Carole Anne Llewellyn

List of Publications by Year
in descending order

68	3,994	201674	128289
papers	citations	27 h-index	60 g-index

68	68	68	4510
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The rapid determination of algal chlorophyll and carotenoid pigments and their breakdown products in natural waters by reverse-phase high-performance liquid chromatography. Analytica Chimica Acta, 1983, 151, 297-314.	5.4	825
2	Nutrient recycling of aqueous phase for microalgae cultivation from the hydrothermal liquefaction process. Algal Research, 2012, 1, 70-76.	4.6	415
3	Winter presence of prochlorophytes in surface waters of the northwestern Mediterranean Sea. Limnology and Oceanography, 1990, 35, 1156-1164.	3.1	165
4	Using microalgae in the circular economy to valorise anaerobic digestate: challenges and opportunities. Bioresource Technology, 2018, 267, 732-742.	9.6	159
5	Distribution and Abundance of MAAs in 33 Species of Microalgae across 13 Classes. Marine Drugs, 2010, 8, 1273-1291.	4.6	156
6	Methane flux to the atmosphere from the Arabian Sea. Nature, 1991, 354, 293-296.	27.8	127
7	The Relevance of Marine Chemical Ecology to Plankton and Ecosystem Function: An Emerging Field. Marine Drugs, 2011, 9, 1625-1648.	4.6	106
8	Phytoplankton community assemblage in the English Channel: a comparison using chlorophyll a derived from HPLC-CHEMTAX and carbon derived from microscopy cell counts. Journal of Plankton Research, 2004, 27, 103-119.	1.8	102
9	Quantitative interpretation of chemotaxonomic pigment data. , 2011, , 257-313.		101
10	Microalgal classes and their signature pigments. , 2011, , 3-77.		99
11	Algae biostimulants: A critical look at microalgal biostimulants for sustainable agricultural practices. Biotechnology Advances, 2021, 49, 107754.	11.7	96
12	Nitrogen biogeochemical cycling in the northwestern Indian Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 1993, 40, 651-671.	1.4	93
13	Chlorophyll f and chlorophyll d are produced in the cyanobacterium Chlorogloeopsis fritschii when cultured under natural light and nearâ€infrared radiation. FEBS Letters, 2014, 588, 3770-3777.	2.8	92
14	Size-fractionated primary production and nitrogen assimilation in the northwestern Indian Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 1993, 40, 697-709.	1.4	86
15	The physical and chemical environment and changes in community structure associated with bloom evolution: the Joint Global Flux Study North Atlantic Bloom Experiment. Deep-Sea Research Part II: Topical Studies in Oceanography, 1993, 40, 347-368.	1.4	64
16	Intra-class variability in the carbon, pigment and biomineral content of prymnesiophytes and diatoms. Marine Ecology - Progress Series, 2000, 193, 33-44.	1.9	61
17	Chlorophyll degradation and absorption throughout the digestive system of the blue mussel Mytilus edulis L.. Journal of Experimental Marine Biology and Ecology, 1986, 96, 213-223.	1.5	58
18	The Use of Pollutant and Biogenic Markers as Source Discriminants of Organic Inputs to Estuarine Sediments. International Journal of Environmental Analytical Chemistry, 1986, 27, 29-54.	3.3	58

