BenoÃ®t Schoefs

List of Publications by Year
in descending order

124 papers	4,960 citations	76196 40 h-index	106150 65 g-index
131 all docs	131 docs citations	131 times ranked	5558 citing authors

#	Article	IF	Citations
1	Nanotechnological approaches to disrupt the rigid cell walled microalgae grown in wastewater for value-added biocompounds: commercial applications, challenges, and breakthrough. Biomass Conversion and Biorefinery, 2023, 13, 13309-13334.	2.9	10
2	Astaxanthin bioaccumulation in microalgae under environmental stress simulated in industrial effluents highlighting prospects of Haematococcus pluvialis: knowledge gaps and prospective approaches. Phytochemistry Reviews, 2023, 22, 1041-1066.	3.1	12
3	Pulsed Electric Fieldâ€“Assisted Cell Permeabilization of Microalgae (Haematococcus pluvialis) for Milking of Value-Added Compounds. Bioenergy Research, 2023, 16, 311-324.	2.2	5
4	Impact of light on microalgal photosynthetic microbial fuel cells and removal of pollutants by nanoadsorbent biopolymers: Updates, challenges and innovations. Chemosphere, 2022, 288, 132589.	4.2	44
5	Perovskite-based solar cells fabricated from TiO2 nanoparticles hybridized with biomaterials from mollusc and diatoms. Chemosphere, 2022, 291, 132692.	4.2	7
6	Hydrogen economy and storage by nanoporous microalgae diatom: Special emphasis on designing photobioreactors. International Journal of Hydrogen Energy, 2022, 47, 42099-42121.	3.8	13
7	Latest trends and developments in microalgae as potential source for biofuels: The case of diatoms. Fuel, 2022, 314, 122738.	3.4	28
8	Editorial: Metabolic Regulation of Diatoms and Other Chromalveolates. Frontiers in Plant Science, 2022, 13, 897639.	1.7	0
9	A techno-economic approach for eliminating dye pollutants from industrial effluent employing microalgae through microbial fuel cells: Barriers and perspectives. Environmental Research, 2022, 212, 113454.	3.7	15
10	Sustainable treatment of dye wastewater by recycling microalgal and diatom biogenic materials: Biorefinery perspectives. Chemosphere, 2022, 305, 135371.	4.2	31
11	Contribution of n-3 Long-Chain Polyunsaturated Fatty Acids to the Prevention of Breast Cancer Risk Factors. International Journal of Environmental Research and Public Health, 2022, 19, 7936.	1.2	10
12	The Potential of the Marine Microalga Diacronema lutheri in the Prevention of Obesity and Metabolic Syndrome in High-Fat-Fed Wistar Rats. Molecules, 2022, 27, 4246.	1.7	8
13	Application of pulsed electric fields for the biocompatible extraction of proteins from the microalga Haematococcus pluvialis. Bioelectrochemistry, 2021, 137, 107588.	2.4	28
14	Graphene oxide decorated TiO2 and BiVO4 nanocatalysts for enhanced visible-light-driven photocatalytic bacterial inactivation. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 418, 113374.	2.0	13
15	Insights into diatom microalgal farming for treatment of wastewater and pretreatment of algal cells by ultrasonication for value creation. Environmental Research, 2021, 201, 111550.	3.7	35
16	â€œLight modulates transcriptomic dynamics upregulating astaxanthin accumulation in Haematococcus: A reviewâ€• Bioresource Technology, 2021, 340, 125707.	4.8	32
17	The Marine Microalga, Tisochrysis lutea, Protects against Metabolic Disorders Associated with Metabolic Syndrome and Obesity. Nutrients, 2021, 13, 430.	1.7	15
18	Diatom microalgae as smart nanocontainers for biosensing wastewater pollutants: recent trends and innovations. Bioengineered, 2021, 12, 9531-9549.	1.4	38

