Anthony W D Larkum

List of Publications by Year
in descending order

109 papers	5,234 citations	76326 40 h-index	98798 67 g-index
113 all docs	113 docs citations	113 times ranked	5097 citing authors

#	Article	IF	Citations
1	Fluorescent pigments in corals are photoprotective. Nature, 2000, 408, 850-853.	27.8	579
2	Selection, breeding and engineering of microalgae for bioenergy and biofuel production. Trends in Biotechnology, 2012, 30, 198-205.	9.3	266
3	The Biasing Effect of Compositional Heterogeneity on Phylogenetic Estimates May be Underestimated. Systematic Biology, 2004, 53, 638-643.	5.6	234
4	A niche for cyanobacteria containing chlorophyll d. Nature, 2005, 433, 820-820.	27.8	185
5	Shopping for plastids. Trends in Plant Science, 2007, 12, 189-195.	8.8	152
6	Light gradients and optical microniches in coral tissues. Frontiers in Microbiology, 2012, 3, 316.	3.5	147
7	Calcification in the Green AlgaHalimeda. Journal of Experimental Botany, 1976, 27, 879-893.	4.8	136
8	An in situ study of photosynthetic oxygen exchange and electron transport rate in the marine macroalga Ulva lactuca (Chlorophyta). Photosynthesis Research, 2002, 74, 281-293.	2.9	135
9	Chlorophyll d: the puzzle resolved. Trends in Plant Science, 2005, 10, 355-357.	8.8	114
10	Endolithic chlorophyll d-containing phototrophs. ISME Journal, 2011, 5, 1072-1076.	9.8	95
11	Early Archean origin of Photosystem <scp>II</scp>. Geobiology, 2019, 17, 127-150.	2.4	95
12	CORAL PHOTOBIOLOGY STUDIED WITH A NEW IMAGING PULSE AMPLITUDE MODULATED FLUOROMETER1. Journal of Phycology, 2005, 41, 335-342.	2.3	89
13	Lateral light transfer ensures efficient resource distribution in symbiont-bearing corals. Journal of Experimental Biology, 2014, 217, 489-498.	1.7	88
14	The Genome of a Southern Hemisphere Seagrass Species (Zostera muelleri). Plant Physiology, 2016, 172, 272-283.	4.8	88
15	The nature of the photosystem II reaction centre in the chlorophyll d-containing prokaryote, Acaryochloris marina. Photochemical and Photobiological Sciences, 2005, 4, 1060.	2.9	85
16	Microbial diversity of biofilm communities in microniches associated with the didemnid ascidian Lissoclinum patella. ISME Journal, 2012, 6, 1222-1237.	9.8	82
17	The major light-harvesting pigment protein ofAcaryochloris marina. FEBS Letters, 2002, 514, 149-152.	2.8	79
18	The â€˜otherâ€™ coral symbiont: Ostreobium diversity and distribution. ISME Journal, 2017, 11, 296-299.	9.8	72

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19	The in situ light microenvironment of corals. Limnology and Oceanography, 2014, 59, 917-926.	3.1	70
20	Unique Origin and Lateral Transfer of Prokaryotic Chlorophyll-b and Chlorophyll-d Light-Harvesting Systems. Molecular Biology and Evolution, 2005, 22, 21-28.	8.9	67
21	Controversy on chloroplast origins. FEBS Letters, 1992, 301, 127-131.	2.8	64
22	In vivo Microscale Measurements of Light and Photosynthesis during Coral Bleaching: Evidence for the Optical Feedback Loop?. Frontiers in Microbiology, 2017, 8, 59.	3.5	64
23	â€œSuper-quenchingâ€•state protects Symbiodinium from thermal stress â€" Implications for coral bleaching. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 840-847.	1.0	63
24	CALCIFICATION IN THE GREEN ALGA HALIMEDA. I. AN ULTRASTRUCTURE STUDY OF THALLUS DEVELOPMENT1. Journal of Phycology, 1977, 13, 6-16.	2.3	63
25	Structure of a large photosystem II supercomplex fromAcaryochloris marina. FEBS Letters, 2005, 579, 1306-1310.	2.8	61
26	Water-oxidizing complex in Photosystem II: Its structure and relation to manganese-oxide based catalysts. Coordination Chemistry Reviews, 2020, 409, 213183.	18.8	61
27	Photoinhibition, UV-B and Algal Photosynthesis. Advances in Photosynthesis and Respiration, 2003, , 351-384.	1.0	56
28	Chlorophyll f-driven photosynthesis in a cavernous cyanobacterium. ISME Journal, 2015, 9, 2108-2111.	9.8	56
29	Chromatic photoacclimation extends utilisable photosynthetically active radiation in the chlorophyll d-containing cyanobacterium, Acaryochloris marina. Photosynthesis Research, 2009, 101, 69-75.	2.9	55
30	Photosynthesis in Algae. Advances in Photosynthesis and Respiration, 2003, , .	1.0	53
31	IMAGING OF OXYGEN DYNAMICS WITHIN THE ENDOLITHIC ALGAL COMMUNITY OF THE MASSIVE CORALPORITES LOBATA¹. Journal of Phycology, 2008, 44, 541-550.	2.3	53
32	Chromatic photoacclimation, photosynthetic electron transport and oxygen evolution in the Chlorophyll d-containing oxyphotobacterium Acaryochloris marina. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 127-135.	1.0	52
33	Photosynthetic inorganic carbon acquisition of Posidonia australis. Aquatic Botany, 1996, 55, 149-157.	1.6	51
34	Excitation energy transfer from phycobiliprotein to chlorophyll d in intact cells of Acaryochloris marina studied by time- and wavelength-resolved fluorescence spectroscopy. Photochemical and Photobiological Sciences, 2005, 4, 1016.	2.9	48
35	Carbon-concentrating mechanisms in seagrasses. Journal of Experimental Botany, 2017, 68, 3773-3784.	4.8	48
36	Iron deficiency induces a chlorophyll d-binding Pcb antenna system around Photosystem I in Acaryochloris marina. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1708, 367-374.	1.0	46

