Maria J Barbosa

List of Publications by Year
in descending order

96 papers	7,652 citations	109137 35 h-index	51492 86 g-index
97 all docs	97 docs citations	97 times ranked	6531 citing authors

#	Article	IF	Citations
1	Prospects for viruses infecting eukaryotic microalgae in biotechnology. Biotechnology Advances, 2022, 54, 107790.	6.0	5
2	Fucoxanthin and docosahexaenoic acid production by cold-adapted Tisochrysis lutea. New Biotechnology, 2022, 66, 16-24.	2.4	9
3	The nucleolus as a genomic safe harbor for strong gene expression in Nannochloropsis oceanica. Molecular Plant, 2022, 15, 340-353.	3.9	10
4	Expanding the upperâ€temperature boundary for the microalga Picochlorum sp. (BPE23) by adaptive laboratory evolution. Biotechnology Journal, 2022, 17, e2100659.	1.8	13
5	Mixotrophic cultivation of Galdieria sulphuraria for C-phycocyanin and protein production. Algal Research, 2022, 61, 102603.	2.4	25
6	Growth parameter estimation and model simulation for three industrially relevant microalgae: Picochlorum, Nannochloropsis, and Neochloris. Biotechnology and Bioengineering, 2022, 119, 1416-1425.	1.7	7
7	Perspectives of fluorescence spectroscopy for online monitoring in microalgae industry. Microbial Biotechnology, 2022, 15, 1824-1838.	2.0	6
8	Bacterial diversity in different outdoor pilot plant photobioreactor types during production of the microalga Nannochloropsis sp. CCAP211/78. Applied Microbiology and Biotechnology, 2022, 106, 2235-2248.	1.7	5
9	Short-term physiologic response of the green microalga Picochlorum sp. (BPE23) to supra-optimal temperature. Scientific Reports, 2022, 12, 3290.	1.6	9
10	Accumulation of medium chain fatty acids in Nannochloropsis oceanica by heterologous expression of Cuphea palustris thioesterase FatB1. Algal Research, 2022, 64, 102665.	2.4	3
11	Techno-economic analysis of microalgae production for aquafeed in Norway. Algal Research, 2022, 64, 102679.	2.4	9
12	Microalgae based production of single-cell protein. Current Opinion in Biotechnology, 2022, 75, 102705.	3.3	51
13	Techno-economic assessment of microalgae production, harvesting and drying for food, feed, cosmetics, and agriculture. Science of the Total Environment, 2022, 837, 155742.	3.9	34
14	Mild acoustic processing of Tisochrysis lutea for multiproduct biorefineries. Bioresource Technology, 2022, 360, 127582.	4.8	0
15	A novel V-shaped photobioreactor design for microalgae cultivation at low latitudes: Modelling biomass productivities of Chlorella sorokiniana on Bonaire. Chemical Engineering Journal, 2022, 449, 137793.	6.6	3
16	The role of microalgae in the bioeconomy. New Biotechnology, 2021, 61, 99-107.	2.4	136
17	Production and monitoring of biomass and fucoxanthin with brown microalgae under outdoor conditions. Biotechnology and Bioengineering, 2021, 118, 1355-1365.	1.7	26
18	Light spectra as triggers for sorting improved strains of Tisochrysis lutea. Bioresource Technology, 2021, 321, 124434.	4.8	9