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19	PRODUCTS OF CHLOROPHYLL PHOTODEGRADATIONâ€“2. STRUCTURAL IDENTIFICATION. Photochemistry and Photobiology, 1990, 52, 1043-1047.	2.5	55
20	High concentrations of mycosporineâ€like amino acids and colored dissolved organic matter in the sea surface microlayer off the Iberian Peninsula. Limnology and Oceanography, 2010, 55, 1835-1850.	3.1	55
21	Cyanobacterial metabolites as a source of sunscreens and moisturizers: a comparison with current synthetic compounds. European Journal of Phycology, 2017, 52, 43-56.	2.0	47
22	PRODUCTS OF CHLOROPHYLL PHOTODEGRADATIONâ€“1. DETECTION and SEPARATION. Photochemistry and Photobiology, 1990, 52, 1037-1041.	2.5	44
23	A low energy process for the recovery of bioproducts from cyanobacteria using a ball mill. Biochemical Engineering Journal, 2012, 69, 48-56.	3.6	44
24	The MAREDAT global database of high performance liquid chromatography marine pigment measurements. Earth System Science Data, 2013, 5, 109-123.	9.9	44
25	Valorising nutrient-rich digestate: Dilution, settlement and membrane filtration processing for optimisation as a waste-based media for microalgal cultivation. Waste Management, 2020, 118, 197-208.	7.4	43
26	Phytoplankton taxa, irradiance and nutrient availability determine the seasonal cycle of DMSP in temperate shelf seas. Marine Ecology - Progress Series, 2009, 394, 111-124.	1.9	43
27	Assessment of Chlorogloeopsis as a novel microbial dietary supplement for red tilapia (Oreochromis) Tj ETQq1 1 0.784314 rgBT /Over	3.5	40
28	The distribution of chlorophylls, carotenoids and their breakdown products in Lake Kinneret (Israel) sediments. Freshwater Biology, 1991, 26, 1-10.	2.4	36
29	Seasonal variation in Pseudo-nitzschia spp. and domoic acid in the Western English Channel. Continental Shelf Research, 2013, 53, 40-49.	1.8	31
30	IMPROVED DETECTION AND CHARACTERIZATION OF FUCOXANTHIN-TYPE CAROTENOIDS: NOVEL PIGMENTS IN EMILIANIA HUXLEYI (PRYMNESIOPHYCEAE)1. Journal of Phycology, 2006, 42, 391-399.	2.3	30
31	Towards a circular economy: A novel microalgal two-step growth approach to treat excess nutrients from digestate and to produce biomass for animal feed. Bioresource Technology, 2021, 320, 124349.	9.6	30
32	The response of carotenoids and chlorophylls during virus infection of Emiliania huxleyi (Prymnesiophyceae). Journal of Experimental Marine Biology and Ecology, 2007, 344, 101-112.	1.5	28
33	Phytoplankton community composition in the south-eastern Black Sea determined with pigments measured by HPLC-CHEMTAX analyses and microscopy cell counts. Journal of the Marine Biological Association of the United Kingdom, 2015, 95, 35-52.	0.8	28
34	Pinkâ€and orangeâ€pigmented Planctomycetes produce saproxanthinâ€type carotenoids including a rare C ₄₅ carotenoid. Environmental Microbiology Reports, 2019, 11, 741-748.	2.4	28
35	Using community metabolomics as a new approach to discriminate marine microbial particulate organic matter in the western English Channel. Progress in Oceanography, 2015, 137, 421-433.	3.2	27
36	Comparing Nutrient Removal from Membrane Filtered and Unfiltered Domestic Wastewater Using Chlorella vulgaris. Biology, 2018, 7, 12.	2.8	26