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19	Selection of Culture Conditions and Cell Morphology for Biocompatible Extraction of Î²-Carotene from Dunaliella salina. Marine Drugs, 2021, 19, 648.	2.2	1
20	Metabolite Quantification by Fourier Transform Infrared Spectroscopy in Diatoms: Proof of Concept on Phaeodactylum tricornutum. Frontiers in Plant Science, 2021, 12, 756421.	1.7	13
21	The Transition Toward Nitrogen Deprivation in Diatoms Requires Chloroplast Stand-By and Deep Metabolic Reshuffling. Frontiers in Plant Science, 2021, 12, 760516.	1.7	11
22	Protective Action of Ostreococcus Tauri and Phaeodactylum Tricornutum Extracts towards Benzo[a]Pyrene-Induced Cytotoxicity in Endothelial Cells. Marine Drugs, 2020, 18, 3.	2.2	8
23	Introduction : From diatom species identification to ecological and biotechnological applications. Botany Letters, 2020, 167, 2-6.	0.7	6
24	Carotenoid Overproduction in Microalgae: Biochemical and Genetic Engineering. , 2020, , 81-126.		3
25	Chloroplast Ion and Metabolite Transport in Algae. Advances in Photosynthesis and Respiration, 2020, , 107-139.	1.0	4
26	Focus editorial: new contributions in diatom research. Botany Letters, 2019, 166, 115-116.	0.7	0
27	Plant cell compartments. Botany Letters, 2019, 166, 269-273.	0.7	4
28	Preventive Effects of the Marine Microalga Phaeodactylum tricornutum, Used as a Food Supplement, on Risk Factors Associated with Metabolic Syndrome in Wistar Rats. Nutrients, 2019, 11, 1069.	1.7	25
29	Betaine lipid and neutral lipid production under nitrogen or phosphorus limitation in the marine microalga Tisochrysis lutea (Haptophyta). Algal Research, 2019, 40, 101506.	2.4	40
30	Carbon Orientation in the Diatom Phaeodactylum tricornutum: The Effects of Carbon Limitation and Photon Flux Density. Frontiers in Plant Science, 2019, 10, 471.	1.7	25
31	Identification of transcription factors involved in the phenotype of a domesticated oleaginous microalgae strain of Tisochrysis lutea. Algal Research, 2018, 30, 59-72.	2.4	19
32	Ion and metabolite transport in the chloroplast of algae: lessons from land plants. Cellular and Molecular Life Sciences, 2018, 75, 2153-2176.	2.4	61
33	Response of CO ₂ -starved diatom Phaeodactylum tricornutum to light intensity transition. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160396.	1.8	53
34	The peculiar carbon metabolism in diatoms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160405.	1.8	16
35	Modulation of lipid biosynthesis by stress in diatoms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160407.	1.8	97
36	Enhanced Secondary- and Hormone Metabolism in Leaves of Arbuscular Mycorrhizal Medicago truncatula. Plant Physiology, 2017, 175, 392-411.	2.3	81

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37	Review of the volume 143 â€˜Diatom research over time and spaceâ€™ of Nova Hedwigia Beiheft 143. Botany Letters, 2017, 164, 103-103.	0.7	0
38	Changes in plastid proteome and structure in arbuscular mycorrhizal roots display a nutrient starvation signature. Physiologia Plantarum, 2017, 159, 13-29.	2.6	9
39	Carotenoids of Microalgae Used in Food Industry and Medicine. Mini-Reviews in Medicinal Chemistry, 2017, 17, 1140-1172.	1.1	62
40	Metabolic engineering of TiO₂ nanoparticles in Nitzschia palea to form diatom nanotubes: an ingredient for solar cells to produce electricity and biofuel. RSC Advances, 2016, 6, 97276-97284.	1.7	41
41	Fish Oil and Microalga Omegaâ€3 as Dietary Supplements: A Comparative Study on Cardiovascular Risk Factors in Highâ€Fat Fed Rats. Lipids, 2016, 51, 1037-1049.	0.7	23
42	Fabrication of resonating microfluidic chamber for biofuel production in diatoms (Resonating device) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		5
43	Transcription factors in microalgae: genome-wide prediction and comparative analysis. BMC Genomics, 2016, 17, 282.	1.2	52
44	Advances in diatom biodiversity and ecology. Botany Letters, 2016, 163, 69-70.	0.7	3
45	Diatom Milking: A Review and New Approaches. Marine Drugs, 2015, 13, 2629-2665.	2.2	106
46	Food colour additives of natural origin. , 2015, , 3-34.		36
47	Mycorrhiza Symbiosis Increases the Surface for Sunlight Capture in Medicago truncatula for Better Photosynthetic Production. PLoS ONE, 2015, 10, e0115314.	1.1	28
48	Optimization of protein electroextraction from microalgae by a flow process. Bioelectrochemistry, 2015, 103, 74-81.	2.4	70
49	Progress in diatom research: from taxonomy to physiology. Diatom Research, 2014, 29, 3-4.	0.5	3
50	Function and evolution of channels and transporters in photosynthetic membranes. Cellular and Molecular Life Sciences, 2014, 71, 979-998.	2.4	51
51	High performance of vegetables, flowers, and medicinal plants in a red-blue LED incubator for indoor plant production. Agronomy for Sustainable Development, 2014, 34, 879-886.	2.2	149
52	Fatty acids profile and temperature in the cultured marine diatom Odontella aurita. Journal of Applied Phycology, 2014, 26, 2265-2271.	1.5	54
53	Functional investigations in diatoms need more than a transcriptomic approach. Diatom Research, 2014, 29, 75-89.	0.5	19
54	Relaxation of the non-photochemical chlorophyll fluorescence quenching in diatoms: kinetics, components and mechanisms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130241.	1.8	41

