John A Raven

List of Publications by Year
in descending order

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275 papers	26,178 citations	5896 81 h-index	7950 149 g-index
290 all docs	290 docs citations	290 times ranked	21743 citing authors

#	ARTICLE	IF	CITATIONS
1	The Evolution of Modern Eukaryotic Phytoplankton. Science, 2004, 305, 354-360.	12.6	1,287
2	CO2CONCENTRATING MECHANISMS IN ALGAE: Mechanisms, Environmental Modulation, and Evolution. Annual Review of Plant Biology, 2005, 56, 99-131.	18.7	1,238
3	Plant nutrient-acquisition strategies change with soil age. Trends in Ecology and Evolution, 2008, 23, 95-103.	8.7	1,092
4	Algae as nutritional and functional food sources: revisiting our understanding. Journal of Applied Phycology, 2017, 29, 949-982.	2.8	984
5	Opportunities for improving phosphorusâ€use efficiency in crop plants. New Phytologist, 2012, 195, 306-320.	7.3	702
6	Temperature and algal growth. New Phytologist, 1988, 110, 441-461.	7.3	624
7	Phosphorus limitation of nitrogen fixation by Trichodesmium in the central Atlantic Ocean. Nature, 2001, 411, 66-69.	27.8	588
8	THE TRANSPORT AND FUNCTION OF SILICON IN PLANTS. Biological Reviews, 1983, 58, 179-207.	10.4	553
9	The role of trace metals in photosynthetic electron transport in O2-evolving organisms. Photosynthesis Research, 1999, 60, 111-150.	2.9	545
10	Pluses and minuses of ammonium and nitrate uptake and assimilation by phytoplankton and implications for productivity and community composition, with emphasis on nitrogen-enriched conditions. Limnology and Oceanography, 2016, 61, 165-197.	3.1	475
11	The future of Blue Carbon science. Nature Communications, 2019, 10, 3998.	12.8	406
12	The iron and molybdenum use efficiencies of plant growth with different energy, carbon and nitrogen sources. New Phytologist, 1988, 109, 279-287.	7.3	374
13	Misuse of the phytoplanktonâ€“zooplankton dichotomy: the need to assign organisms as mixotrophs within plankton functional types. Journal of Plankton Research, 2013, 35, 3-11.	1.8	344
14	Plant mineral nutrition in ancient landscapes: high plant species diversity on infertile soils is linked to functional diversity for nutritional strategies. Plant and Soil, 2010, 334, 11-31.	3.7	323
15	Predictions of Mn and Fe use efficiencies of phototrophic growth as a function of light availability for growth and of C assimilation pathway. New Phytologist, 1990, 116, 1-18.	7.3	317
16	Defining Planktonic Protist Functional Groups on Mechanisms for Energy and Nutrient Acquisition: Incorporation of Diverse Mixotrophic Strategies. Protist, 2016, 167, 106-120.	1.5	290
17	The potential effects of global climate change on microalgal photosynthesis, growth and ecology. Phycologia, 2004, 43, 26-40.	1.4	285
18	Mechanistic interpretation of carbon isotope discrimination by marine macroalgae and seagrasses. Functional Plant Biology, 2002, 29, 355.	2.1	284

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19	Primary productivity of planet earth: biological determinants and physical constraints in terrestrial and aquatic habitats. Global Change Biology, 2001, 7, 849-882.	9.5	281
20	The evolution of inorganic carbon concentrating mechanisms in photosynthesis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 2641-2650.	4.0	281
21	The cost of photoinhibition. Physiologia Plantarum, 2011, 142, 87-104.	5.2	263
22	Selection pressures on stomatal evolution. New Phytologist, 2002, 153, 371-386.	7.3	262
23	Early photosynthetic eukaryotes inhabited low-salinity habitats. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7737-E7745.	7.1	244
