Lucas J Stal

List of Publications by Citations

47 papers	3,027 citations	26 h-index	48 g-index
48 ext. papers	3,571 ext. citations	6.9 avg, IF	5.37 L-index

#	Paper	IF	Citations
47	Physiological ecology of cyanobacteria in microbial mats and other communities. *New Phytologist*, **1995**, 131, 1-32	9.8	308
46	How rising CO and global warming may stimulate harmful cyanobacterial blooms. *Harmful Algae*, **2016**, 54, 145-159	5.3	277
45	Adaptive divergence in pigment composition promotes phytoplankton biodiversity. *Nature*, **2004**, 432, 104-7	50.4	208
44	Comparative structure, primary production and biogenic stabilization of cohesive and non-cohesive marine sediments inhabited by microphytobenthos. *Estuarine, Coastal and Shelf Science*, **1994**, 39, 565-582	2.9	203
43	Structure and development of a benthic marine microbial mat. *FEMS Microbiology Letters*, **1985**, 31, 111-125	1.9	188
42	Colourful coexistence of red and green picocyanobacteria in lakes and seas. *Ecology Letters*, **2007**, 10, 290-8	10	175
41	Exopolysaccharide production by the epipelic diatom Cylindrotheca closterium: effects of nutrient conditions. *Journal of Experimental Marine Biology and Ecology*, **2000**, 249, 13-27	2.1	152
40	The selective advantage of buoyancy provided by gas vesicles for planktonic cyanobacteria in the Baltic Sea. *New Phytologist*, **1997**, 136, 407-417	9.8	131
39	Nitrogenase activity in the non-heterocystous cyanobacterium Oscillatoria sp. grown under alternating light-dark cycles. *Archives of Microbiology*, **1985**, 143, 67-71	3	122
38	Analysis of bacterial and archaeal diversity in coastal microbial mats using massive parallel 16S rRNA gene tag sequencing. *ISME Journal*, **2011**, 5, 1701-12	11.9	118
37	Microphytobenthos as a biogeomorphological force in intertidal sediment stabilization. *Ecological Engineering*, **2010**, 36, 236-245	3.9	108
36	Molecular ecology of microbial mats. *FEMS Microbiology Ecology*, **2014**, 90, 335-50	4.3	93
35	Colorful microdiversity of Synechococcus strains (picocyanobacteria) isolated from the Baltic Sea. *ISME Journal*, **2009**, 3, 397-408	11.9	92
34	Horizontal transfer of the nitrogen fixation gene cluster in the cyanobacterium Microcoleus chthonoplastes. *ISME Journal*, **2010**, 4, 121-30	11.9	82
33	Cyanobacterial Mats and Stromatolites **2012**, 65-125		74
32	Phenotypic and genetic diversification of Pseudanabaena spp. (cyanobacteria). *ISME Journal*, **2009**, 3, 31-46	11.9	61
31	Oxygen protection of nitrogenase in the aerobically nitrogen fixing, non-heterocystous cyanobacterium Oscillatoria sp.. *Archives of Microbiology*, **1985**, 143, 72-76	3	60