#	Article	IF	Citations
19	Developing microalgal oil production for an outdoor photobioreactor. Journal of Applied Phycology, 2021, 33, 1315-1325.	1.5	3
20	Outdoor scaleâ€up of Leptolyngbya sp.: Effect of light intensity and inoculum volume on photoinhibition and â€oxidation. Biotechnology and Bioengineering, 2021, 118, 2368-2379.	1.7	12
21	Improved fucoxanthin and docosahexaenoic acid productivities of a sorted self-settling Tisochrysis lutea phenotype at pilot scale. Bioresource Technology, 2021, 325, 124725.	4.8	18
22	Starch Production in Chlamydomonas reinhardtii through Supraoptimal Temperature in a Pilot-Scale Photobioreactor. Cells, 2021, 10, 1084.	1.8	15
23	Neochloris oleoabundans oil production in an outdoor tubular photobioreactor at pilot scale. Journal of Applied Phycology, 2021, 33, 1327-1339.	1.5	4
24	High-throughput insertional mutagenesis reveals novel targets for enhancing lipid accumulation in Nannochloropsis oceanica. Metabolic Engineering, 2021, 66, 239-258.	3.6	37
25	Techno-economics of algae production in the Arabian Peninsula. Bioresource Technology, 2021, 331, 125043.	4.8	34
26	Towards industrial production of microalgae without temperature control: The effect of diel temperature fluctuations on microalgal physiology. Journal of Biotechnology, 2021, 336, 56-63.	1.9	24
27	Starch Rich Chlorella vulgaris: High-Throughput Screening and Up-Scale for Tailored Biomass Production. Applied Sciences (Switzerland), 2021, 11, 9025.	1.3	9
28	Synthetic Biology Approaches To Enhance Microalgal Productivity. Trends in Biotechnology, 2021, 39, 1019-1036.	4.9	41
29	Selenium enrichment in the marine microalga Nannochloropsis oceanica. Algal Research, 2021, 59, 102427.	2.4	16
30	Genetic engineering of microalgae for enhanced lipid production. Biotechnology Advances, 2021, 52, 107836.	6.0	52
31	Predicting biomass and hydrocarbon productivities and colony size in continuous cultures of Botryococcus braunii showa. Bioresource Technology, 2021, 340, 125653.	4.8	3
32	Comprehensive Genome Engineering Toolbox for Microalgae Nannochloropsis oceanica Based on CRISPR-Cas Systems. ACS Synthetic Biology, 2021, 10, 3369-3378.	1.9	29
33	Time-dependent transcriptome profile of genes involved in triacylglycerol (TAG) and polyunsaturated fatty acid synthesis in Nannochloropsis gaditana during nitrogen starvation. Journal of Applied Phycology, 2020, 32, 1153-1164.	1.5	16
34	Monitoring of eicosapentaenoic acid (EPA) production in the microalgae Nannochloropsis oceanica. Algal Research, 2020, 45, 101766.	2.4	21
35	Production and high throughput quantification of fucoxanthin and lipids in Tisochrysis lutea using single-cell fluorescence. Bioresource Technology, 2020, 318, 124104.	4.8	24
36	Bioprospecting and characterization of temperature tolerant microalgae from Bonaire. Algal Research, 2020, 50, 102008.	2.4	37

#	Article	IF	Citations
37	Process optimization of fucoxanthin production with Tisochrysis lutea. Bioresource Technology, 2020, 315, 123894.	4.8	44
38	Fluorescence spectroscopy and chemometrics for simultaneous monitoring of cell concentration, chlorophyll and fatty acids in Nannochloropsis oceanica. Scientific Reports, 2020, 10, 7688.	1.6	10
39	Production of phycocyanin by Leptolyngbya sp. in desert environments. Algal Research, 2020, 47, 101875.	2.4	23
40	Effect of removal of bacteria on the biomass and extracellular carbohydrate productivity of Botryococcus braunii. Journal of Applied Phycology, 2019, 31, 3453-3463.	1.5	9
41	Lipid Production in Nannochloropsis gaditana during Nitrogen Starvation. Biology, 2019, 8, 5.	1.3	27
42	CRISPRâ€“Cas ribonucleoprotein mediated homology-directed repair for efficient targeted genome editing in microalgae Nannochloropsis oceanica IMET1. Biotechnology for Biofuels, 2019, 12, 66.	6.2	66
43	Potential of novel desert microalgae and cyanobacteria for commercial applications and CO2 sequestration. Journal of Applied Phycology, 2019, 31, 2231-2243.	1.5	28
44	Translocation and de novo synthesis of eicosapentaenoic acid (EPA) during nitrogen starvation in Nannochloropsis gaditana. Algal Research, 2019, 37, 138-144.	2.4	26
45	Associated bacteria of Botryococcus braunii (Chlorophyta). PeerJ, 2019, 7, e6610.	0.9	7
46	Integrated Biorefineries for Algal Biomolecules. Grand Challenges in Biology and Biotechnology, 2019, , 293-317.	2.4	0
47	Cultivation of Dunaliella for High-Value Compounds. , 2019, , 91-110.		0
48	Can We Approach Theoretical Lipid Yields in Microalgae?. Trends in Biotechnology, 2018, 36, 265-276.	4.9	54
49	Progress of CRISPRâ€Cas Based Genome Editing in Photosynthetic Microbes. Biotechnology Journal, 2018, 13, e1700591.	1.8	38
50	Production of exopolysaccharide by Botryococcus braunii CCALA 778 under laboratory simulated Mediterranean climate conditions. Algal Research, 2018, 29, 330-336.	2.4	27
51	Effect of initial biomass-specific photon supply rate on fatty acid accumulation in nitrogen depleted Nannochloropsis gaditana under simulated outdoor light conditions. Algal Research, 2018, 35, 595-601.	2.4	20
52	Effect of nitrogen addition on lipid productivity of nitrogen starved Nannochloropsis gaditana. Algal Research, 2018, 33, 125-132.	2.4	25
53	Milking exopolysaccharides from Botryococcus braunii CCALA778 by membrane filtration. Algal Research, 2018, 34, 175-181.	2.4	12
54	Pulsed Electric Field for protein release of the microalgae Chlorella vulgaris and Neochloris oleoabundans. Algal Research, 2017, 24, 181-187.	2.4	99