24	Algal evolution in relation to atmospheric CO ₂ : carboxylases, carbon-concentrating mechanisms and carbon oxidation cycles. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 493-507.	4.0	231
25	Mechanisms of inorganic-carbon acquisition in marine phytoplankton and their implications for the use of other resources. Limnology and Oceanography, 1991, 36, 1701-1714.	3.1	226
26	Algal and aquatic plant carbon concentrating mechanisms in relation to environmental change. Photosynthesis Research, 2011, 109, 281-296.	2.9	218
27	Energy costs of carbon dioxide concentrating mechanisms in aquatic organisms. Photosynthesis Research, 2014, 121, 111-124.	2.9	199
28	A comparison of ammonium and nitrate as nitrogen sources for photolithotrophs. New Phytologist, 1992, 121, 19-32.	7.3	197
29	TESTING THE EFFECTS OF OCEAN ACIDIFICATION ON ALGAL METABOLISM: CONSIDERATIONS FOR EXPERIMENTAL DESIGNS¹. Journal of Phycology, 2009, 45, 1236-1251.	2.3	194
30	Genomics and chloroplast evolution: what did cyanobacteria do for plants?. Genome Biology, 2003, 4, 209.	9.6	190
31	The influence of N metabolism and organic acid synthesis on the natural abundance of isotopes of carbon in plants. New Phytologist, 1990, 116, 505-529.	7.3	176
32	The future of the northeast <scp>A</scp>tlantic benthic flora in a high <scp>CO</scp>₂ world. Ecology and Evolution, 2014, 4, 2787-2798.	1.9	176
33	Implications of inorganic carbon utilization: ecology, evolution, and geochemistry. Canadian Journal of Botany, 1991, 69, 908-924.	1.1	173
34	Cycling silicon - the role of accumulation in plants. New Phytologist, 2003, 158, 419-421.	7.3	167
35	Free-radical-induced mutation vs redox regulation: Costs and benefits of genes in organelles. Journal of Molecular Evolution, 1996, 42, 482-492.	1.8	166
36	C3 and C4 Pathways of Photosynthetic Carbon Assimilation in Marine Diatoms Are under Genetic, Not Environmental, Control. Plant Physiology, 2007, 145, 230-235.	4.8	166

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37	The effects of reduced and elevated CO 2 and O 2 on the seaweed Lomentaria articulata. Plant, Cell and Environment, 1999, 22, 1303-1310.	5.7	164
38	Changes in pH at the exterior surface of plankton with ocean acidification. Nature Climate Change, 2012, 2, 510-513.	18.8	158
39	Costs of acquiring phosphorus by vascular land plants: patterns and implications for plant coexistence. New Phytologist, 2018, 217, 1420-1427.	7.3	154
40	Exogenous inorganic carbon sources for photosynthesis in seawater by members of the Fucales and the Laminariales (Phaeophyta): ecological and taxonomic implications. Oecologia, 1989, 78, 97-105.	2.0	150
41	Algae lacking carbon-concentrating mechanisms. Canadian Journal of Botany, 2005, 83, 879-890.	1.1	145
42	Speedy small stomata?. Journal of Experimental Botany, 2014, 65, 1415-1424.	4.8	144
43	<scp>R</scp>ubisco: still the most abundant protein of Earth?. New Phytologist, 2013, 198, 1-3.	7.3	143
44	Ecophysiology of photosynthesis in macroalgae. Photosynthesis Research, 2012, 113, 105-125.	2.9	142
45	BIOCHEMICAL DISPOSAL OF EXCESS H+ IN GROWING PLANTS?. New Phytologist, 1986, 104, 175-206.	7.3	141
46	Allometry and stoichiometry of unicellular, colonial and multicellular phytoplankton. New Phytologist, 2009, 181, 295-309.	7.3	138
47	A REVISED ESTIMATE OF THE IRON USE EFFICIENCY OF NITROGEN FIXATION, WITH SPECIAL REFERENCE TO THE MARINE CYANOBACTERIUMTRICHODESMIUMSPP. (CYANOPHYTA)1. Journal of Phycology, 2003, 39, 12-25.	2.3	136
48	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
49	Insights into the Evolution of Multicellularity from the Sea Lettuce Genome. Current Biology, 2018, 28, 2921-2933.e5.	3.9	134