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37	Genome-wide survey of the seagrass Zostera muelleri suggests modification of the ethylene signalling network. Journal of Experimental Botany, 2015, 66, 1489-1498.	4.8	46
38	The biological water-oxidizing complex at the nanoâ€“bio interface. Trends in Plant Science, 2015, 20, 559-568.	8.8	46
39	Time-resolved comparative molecular evolution of oxygenic photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148400.	1.0	44
40	Light-Harvesting Systems in Algae. Advances in Photosynthesis and Respiration, 2003, , 277-304.	1.0	43
41	Photosynthetic Acclimation of Symbiodinium in hospite Depends on Vertical Position in the Tissue of the Scleractinian Coral Montastrea curta. Frontiers in Microbiology, 2016, 7, 230.	3.5	43
42	Calcification in the Green AlgaHalimeda. Journal of Experimental Botany, 1976, 27, 894-907.	4.8	42
43	Inhibition of photosynthetic CO2 fixation in the coral Pocillopora damicornis and its relationship to thermal bleaching. Journal of Experimental Biology, 2014, 217, 2150-62.	1.7	42
44	The emergence of molecular profiling and omics techniques in seagrass biology; furthering our understanding of seagrasses. Functional and Integrative Genomics, 2016, 16, 465-480.	3.5	41
45	Global distribution of a chlorophyll f cyanobacterial marker. ISME Journal, 2020, 14, 2275-2287.	9.8	41
46	Proposed mechanisms for water oxidation by Photosystem II and nanosized manganese oxides. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 156-174.	1.0	40
47	Effective light absorption and absolute electron transport rates in the coral Pocillopora damicornis. Plant Physiology and Biochemistry, 2014, 83, 159-167.	5.8	37
48	Symbiodinium sp. cells produce lightâ€induced intraâ€and extracellular singlet oxygen, which mediates photodamage of the photosynthetic apparatus and has the potential to interact with the animal host in coral symbiosis. New Phytologist, 2016, 212, 472-484.	7.3	37
49	Microenvironmental Ecology of the Chlorophyll b-Containing Symbiotic Cyanobacterium Prochloron in the Didemnid Ascidian Lissoclinum patella. Frontiers in Microbiology, 2012, 3, 402.	3.5	36
50	The Effect of Diel Temperature and Light Cycles on the Growth of Nannochloropsis oculata in a Photobioreactor Matrix. PLoS ONE, 2014, 9, e86047.	2.5	36
51	A Novel Epiphytic Chlorophyll dâ€containing Cyanobacterium Isolated from a Mangroveâ€associated Red Alga. Journal of Phycology, 2012, 48, 1320-1327.	2.3	32
52	Raman properties of chlorophyll d, the major pigment of Acaryochloris marina: studies using both Raman spectroscopy and density functional theory. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 527-534.	3.9	31
53	Formyl group modification of chlorophyll a: a major evolutionary mechanism in oxygenic photosynthesis. Plant, Cell and Environment, 2013, 36, 521-527.	5.7	31
54	Low oxygen affects photophysiology and the level of expression of two-carbon metabolism genes in the seagrass Zostera muelleri. Photosynthesis Research, 2018, 136, 147-160.	2.9	31

