0	19

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37	Daily rhythmicity in coastal microbial mats. <i>Npj Biofilms and Microbiomes</i> , 2018, 4, 11.	6.4	19
38	Denitrification and the denitrifier community in coastal microbial mats. <i>FEMS Microbiology Ecology</i> , 2015, 91, .	2.7	17
39	LC/IRMS analysis: A powerful technique to trace carbon flow in microphytobenthic communities in intertidal sediments. <i>Journal of Sea Research</i> , 2014, 92, 19-25.	1.6	15
40	Seasonal changes in the biochemical fate of carbon fixed by benthic diatoms in intertidal sediments. <i>Limnology and Oceanography</i> , 2018, 63, 550-569.	3.1	11
41	Structure and development of a benthic marine microbial mat. <i>FEMS Microbiology Letters</i> , 1985, 31, 111-125.	1.8	11
42	Gregarious cyanobacteria. <i>Environmental Microbiology</i> , 2017, 19, 2105-2109.	3.8	10
43	Circadian clock-controlled gene expression in co-cultured, mat-forming cyanobacteria. <i>Scientific Reports</i> , 2020, 10, 14095.	3.3	9
44	A versatile method for simultaneous stable carbon isotope analysis of DNA and RNA nucleotides by liquid chromatography/isotope ratio mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 1401-1411.	1.5	7
45	Fermentation in the unicellular cyanobacterium <i>Microcystis PCC7806</i> . <i>Archives of Microbiology</i> , 1994, 162, 63-69.	2.2	7
46	Interactions between nitrogen fixation and oxygenic photosynthesis in a marine cyanobacterial mat. <i>FEMS Microbiology Letters</i> , 1990, 74, 59-71.	1.8	4
47	Aerobic nitrogen fixation in pure cultures of a benthic marine <i>Oscillatoria</i> (cyanobacteria). <i>FEMS Microbiology Letters</i> , 1981, 11, 295-298.	1.8	3