50	THE ROLE OF VACUOLES. New Phytologist, 1987, 106, 357-422.	7.3	130
51	Inorganic carbon acquisition by eukaryotic algae: four current questions. Photosynthesis Research, 2010, 106, 123-134.	2.9	125
52	Low levels of ribosomal <scp>RNA</scp> partly account for the very high photosynthetic phosphorusâ€use efficiency of <scp>P</scp>roteaceae species. Plant, Cell and Environment, 2014, 37, 1276-1298.	5.7	121
53	Carbon acquisition by diatoms. Photosynthesis Research, 2007, 93, 79-88.	2.9	120
54	Inorganic carbon physiology underpins macroalgal responses to elevated CO2. Scientific Reports, 2017, 7, 46297.	3.3	119

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55	The role of CO 2 uptake by roots and CAM in acquisition of inorganic C by plants of the isoetid lifeâ€form: a review, with new data on Eriocaulon decangulare L.. New Phytologist, 1988, 108, 125-148.	7.3	118
56	Inorganic C-sources for Lemanea, Cladophora and Ranunculus in a fast-flowing stream: Measurements of gas exchange and of carbon isotope ratio and their ecological implications. Oecologia, 1982, 53, 68-78.	2.0	117
57	Putting the C in phycology. European Journal of Phycology, 1997, 32, 319-333.	2.0	117
58	Stylites, a vascular land plant without stomata absorbs CO2 via its roots. Nature, 1984, 310, 694-695.	27.8	116
59	NEW LIGHT ON THE SCALING OF METABOLIC RATE WITH THE SIZE OF ALGAE. Journal of Phycology, 2002, 38, 11-16.	2.3	113
60	A Neoproterozoic Transition in the Marine Nitrogen Cycle. Current Biology, 2014, 24, 652-657.	3.9	113
61	The possible evolution and future of CO2-concentrating mechanisms. Journal of Experimental Botany, 2017, 68, 3701-3716.	4.8	111
62	Phagotrophy in the origins of photosynthesis in eukaryotes and as a complementary mode of nutrition in phototrophs: relation to Darwin's insectivorous plants. Journal of Experimental Botany, 2009, 60, 3975-3987.	4.8	108
63	Nitrogen and sulfur assimilation in plants and algae. Aquatic Botany, 2014, 118, 45-61.	1.6	108
64	Physiological correlates of the morphology of early vascular plants. Botanical Journal of the Linnean Society, 1984, 88, 105-126.	1.6	105
65	IS THE GROWTH RATE HYPOTHESIS APPLICABLE TO MICROALGAE?1. Journal of Phycology, 2010, 46, 1-12.	2.3	105
66	Inorganic carbon acquisition by Xiphophora chondrophylla (Phaeophyta, Fucales). Phycologia, 1996, 35, 83-89.	1.4	104
67	Inorganic carbon concentrating mechanisms in relation to the biology of algae. Photosynthesis Research, 2003, 77, 155-171.	2.9	103
68	An Anaplerotic Role for Mitochondrial Carbonic Anhydrase in Chlamydomonas reinhardtii. Plant Physiology, 2003, 132, 2126-2134.	4.8	103
69	The Response of Thalassiosira pseudonana to Long-Term Exposure to Increased CO2 and Decreased pH. PLoS ONE, 2011, 6, e26695.	2.5	103
70	The ins and outs of CO₂. Journal of Experimental Botany, 2016, 67, 1-13.	4.8	102
71	Plant mineral nutrition in ancient landscapes: high plant species diversity on infertile soils is linked to functional diversity for nutritional strategies. Plant and Soil, 2011, 348, 7-27.	3.7	99
72	Microbial rhodopsins are major contributors to the solar energy captured in the sea. Science Advances, 2019, 5, eaaw8855.	10.3	97

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73	Geomicrobiology of Eukaryotic Microorganisms. Geomicrobiology Journal, 2010, 27, 491-519.	2.0	96
74	INORGANIC CARBON ACQUISITION BY CHRYSOPHYTES¹. Journal of Phycology, 2009, 45, 1052-1061.	2.3	94
75	SOURCES OF INORGANIC CARBON FOR PHOTOSYNTHESIS BY THREE SPECIES OF MARINE DIATOM1. Journal of Phycology, 1997, 33, 433-440.	2.3	91