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55	Light Respiratory Processes and Gross Photosynthesis in Two Scleractinian Corals. PLoS ONE, 2014, 9, e110814.	2.5	31
56	Algal Plastids: Their Fine Structure and Properties. Advances in Photosynthesis and Respiration, 2003, , 11-28.	1.0	30
57	The Evolution of Chlorophylls and Photosynthesis. , 2006, , 261-282.		30
58	Action spectra of oxygen production and chlorophyll a fluorescence in the green microalga Nannochloropsis oculata. Bioresource Technology, 2014, 169, 320-327.	9.6	29
59	Raman spectroscopy of chlorophyll d from Acaryochloris marina. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1556, 89-91.	1.0	28
60	Photosynthetic acclimation of Nannochloropsis oculata investigated by multi-wavelength chlorophyll fluorescence analysis. Bioresource Technology, 2014, 167, 521-529.	9.6	28
61	Leaf growth in early development is key to biomass heterosis in Arabidopsis. Journal of Experimental Botany, 2020, 71, 2439-2450.	4.8	27
62	Examination of the Photophysical Processes of Chlorophyll d Leading to a Clarification of Proposed Uphill Energy Transfer Processes in Cells of Acaryochloris marinaÂ¶. Photochemistry and Photobiology, 2003, 77, 628.	2.5	26
63	Plastid origins. Trends in Ecology and Evolution, 1992, 7, 378-383.	8.7	25
64	In situ thermal dynamics of shallow water corals is affected by tidal patterns and irradiance. Marine Biology, 2012, 159, 1773-1782.	1.5	25
65	Genomic and proteomic characterization of two novel siphovirus infecting the sedentary facultative epibiont cyanobacterium <scp>A</scp>caryochloris marina. Environmental Microbiology, 2015, 17, 4239-4252.	3.8	25
66	Biofilm Growth and Near-Infrared Radiation-Driven Photosynthesis of the Chlorophyll d -Containing Cyanobacterium Acaryochloris marina. Applied and Environmental Microbiology, 2012, 78, 3896-3904.	3.1	24
67	Optical Properties of Corals Distort Variable Chlorophyll Fluorescence Measurements. Plant Physiology, 2019, 179, 1608-1619.	4.8	24
68	Chlorophylldas the major photopigment inAcaryochloris marina. Journal of Porphyrins and Phthalocyanines, 2002, 06, 763-773.	0.8	22
69	Diversity of cyanobacterial biomarker genes from the stromatolites of Shark Bay, Western Australia. Environmental Microbiology, 2013, 15, 1464-1475.	3.8	21
70	Discovery of Cyanophage Genomes Which Contain Mitochondrial DNA Polymerase. Molecular Biology and Evolution, 2011, 28, 2269-2274.	8.9	20
71	Evolution of the Inner Light-Harvesting Antenna Protein Family of Cyanobacteria, Algae, and Plants. Journal of Molecular Evolution, 2007, 64, 321-331.	1.8	19
72	Non-intrusive Assessment of Photosystem II and Photosystem I in Whole Coral Tissues. Frontiers in Marine Science, 2017, 4, .	2.5	19

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73	Correlation of bio-optical properties with photosynthetic pigment and microorganism distribution in microbial mats from Hamelin Pool, Australia. FEMS Microbiology Ecology, 2019, 95, .	2.7	18
74	Multiple strategies for a high light existence in a tropical marine macroalga. Photosynthesis Research, 1997, 53, 149-159.	2.9	17
75	Gas Transfer Controls Carbon Limitation During Biomass Production by Marine Microalgae. ChemSusChem, 2015, 8, 2727-2736.	6.8	17
76	Photosynthesis and Light Harvesting in Algae. , 2016, , 67-87.		16
77	Gene duplication and the evolution of photosynthetic reaction center proteins. FEBS Letters, 1996, 385, 193-196.	2.8	15
78	The molecular structure of the IsiAâ€“Photosystem I supercomplex, modelled from high-resolution, crystal structures of Photosystem I and the CP43 protein. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 457-465.	1.0	14
79	Thermal effects of tissue optics in symbiont-bearing reef-building corals. Limnology and Oceanography, 2012, 57, 1816-1825.	3.1	14
80	Excitation Dynamics in the Core Antenna in the Photosystem I Reaction Center of the Chlorophylld-Containing Photosynthetic ProkaryoteAcaryochloris marina. Journal of Physical Chemistry B, 2003, 107, 1452-1457.	2.6	13
81	Lack of Methylated Hopanoids Renders the Cyanobacterium Nostoc punctiforme Sensitive to Osmotic and pH Stress. Applied and Environmental Microbiology, 2017, 83, .	3.1	13
82	Photosynthesis and Metabolism of Seagrasses. , 2018, , 315-342.		13
83	Rapid Mass Movement of Chloroplasts during Segment Formation of the Calcifying Siphonalean Green Alga, Halimeda macroloba. PLoS ONE, 2011, 6, e20841.	2.5	13
84	SeagrassDB: An open-source transcriptomics landscape for phylogenetically profiled seagrasses and aquatic plants. Scientific Reports, 2018, 8, 2749.	3.3	12
85	Light transmission of the marine diatom Coscinodiscus wailesii. , 2012, , .		11
86	Biology of the Chlorophyll D-Containing Cyanobacterium Acaryochloris Marina. Cellular Origin and Life in Extreme Habitats, 2007, , 101-123.	0.3	11
87	Reactive oxygen production induced by near-infrared radiation in three strains of the Chl d-containing cyanobacterium Acaryochloris marina. F1000Research, 2013, 2, 44.	1.6	10
88	Genome-resolved metagenomics provides insights into the functional complexity of microbial mats in Blue Holes, Shark Bay. FEMS Microbiology Ecology, 2022, 98, .	2.7	10
89	Rapid TaqMan-Based Quantification of Chlorophyll d -Containing Cyanobacteria in the Genus Acaryochloris. Applied and Environmental Microbiology, 2014, 80, 3244-3249.	3.1	9
90	Photosynthesis and Metabolism in Seagrasses at the Cellular Level. , 0, , 323-345.		9