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37	Intracellular and Extracellular Metabolites from the Cyanobacterium Chlorogloeopsis fritschii, PCC 6912, During 48 Hours of UV-B Exposure. Metabolites, 2019, 9, 74.	2.9	26
38	Synthesis, Regulation and Degradation of Carotenoids Under Low Level UV-B Radiation in the Filamentous Cyanobacterium Chlorogloeopsis fritschii PCC 6912. Frontiers in Microbiology, 2020, 11, 163.	3.5	26
39	Flow cytometry and pigment analyses as tools to investigate the toxicity of herbicides to natural phytoplankton communities. Marine Environmental Research, 2004, 58, 353-358.	2.5	25
40	Combining HPLC pigment markers and ecological similarity indices to assess phytoplankton community structure: An environmental tool for eutrophication?. Science of the Total Environment, 2006, 361, 97-110.	8.0	24
41	Temporal changes in total and size-fractioned chlorophyll-a in surface waters of three provinces in the Atlantic Ocean (September to November) between 2003 and 2010. Journal of Marine Systems, 2015, 150, 56-65.	2.1	23
42	Microbial dynamics during the decline of a spring diatom bloom in the Northeast Atlantic. Journal of Plankton Research, 2007, 30, 261-273.	1.8	22
43	Light Intensity and Nitrogen Concentration Impact on the Biomass and Phycoerythrin Production by Porphyridium purpureum. Marine Drugs, 2019, 17, 460.	4.6	22
44	Characterisation of bacteria from the cultures of a Chlorella strain isolated from textile wastewater and their growth enhancing effects on the axenic cultures of Chlorella vulgaris in low nutrient media. Algal Research, 2019, 44, 101666.	4.6	21
45	Carotenoid metabolism in phytoplankton. , 2011, , 113-162.		19
46	Secondary Metabolites in Cyanobacteria. , 0, , .		18
47	Trace Enrichment of marine algal pigments for use with HPLC-diode array spectroscopy. Journal of High Resolution Chromatography, 1984, 7, 632-635.	1.4	17
48	Modulation of Polar Lipid Profiles in Chlorella sp. in Response to Nutrient Limitation. Metabolites, 2019, 9, 39.	2.9	17
49	Mycosporine-like amino acid and aromatic amino acid transcriptome response to UV and far-red light in the cyanobacterium Chlorogloeopsis fritschii PCC 6912. Scientific Reports, 2020, 10, 20638.	3.3	17
50	Microalgae Cultivation on Nutrient Rich Digestate: The Importance of Strain and Digestate Tailoring under PH Control. Applied Sciences (Switzerland), 2022, 12, 5429.	2.5	17
51	Distribution of Mycosporine-Like Amino Acids Along a Surface Water Meridional Transect of the Atlantic. Microbial Ecology, 2012, 64, 320-333.	2.8	15
52	Pigment biomarkers and particulate carbon in the upper water column compared to the ocean interior of the northeast Atlantic. Deep-Sea Research Part I: Oceanographic Research Papers, 1996, 43, 1165-1184.	1.4	14
53	Atmospheric pressure chemical ionisation liquid chromatography/mass spectrometry of type II chlorophyll-a transformation products: Diagnostic fragmentation patterns. Organic Geochemistry, 2010, 41, 473-481.	1.8	14
54	Type I and Type II chlorophyll-a transformation products associated with algal senescence. Organic Geochemistry, 2011, 42, 451-464.	1.8	14

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55	Far-Red Light Acclimation for Improved Mass Cultivation of Cyanobacteria. Metabolites, 2019, 9, 170.	2.9	14
56	Reversible colony formation and the associated costs in Scenedesmus obliquus. Journal of Plankton Research, 2019, 41, 419-429.	1.8	14
57	Modelling xanthophyll photoprotective activity in phytoplankton. Journal of Plankton Research, 2012, 34, 196-207.	1.8	12
58	A UV absorbing compound in HPLC pigment chromatograms obtained from Icelandic Basin phytoplankton. Marine Ecology - Progress Series, 1997, 158, 283-287.	1.9	12
59	New HPLC separation techniques. , 0, , 165-194.		10
60	EFFECTS OF ULTRAVIOLETâ€A RADIATION AND NUTRIENT AVAILABILITY ON THE CELLULAR COMPOSITION OF PHOTOPROTECTIVE COMPOUNDS IN GLENODINIUM FOLIACEUM (DINOPHYCEAE)¹. Journal of Phycology, 2011, 47, 1078-1088.	2.3	9
61	Chlorophyll-a transformations associated with sinking diatoms during termination of a North Atlantic spring bloom. Marine Chemistry, 2015, 172, 23-33.	2.3	9
62	Transformation of chlorophyll a during viral infection of Emiliania huxleyi. Aquatic Microbial Ecology, 2013, 69, 205-210.	1.8	8
63	Liquid chromatography-mass spectrometry for pigment analysis. , 2011, , 314-342.		7
64	Deriving Economic Value from Metabolites in Cyanobacteria. Grand Challenges in Biology and Biotechnology, 2019, , 535-576.	2.4	3
65	Perspectives on future directions. , 0, , 609-624.		1
66	Turning defence into offence? Intrusion of cladoceran brood chambers by a green alga leads to reproductive failure. Royal Society Open Science, 2020, 7, 200249.	2.4	1
67	Response of Key Metabolites during a UV-A Exposure Time-Series in the Cyanobacterium Chlorogloeopsis fritschii PCC 6912. Microorganisms, 2021, 9, 910.	3.6	1
68	Xanthophylls. , 0, , 728-822.		0