76	Seaweeds in Cold Seas: Evolution and Carbon Acquisition. Annals of Botany, 2002, 90, 525-536.	2.9	90
77	How do marine diatoms fix 10 billion tonnes of inorganic carbon per year?. Canadian Journal of Botany, 2005, 83, 898-908.	1.1	90
78	THE ENERGETICS OF FRESHWATER ALGAE; ENERGY REQUIREMENTS FOR BIOSYNTHESIS AND VOLUME REGULATION. New Phytologist, 1982, 92, 1-20.	7.3	89
79	THE EVOLUTION OF VASCULAR PLANTS IN RELATION TO QUANTITATIVE FUNCTIONING OF DEAD WATERâ€CONDUCTING CELLS AND STOMATA. Biological Reviews, 1993, 68, 337-363.	10.4	89
80	Dynamic CO2 and pH levels in coastal, estuarine, and inland waters: Theoretical and observed effects on harmful algal blooms. Harmful Algae, 2020, 91, 101594.	4.8	88
81	GROWTH, PHOTOSYNTHESIS AND MAINTENANCE METABOLIC COST IN THE DIATOM <i>PHAEODACTYLUM TRICORNUTUM</i> AT VERY LOW LIGHT LEVELS ¹. Journal of Phycology, 1986, 22, 39-48.	2.3	87
82	Evolutionary temperature compensation of carbon fixation in marine phytoplankton. Ecology Letters, 2020, 23, 722-733.	6.4	86
83	Photosynthetic gas exchange under emersed conditions in eulittoral and normally submersed members of the Fucales and the Laminariales: interpretation in relation to C isotope ratio and N and water use efficiency. Oecologia, 1990, 82, 68-80.	2.0	85
84	Exploring Cyanobacterial Mutualisms. Annual Review of Ecology, Evolution, and Systematics, 2007, 38, 255-273.	8.3	85
85	Neoproterozoic origin and multiple transitions to macroscopic growth in green seaweeds. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2551-2559.	7.1	85
86	Macroalgal growth in nutrient-enriched estuaries: A biogeochemical and evolutionary perspective. Water, Air and Soil Pollution, 2003, 3, 7-26.	0.8	83
87	Adaptation, Acclimation and Regulation in Algal Photosynthesis. Advances in Photosynthesis and Respiration, 2003, , 385-412.	1.0	83
88	A Metabolomic Approach to Study Major Metabolite Changes during Acclimation to Limiting CO2 in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 2010, 154, 187-196.	4.8	80
89	Testing the climate intervention potential of ocean afforestation using the Great Atlantic Sargassum Belt. Nature Communications, 2021, 12, 2556.	12.8	79
90	Why are there no picoplanktonic O2 evolvers with volumes less than 10âˆ'19 m3?. Journal of Plankton Research, 1994, 16, 565-580.	1.8	78

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91	Protein turnover and plant RNA and phosphorus requirements in relation to nitrogen fixation. Plant Science, 2012, 188-189, 25-35.	3.6	78
92	Responses of aquatic photosynthetic organisms to increased solar UVB. Journal of Photochemistry and Photobiology B: Biology, 1991, 9, 239-244.	3.8	77
93	Photosynthesis in a marine diatom. Nature, 2001, 412, 40-41.	27.8	77
94	Growth and photoregulation dynamics of the picoeukaryote Pelagomonas calceolata in fluctuating light. Limnology and Oceanography, 2009, 54, 823-836.	3.1	76
95	The analysis of photosynthesis in air and water of Ascophyllum nodosum (L.) Le Jol.. Oecologia, 1986, 69, 288-295.	2.0	73
96	Regulation of inorganic carbon acquisition by phosphorus limitation in the green alga Chlorella emersonii. Canadian Journal of Botany, 2005, 83, 859-864.	1.1	73
97	The Algal Revolution. Trends in Plant Science, 2017, 22, 726-738.	8.8	73
98	THE INTERACTION BETWEEN INORGANIC CARBON ACQUISITION AND LIGHT SUPPLY IN PALMARIA PALMATA (RHODOPHYTA)1. Journal of Phycology, 1995, 31, 369-375.	2.3	72
99	A Large Population of Small Chloroplasts in Tobacco Leaf Cells Allows More Effective Chloroplast Movement Than a Few Enlarged Chloroplasts. Plant Physiology, 2002, 129, 112-121.	4.8	70