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91	The Algae and their General Characteristics. Advances in Photosynthesis and Respiration, 2003, , 1-10.	1.0	7
92	An electron paramagnetic resonance investigation of the electron transfer reactions in the chlorophylldcontaining photosystem I ofAcaryochloris marina. FEBS Letters, 2007, 581, 1567-1571.	2.8	7
93	Ecological roles of zoosporic parasites in blue carbon ecosystems. Fungal Ecology, 2013, 6, 319-327.	1.6	7
94	Under high light stress two Indo-Pacific coral species display differential photodamage and photorepair dynamics. Marine Biology, 2016, 163, 1.	1.5	7
95	In situ metabolomic- and transcriptomic-profiling of the host-associated cyanobacteria Prochloron and Acaryochloris marina. ISME Journal, 2018, 12, 556-567.	9.8	7
96	Microenvironment and phylogenetic diversity of <scp>P</scp>rochloron inhabiting the surface of crustose didemnid ascidians. Environmental Microbiology, 2015, 17, 4121-4132.	3.8	5
97	Reactive oxygen production induced by near-infrared radiation in three strains of the Chl d-containing cyanobacterium Acaryochloris marina. F1000Research, 2013, 2, 44.	1.6	5
98	Contributions of Henrik LundegÃ¥rdh. , 2005, , 139-144.		5
99	Estimating Internal Phosphorus Pools in Macroalgae Using Radioactive Phosphorus and Trichloroacetic Acid Extracts. Analytical Biochemistry, 2001, 297, 191-192.	2.4	4
100	Photosynthesis and Metabolism in Seagrasses at the Cellular Level. , 2007, , 323-345.		4
101	Chapter 22. The Evolution of Photosynthesis. Comprehensive Series in Photochemical and Photobiological Sciences, 2007, , 491-521.	0.3	4
102	Light-Harvesting in Cyanobacteria and Eukaryotic Algae: An Overview. Advances in Photosynthesis and Respiration, 2020, , 207-260.	1.0	4
103	Effect of reduced irradiance on 13C uptake, gene expression and protein activity of the seagrass Zostera muelleri. Marine Environmental Research, 2019, 149, 80-89.	2.5	2
104	Editorial: Optics and Ecophysiology of Coral Reef Organisms. Frontiers in Marine Science, 2019, 6, .	2.5	2
105	Recent Advances in the Photosynthesis of Cyanobacteria and Eukaryotic Algae. Advances in Photosynthesis and Respiration, 2020, , 3-9.	1.0	1
106	The Function of MgDVP in a Chlorophyll d-Containing Organism. , 2008, , 1125-1128.		1
107	A Cyanobacteria Enriched Layer of Shark Bay Stromatolites Reveals a New Acaryochloris Strain Living in Near Infrared Light. Microorganisms, 2022, 10, 1035.	3.6	1
108	Electrogenic plasma membrane H+-ATPase activity using voltage sensitive dyes. Journal of Bioenergetics and Biomembranes, 2010, 42, 387-393.	2.3	0

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109	The Golden Apples of the Sun: the History of Photosynthesisâ€"so Far. Advanced Topics in Science and Technology in China, 2013, , 834-839.	0.1	0