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55	Photosynthesis under artificial light: the shift in primary and secondary metabolism. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130243.	1.8	327
56	Changing the light environment: chloroplast signalling and response mechanisms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130220.	1.8	28
57	Cadmium, Copper, Sodium and Zinc Effects on Diatoms: from Heaven to Hell â€" a Review. Cryptogamie, Algologie, 2013, 34, 185-225.	0.3	63
58	Plastids of Marine Phytoplankton Produce Bioactive Pigments and Lipids. Marine Drugs, 2013, 11, 3425-3471.	2.2	86
59	Assessment of the requirement for aquaporins in the thylakoid membrane of plant chloroplasts to sustain photosynthetic water oxidation. FEBS Letters, 2013, 587, 2083-2089.	1.3	34
60	The tannosome is an organelle forming condensed tannins in the chlorophyllous organs of Tracheophyta. Annals of Botany, 2013, 112, 1003-1014.	1.4	128
61	The Potential of Microalgae for the Production of Bioactive Molecules of Pharmaceutical Interest. Current Pharmaceutical Biotechnology, 2012, 13, 2733-2750.	0.9	201
62	Phylogenetic Analysis of the Thylakoid ATP/ADP Carrier Reveals New Insights into Its Function Restricted to Green Plants. Frontiers in Plant Science, 2012, 2, 110.	1.7	10
63	Zinc Affects Differently Growth, Photosynthesis, Antioxidant Enzyme Activities and Phytochelatin Synthase Expression of Four Marine Diatoms. Scientific World Journal, The, 2012, 2012, 1-15.	0.8	54
64	High biological variability of plastids, photosynthetic pigments and pigment forms of leaf primordia in buds. Planta, 2012, 235, 1035-1049.	1.6	25
65	Calcium signatures and signaling in cytosol and organelles of tobacco cells induced by plant defense elicitors. Cell Calcium, 2012, 51, 434-444.	1.1	51
66	Chlorophylls, Chlorophyll-Related Molecules, and Open-Chain Tetrapyrroles. , 2012, , 665-686.		3
67	Photosystem II Function and Dynamics in Three Widely Used Arabidopsis thaliana Accessions. PLoS ONE, 2012, 7, e46206.	1.1	28
68	Arbuscular mycorrhizal symbiosis elicits shoot proteome changes that are modified during cadmium stress alleviation in Medicago truncatula. BMC Plant Biology, 2011, 11, 75.	1.6	92
69	Etioplast and etio-chloroplast formation under natural conditions: the dark side of chlorophyll biosynthesis in angiosperms. Photosynthesis Research, 2010, 105, 143-166.	1.6	165
70	Secondary ketocarotenoid astaxanthin biosynthesis in algae: a multifunctional response to stress. Photosynthesis Research, 2010, 106, 155-177.	1.6	310
71	Proteomic analysis of Medicago truncatula root plastids. Proteomics, 2010, 10, 2123-2137.	1.3	44
72	Role of Thylakoid ATP/ADP Carrier in Photoinhibition and Photoprotection of Photosystem II in Arabidopsis Â Â. Plant Physiology, 2010, 153, 666-677.	2.3	42