100	Oceanic protists with different forms of acquired phototrophy display contrasting biogeographies and abundance. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170664.	2.6	63
101	Could landâ€based early photosynthesizing ecosystems have bioengineered the planet in midâ€Palaeozoic times?. Palaeontology, 2015, 58, 803-837.	2.2	62
102	Ocean acidification as a multiple driver: how interactions between changing seawater carbonate parameters affect marine life. Marine and Freshwater Research, 2020, 71, 263.	1.3	62
103	Ammonia and ammonium fluxes between photolithotrophs and the environment in relation to the global nitrogen cycle. New Phytologist, 1992, 121, 5-18.	7.3	58
104	Global aspects of C/N interactions determining plant-environment interactions. Journal of Experimental Botany, 2003, 55, 11-25.	4.8	58
105	Cryptic Photosynthesisâ€"Extrasolar Planetary Oxygen Without a Surface Biological Signature. Astrobiology, 2009, 9, 623-636.	3.0	58
106	DARK CARBON FIXATION STUDIES ON THE INTERTIDAL MACROALGA <i>ASCOPHYLLUM NODOSUM</i> (PHAEOPHYTA) ¹. Journal of Phycology, 1986, 22, 78-83.	2.3	57
107	RNA function and phosphorus use by photosynthetic organisms. Frontiers in Plant Science, 2013, 4, 536.	3.6	56
108	Impact of irradiance on the C allocation in the coastal marine diatom <i>Skeletonema marinoi</i> Sarno and Zingone*. Plant, Cell and Environment, 2011, 34, 1666-1677.	5.7	55

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109	Genomes at the interface between bacteria and organelles. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 5-18.	4.0	54
110	The early evolution of land plants: Aquatic ancestors and atmospheric interactions. Botanical Journal of Scotland, 1995, 47, 151-175.	0.3	53
111	Carbon Acquisition Mechanisms of Algae: Carbon Dioxide Diffusion and Carbon Dioxide Concentrating Mechanisms. Advances in Photosynthesis and Respiration, 2003, , 225-244.	1.0	53
112	Photosynthesis in watercolours. Nature, 2007, 448, 418-418.	27.8	53
113	Forensic carbon accounting: Assessing the role of seaweeds for carbon sequestration. Journal of Phycology, 2022, 58, 347-363.	2.3	53
114	Transport and assimilation of inorganic carbon by Lichina pygmaea under emersed and submersed conditions. New Phytologist, 1990, 114, 407-417.	7.3	52
115	PROCESSES LIMITING PHOTOSYNTHETIC CONDUCTANCE. , 1981, , 109-136.		52
116	Non-Skeletal Biomineralization by Eukaryotes: Matters of Moment and Gravity. Geomicrobiology Journal, 2010, 27, 572-584.	2.0	51
117	IMPACT OF TAXONOMY, GEOGRAPHY, AND DEPTH ON Î´¹³C AND Î´¹⁵N VARIATION IN A LARGE COLLECTION OF MACROALGAE¹. Journal of Phycology, 2011, 47, 1023-1035.	2.3	49
118	Swansong biospheres II: the final signs of life on terrestrial planets near the end of their habitable lifetimes. International Journal of Astrobiology, 2014, 13, 229-243.	1.6	49
119	Enhanced biofuel production using optimality, pathway modification and waste minimization. Journal of Applied Phycology, 2015, 27, 1-31.	2.8	49
120	REPAIR OF PHOTOINHIBITORY DAMAGE IN ANACYSTIS NIDULANS 625 (SYNECHOCOCCUS 6301): RELATION TO CATALYTIC CAPACITY FOR, AND ENERGY SUPPLY TO, PROTEIN SYNTHESIS, AND IMPLICATIONS FOR mumax AND THE EFFICIENCY OF LIGHT-LIMITED GROWTH. New Phytologist, 1986, 103, 625-643.	7.3	48
121	The role of marine biota in the evolution of terrestrial biota: Gases and genes. Biogeochemistry, 1997, 39, 139-164.	3.5	48
122	Interactions of photosynthesis with genome size and function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120264.	4.0	48
123	Carbon-concentrating mechanisms in seagrasses. Journal of Experimental Botany, 2017, 68, 3773-3784.	4.8	48