30	Microbial diversity in the hypersaline Lake Meyghan, Iran. *Scientific Reports*, **2017**, 7, 11522	4.9	44
29	Light dependency of nitrogen fixation in a coastal cyanobacterial mat. *ISME Journal*, **2008**, 2, 1077-88	11.9	44
28	Coastal microbial mat diversity along a natural salinity gradient. *PLoS ONE*, **2013**, 8, e63166	3.7	40
27	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	1.9	38
26	Dominance of unicellular cyanobacteria in the diazotrophic community in the Atlantic Ocean. *Limnology and Oceanography*, **2014**, 59, 623-637	4.8	34
25	Effect of salinity on nitrogenase activity and composition of the active diazotrophic community in intertidal microbial mats. *Archives of Microbiology*, **2012**, 194, 483-91	3	33
24	Tracing carbon flow from microphytobenthos to major bacterial groups in an intertidal marine sediment by using an in situ 13C pulse-chase method. *Limnology and Oceanography*, **2014**, 59, 1275-1287	4.8	32
23	Fermentation in cyanobacteria1. *FEMS Microbiology Reviews*, **2006**, 21, 179-211	15.1	31
22	Sulphate-limited growth in the N -fixing unicellular cyanobacterium Gloeothece (Nägeli) sp. PCC 6909. *New Phytologist*, **1994**, 128, 273-281	9.8	27
21	Dinitrogen fixation in a unicellular chlorophyll d-containing cyanobacterium. *ISME Journal*, **2012**, 6, 1367-77	11.9	25
20	Bioremediation of chromium contaminated water by diatoms with concomitant lipid accumulation for biofuel production. *Journal of Environmental Management*, **2018**, 227, 313-320	7.9	23
19	Isolation, characterization and localization of extracellular polymeric substances from the cyanobacterium Arthrospira platensis strain MMG-9. *European Journal of Phycology*, **2014**, 49, 143-150	2.2	22
18	The biogeochemistry of two eutrophic marine lagoons and its effect on microphytobenthic communities. *Hydrobiologia*, **1996**, 329, 185-198	2.4	19
17	Phototrophic marine benthic microbiomes: the ecophysiology of these biological entities. *Environmental Microbiology*, **2019**, 21, 1529-1551	5.2	17
16	Nitrogen fixation rates in algal turf communities of a degraded versus less degraded coral reef. *Coral Reefs*, **2014**, 33, 1003-1015	4.2	16
15	Drivers of the dynamics of diazotrophs and denitrifiers in North Sea bottom waters and sediments. *Frontiers in Microbiology*, **2015**, 6, 738	5.7	15
14	Nitrification and Nitrifying Bacteria in a Coastal Microbial Mat. *Frontiers in Microbiology*, **2015**, 6, 1367	5.7	15
13	EFFECT OF TEMPERATURE ON THE SENSITIVITY OF NITROGENASE TO OXYGEN IN TWO HETEROCYSTOUS CYANOBACTERIA1. *Journal of Phycology*, **2010**, 46, 1172-1179	3	15

12	Denitrification and the denitrifier community in coastal microbial mats. *FEMS Microbiology Ecology*, **2015**, 91,	4.3	13
11	LC/IRMS analysis: A powerful technique to trace carbon flow in microphytobenthic communities in intertidal sediments. *Journal of Sea Research*, **2014**, 92, 19-25	1.9	13
10	Daily rhythmicity in coastal microbial mats. *Npj Biofilms and Microbiomes*, **2018**, 4, 11	8.2	12
9	Seasonal development of a coastal microbial mat. *Scientific Reports*, **2019**, 9, 9035	4.9	10
8	Seasonal changes in the biochemical fate of carbon fixed by benthic diatoms in intertidal sediments. *Limnology and Oceanography*, **2018**, 63, 550-569	4.8	9
7	A versatile method for simultaneous stable carbon isotope analysis of DNA and RNA nucleotides by liquid chromatography/isotope ratio mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2014**, 28, 1401-11	2.2	7
6	Gregarious cyanobacteria. *Environmental Microbiology*, **2017**, 19, 2105-2109	5.2	6
5	Fermentation in the unicellular cyanobacterium Microcystis PCC7806 **1994**, 162, 63		4
4	Interactions between nitrogen fixation and oxegenic photosynthesis in a marine cyanobacterial mat		4
3	Cyanobacterial cellulose synthesis in the light of the photanol concept **2013**, 181-195		3
2	The economics of cyanobacteria-based biofuel production: challenges and opportunities **2013**, 167-180		2
1	Circadian clock-controlled gene expression in co-cultured, mat-forming cyanobacteria. *Scientific Reports*, **2020**, 10, 14095	4.9	2