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73	Solute transporters in plant thylakoid membranes. Communicative and Integrative Biology, 2010, 3, 122-129.	0.6	34
74	Modifications of the Carotenoid Metabolism in Plastids. Books in Soils, Plants, and the Environment, 2010, , 407-433.	0.1	2
75	Communication and Signaling in the Plantâ€“Fungus Symbiosis: The Mycorrhiza. Signaling and Communication in Plants, 2009, , 45-71.	0.5	10
76	Life with and without AtTIP1;1, an Arabidopsis aquaporin preferentially localized in the apposing tonoplasts of adjacent vacuoles. Plant Molecular Biology, 2009, 70, 193-209.	2.0	79
77	Functions of reticulons in plants: What we can learn from animals and yeasts. Cellular and Molecular Life Sciences, 2009, 66, 584-595.	2.4	39
78	The photoenzymatic cycle of NADPH: protochlorophyllide oxidoreductase in primary bean leaves (Phaseolus vulgaris) during the first days of photoperiodic growth. Photosynthesis Research, 2008, 96, 15-26.	1.6	33
79	Stability of vacuolar betaxanthin pigments in juices from Moroccan yellow Opuntia ficus indica fruits. International Journal of Food Science and Technology, 2008, 43, 351-356.	1.3	15
80	ENVIRONMENTAL FACTORS AFFECTING GROWTH AND OMEGA 3 FATTY ACID COMPOSITION INSKELETONEMA COSTATUM.THE INFLUENCES OF IRRADIANCE AND CARBON SOURCE. Diatom Research, 2008, 23, 93-103.	0.5	29
81	Screening for Solute Transporters in Plant Photosynthetic Membranes. , 2008, , 1067-1069.		0
82	Identification, Expression, and Functional Analyses of a Thylakoid ATP/ADP Carrier from Arabidopsis. Journal of Biological Chemistry, 2007, 282, 8848-8859.	1.6	72
83	The Arabidopsis PsbO2 protein regulates dephosphorylation and turnover of the photosystem II reaction centre D1 protein. Plant Journal, 2007, 49, 528-539.	2.8	101
84	Reticulon-like proteins inArabidopsis thaliana: Structural organization and ER localization. FEBS Letters, 2007, 581, 3356-3362.	1.3	75
85	Spectroscopic Properties of Protochlorophyllide Analyzed In Situ in the Course of Etiolation and in Illuminated Leaves Â¶. Photochemistry and Photobiology, 2007, 72, 85-93.	1.3	2
86	Photoactive Protochlorophyllide Regeneration in Cotyledons and Leaves from Higher Plantsâ€Â¶. Photochemistry and Photobiology, 2007, 72, 660-668.	1.3	0
87	Protochlorophyllide reduction - what is new in 2005?. Photosynthetica, 2005, 43, 329-343.	0.9	34
88	Plant Pigments: Properties, Analysis, Degradation. Advances in Food and Nutrition Research, 2005, 49, 41-91.	1.5	26
89	Protochlorophyllide Photoreductionâ€”A Review. Books in Soils, Plants, and the Environment, 2005, , .	0.1	1
90	Determination of pigments in vegetables. Journal of Chromatography A, 2004, 1054, 217-226.	1.8	66