124	Carbon dioxide as the exogenous inorganic carbon source forBatrachospermumandLemanea. British Phycological Journal, 1981, 16, 165-175.	1.2	46
125	HOW BENTHIC MACROALGAE COPE WITH FLOWING FRESHWATER: RESOURCE ACQUISITION AND RETENTION. Journal of Phycology, 1992, 28, 133-146.	2.3	46
126	Ozone and life on the Archaean Earth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1889-1901.	3.4	46

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127	Insights into the evolution of CCMs from comparisons with other resource acquisition and assimilation processes. Physiologia Plantarum, 2008, 133, 4-14.	5.2	46
128	PRIMARY CARBON AND NITROGEN METABOLIC GENE EXPRESSION IN THE DIATOM<i>THALASSIOSIRA PSEUDONANA</i>(BACILLARIOPHYCEAE): DIEL PERIODICITY AND EFFECTS OF INORGANIC CARBON AND NITROGEN¹. Journal of Phycology, 2009, 45, 1083-1092.	2.3	46
129	Inorganic carbon accumulation by the marine diatomPhaeodactylum tricornutum. European Journal of Phycology, 1996, 31, 285-290.	2.0	45
130	Growth rate affects the responses of the green alga <scp><i>T</i></scp><i>etraselmis suecica</i> to external perturbations. Plant, Cell and Environment, 2014, 37, 512-519.	5.7	45
131	Polar auxin transport in relation to long-distance transport of nutrients in the Charales: Table 1.. Journal of Experimental Botany, 2013, 64, 1-9.	4.8	43
132	Active water transport in unicellular algae: where, why, and how. Journal of Experimental Botany, 2014, 65, 6279-6292.	4.8	43
133	Biological Approaches to Global Environment Change Mitigation and Remediation. Current Biology, 2009, 19, R615-R623.	3.9	42
134	Chloride: essential micronutrient and multifunctional beneficial ion. Journal of Experimental Botany, 2017, 38, erw421.	4.8	42
135	Algae. Current Biology, 2014, 24, R590-R595.	3.9	41
136	Blue carbon: past, present and future, with emphasis on macroalgae. Biology Letters, 2018, 14, 20180336.	2.3	41
137	Functional evolution of photochemical energy transformations in oxygen-producing organisms. Functional Plant Biology, 2009, 36, 505.	2.1	41
138	Oxygen Consumption: Photorespiration and Chlororespiration. Advances in Photosynthesis and Respiration, 2003, , 157-181.	1.0	40
139	Carboxysomes and peptidoglycan walls of cyanelles: possible physiological functions. European Journal of Phycology, 2003, 38, 47-53.	2.0	40
140	The evolution of autotrophy in relation to phosphorus requirement. Journal of Experimental Botany, 2013, 64, 4023-4046.	4.8	40
141	Influence of changes in CO2 concentration and temperature on marine phytoplankton 13C/12C ratios: an analysis of possible mechanisms. Global and Planetary Change, 1993, 8, 1-12.	3.5	39
142	Evolution of tree nutrition. Tree Physiology, 2010, 30, 1050-1071.	3.1	38
143	The possible roles of algae in restricting the increase in atmospheric CO₂and global temperature. European Journal of Phycology, 2017, 52, 506-522.	2.0	38
144	Terrestrial rhizophytes and H+ currents circulating over at least a millimetre: an obligate relationship?. New Phytologist, 1991, 117, 177-185.	7.3	36

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145	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
146	Limitations on microalgal growth at very low photon fluence rates: the role of energy slippage. Photosynthesis Research, 2006, 88, 299-310.	2.9	35
147	Photosynthesis in reproductive structures: costs and benefits. Journal of Experimental Botany, 2015, 66, 1699-1705.	4.8	35
148	What is the limit for photoautotrophic plankton growth rates?. Journal of Plankton Research, 2017, 39, 13-22.	1.8	35
149	Intraspecific chemical communication in microalgae. New Phytologist, 2017, 215, 516-530.	7.3	34
150	The C4-like characteristics of the intertidal macroalga Ascophyllum nodosum (L.) Le Jolis (Fucales,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.4	33
151	Influences of different nitrogen sources on nitrogen- and water-use efficiency, and carbon isotope discrimination, in C 3 Triticum aestivum L. and C 4 Zea mays L. plants. Planta, 1998, 205, 574-580.	3.2	33
152	The mixotrophic nature of photosynthetic plants. Functional Plant Biology, 2013, 40, 425.	2.1	33
153	Inorganic carbon acquisition by eight species ofCaulerpa (Caulerpaceae, Chlorophyta). Phycologia, 2006, 45, 442-449.	1.4	32
154	Energy, genes and evolution: introduction to an evolutionary synthesis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120253.	4.0	32
155	Acclimation, adaptation, traits and trade-offs in plankton functional type models: reconciling terminology for biology and modelling. Journal of Plankton Research, 2015, 37, 683-691.	1.8	32
156	Physiological evolution of lower embryophytes. , 2004, , 17-41.		32
157	Intercellular Transport and Cytoplasmic Streaming inChara hispida. Journal of Experimental Botany, 1984, 35, 1016-1021.	4.8	31
158	Photosynthetic inorganic carbon assimilation byPrasiola stipitata(Prasiolales, Chlorophyta) under emersed and submersed conditions: Relationship to the taxonomy ofPrasiola. British Phycological Journal, 1991, 26, 247-257.	1.2	31
159	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
160	The intrinsic permeability of biological membranes to H+: Significance for the efficiency of low rates of energy transformation. FEMS Microbiology Letters, 1981, 10, 1-5.	1.8	30
161	Photosynthetic carbon assimilation by Crassula helmsii. Oecologia, 1995, 101, 494-499.	2.0	29
162	Carbohydrate Metabolism and Respiration in Algae. Advances in Photosynthesis and Respiration, 2003, , 205-224.	1.0	29

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163	Carbon Acquisition by Microalgae. , 2016, , 89-99.		29
164	Combined Nitrogen. , 2016, , 143-154.		29
165	NONEQUILIBRIUM RATES OF PHOTOSYNTHESIS AND RESPIRATION UNDER DYNAMIC LIGHT SUPPLY1. Journal of Phycology, 1996, 32, 963-969.	2.3	28
166	Photosynthetic acclimation of Nannochloropsis oculata investigated by multi-wavelength chlorophyll fluorescence analysis. Bioresource Technology, 2014, 167, 521-529.	9.6	28
167	Photosynthetic oscillation in individual cells of the marine diatom Coscinodiscus wailesii (Bacillariophyceae) revealed by microsensor measurements. Photosynthesis Research, 2007, 95, 37-44.	2.9	27
168	Limits to Phototrophic Growth in Dense Culture: CO2 Supply and Light. , 2013, , 91-97.		27
169	Energy cost and putative benefits of cellular mechanisms modulating buoyancy in aflagellate marine phytoplankton. Journal of Phycology, 2016, 52, 239-251.	2.3	27
170	Iron acquisition and allocation in stramenopile algae. Journal of Experimental Botany, 2013, 64, 2119-2127.	4.8	26
171	Growth rate hypothesis and efficiency of protein synthesis under different sulphate concentrations in two green algae. Plant, Cell and Environment, 2015, 38, 2313-2317.	5.7	26
172	Potential negative effects of ocean afforestation on offshore ecosystems. Nature Ecology and Evolution, 2022, 6, 675-683.	7.8	26
173	Inorganic carbon acquisition by red seaweeds grown under dynamic light regimes. Hydrobiologia, 1996, 326-327, 401-406.	2.0	25
174	Carbon Sequestration: Photosynthesis and Subsequent Processes. Current Biology, 2006, 16, R165-R167.	3.9	25
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