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91	Assembly of the photosynthetic apparatus in embryos from Fucus serratus L. Photosynthesis Research, 2003, 77, 45-52.	1.6	20
92	Metal determination and quantification in biological material using particle-induced X-ray emission. TrAC - Trends in Analytical Chemistry, 2003, 22, 254-262.	5.8	29
93	Chlorophyll and carotenoid analysis in food products. A practical case-by-case view. TrAC - Trends in Analytical Chemistry, 2003, 22, 335-339.	5.8	35
94	Protochlorophyllide Reduction: Mechanisms and EvolutionÂ¶. Photochemistry and Photobiology, 2003, 78, 543.	1.3	111
95	Changes in the LHCI aggregation state during iron repletion in the unicellular red algaRhodella violacea. FEBS Letters, 2003, 533, 59-62.	1.3	23
96	Protochlorophyllide Reduction: Mechanisms and EvolutionÂ¶. Photochemistry and Photobiology, 2003, 78, 543-557.	1.3	16
97	Pigment composition and location in honey locust (Gleditsia triacanthos) seeds before and after desiccation. Tree Physiology, 2002, 22, 285-290.	1.4	3
98	Chlorophyll and carotenoid analysis in food products. Properties of the pigments and methods of analysis. Trends in Food Science and Technology, 2002, 13, 361-371.	7.8	160
99	Astaxanthin accumulation in Haematococcus requires a cytochrome P450 hydroxylase and an active synthesis of fatty acids. FEBS Letters, 2001, 500, 125-128.	1.3	90
100	Cadmium inhibits epoxidation of diatoxanthin to diadinoxanthin in the xanthophyll cycle of the marine diatom Phaeodactylum tricornutum. FEBS Letters, 2001, 508, 153-156.	1.3	56
101	Photosynthetic Pigments, Photosynthesis and Plastid Ultrastructure in RbcS Antisense DNA Mutants 2001, 56, 1067-1074.	0.6	20
102	The protochlorophyllide-chlorophyllide cycle. Photosynthesis Research, 2001, 70, 257-271.	1.6	57
103	Chlorophyll Biosynthesis During Plant Greening. , 2001, , .		0
104	Improved liquid chromatographic method for the analysis of photosynthetic pigments of higher plants. Journal of Chromatography A, 2000, 876, 111-116.	1.8	26
105	Photoactive Protochlorophyllide Regeneration in Cotyledons and Leaves from Higher Plantsâ€Â¶. Photochemistry and Photobiology, 2000, 72, 660.	1.3	24
106	The formation of chlorophyll from chlorophyllide in leaves containing proplastids is a four-step process. FEBS Letters, 2000, 486, 243-246.	1.3	27
107	Spectroscopic Properties of Protochlorophyllide Analyzed In Situ in the Course of Etiolation and in Illuminated LeavesÂ¶. Photochemistry and Photobiology, 2000, 72, 85.	1.3	45
108	Title is missing!. Photosynthesis Research, 1999, 62, 107-116.	1.6	24

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109	The Light-Dependent and Light-Independent Reduction of Protochlorophyllide a to Chlorophyllide a. Photosynthetica, 1999, 36, 481-496.	0.9	41
110	Carotenoids and Stress in Higher Plants and Algae. Books in Soils, Plants, and the Environment, 1999, , 465-482.	0.1	10
111	Photosynthetic Pigment Metabolism in Plants During Stress. Books in Soils, Plants, and the Environment, 1999, , 527-543.	0.1	6
112	Title is missing!. Photosynthesis Research, 1998, 57, 203-213.	1.6	28
113	Quantification by PIXE of metallic sites in proteins separated by electrophoresis. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 932-935.	0.6	8
114	Isolation and characterization of photoactive complexes of NADPH:protochlorophyllide oxidoreductase from wheat. Planta, 1998, 206, 673-680.	1.6	55
115	Development of the Photosynthetic Apparatus in Fucus Serratus Embryos. , 1998, , 3245-3248.		1
116	Light-Minus-Dark Absorbance Spectra During Photoactive Pchlide Photoreduction. , 1997, , 133-134.		1
117	QUANTITATIVE MEASUREMENT OF METAL ION CONCENTRATION OF PROTEINS SEPARATED BY ELECTROPHORESIS. International Journal of PIXE, 1996, 06, 215-225.	0.4	8
118	Separation of photosynthetic pigments and their precursors by reversed-phase high-performance liquid chromatography using a photodiode-array detector. Journal of Chromatography A, 1995, 692, 239-245.	1.8	39
119	Spectral Heterogeneity of the Photoinactive Protochlorophyllide in Dark-Grown Bean Leaves and Pine Cotyledons. , 1995, , 2949-2952.		2
120	Role of Nadph:Protochlorophyllide Reductase in Photoprotection of Newly Formed Chlorophyllide. , 1995, , 2953-2956.		1
121	Comparison of the photoreduction of protochlorophyllide to chlorophyllide in leaves and cotyledons from dark-grown bean as a function of age. Photosynthesis Research, 1994, 41, 405-417.	1.6	31
122	Photoreduction of Protochlorophyllide to Chlorophyllide in 2-d-old Dark-Grown Bean (Phaseolus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 Experimental Botany, 1993, 44, 1053-1057.	2.4	57
123	Kinetics of the Photoreduction of Protochlorophyllide (Pchlide) to Chlorophyllide (Chlide) in Leaves of Phaseolus Vulgaris CV Commodore. , 1993, , 303-304.		1
124	CHAPTER 3. Nanoengineering of Diatom Surfaces for Emerging Applications. RSC Nanoscience and Nanotechnology, 0, , 55-78.	0.2	10