#	Article	IF	Citations
55	The influence of day/night cycles on biomass yield and composition of Neochloris oleoabundans. Biotechnology for Biofuels, 2017, 10, 104.	6.2	24
56	Energy efficient bead milling of microalgae: Effect of bead size on disintegration and release of proteins and carbohydrates. Bioresource Technology, 2017, 224, 670-679.	4.8	120
57	From Current Algae Products to Future Biorefinery Practices: A Review. Advances in Biochemical Engineering/Biotechnology, 2017, 166, 99-123.	0.6	37
58	Botryococcus braunii strains compared for biomass productivity, hydrocarbon and carbohydrate content. Journal of Biotechnology, 2017, 248, 77-86.	1.9	50
59	The influence of day length on circadian rhythms of Neochloris oleoabundans. Algal Research, 2017, 22, 31-38.	2.4	17
60	Comparative life cycle assessment of real pilot reactors for microalgae cultivation in different seasons. Applied Energy, 2017, 205, 1151-1164.	5.1	79
61	Outdoor performance of Chlorococcum littorale at different locations. Algal Research, 2017, 27, 55-64.	2.4	7
62	Towards microalgal triglycerides in the commodity markets. Biotechnology for Biofuels, 2017, 10, 188.	6.2	16
63	Sorting cells of the microalga Chlorococcum littorale with increased triacylglycerol productivity. Biotechnology for Biofuels, 2016, 9, 183.	6.2	34
64	Batch and semi-continuous microalgal TAG production in lab-scale and outdoor photobioreactors. Journal of Applied Phycology, 2016, 28, 3167-3177.	1.5	44
65	Repeated nitrogen starvation doesnâ€™t affect lipid productivity of Chlorococcum littorale. Bioresource Technology, 2016, 219, 576-582.	4.8	15
66	Towards industrial products from microalgae. Energy and Environmental Science, 2016, 9, 3036-3043.	15.6	468
67	Microalgal TAG production strategies: why batch beats repeated-batch. Biotechnology for Biofuels, 2016, 9, 64.	6.2	33
68	Turbidostat operation of outdoor pilot-scale photobioreactors. Algal Research, 2016, 18, 198-208.	2.4	27
69	Cell diameter doesn't affect lipid productivity of Chlorococcum littorale. Algal Research, 2016, 19, 333-341.	2.4	5
70	Selective extraction of intracellular components from the microalga Chlorella vulgaris by combined pulsed electric fieldâ€“temperature treatment. Bioresource Technology, 2016, 203, 80-88.	4.8	139
71	Comparison of four outdoor pilot-scale photobioreactors. Biotechnology for Biofuels, 2015, 8, 215.	6.2	152
72	Mild disintegration of the green microalgae Chlorella vulgaris using bead milling. Bioresource Technology, 2015, 184, 297-304.	4.8	148

#	Article	IF	Citations
73	Food and feed products from micro-algae: Market opportunities and challenges for the EU. Trends in Food Science and Technology, 2015, 42, 81-92.	7.8	253
74	Use of methylene blue uptake for assessing cell viability of colony-forming microalgae. Algal Research, 2015, 8, 174-180.	2.4	9
75	Microalgal triacylglycerides production in outdoor batch-operated tubular PBRs. Biotechnology for Biofuels, 2015, 8, 100.	6.2	24
76	Selecting microalgae with high lipid productivity and photosynthetic activity under nitrogen starvation. Journal of Applied Phycology, 2015, 27, 1425-1431.	1.5	81
77	Rapid method to screen and sort lipid accumulating microalgae. Bioresource Technology, 2015, 184, 47-52.	4.8	23
78	Design and construction of the microalgal pilot facility AlgaePARC. Algal Research, 2014, 6, 160-169.	2.4	51
79	Cationic polymers for successful flocculation of marine microalgae. Bioresource Technology, 2014, 169, 804-807.	4.8	52
80	Circadian rhythms in the cell cycle and biomass composition of Neochloris oleoabundans under nitrogen limitation. Journal of Biotechnology, 2014, 187, 25-33.	1.9	27
81	Food commodities from microalgae. Current Opinion in Biotechnology, 2013, 24, 169-177.	3.3	333
82	The synchronized cell cycle of Neochloris oleoabundans and its influence on biomass composition under constant light conditions. Algal Research, 2013, 2, 313-320.	2.4	62
83	Biorefinery of microalgae for food and fuel. Bioresource Technology, 2013, 135, 142-149.	4.8	402
84	Microalgal production â€" A close look at the economics. Biotechnology Advances, 2011, 29, 24-27.	6.0	678
85	An Outlook on Microalgal Biofuels. Science, 2010, 329, 796-799.	6.0	1,585
86	Microalgae for the production of bulk chemicals and biofuels. Biofuels, Bioproducts and Biorefining, 2010, 4, 287-295.	1.9	424
87	Cultivation of Dunaliella for High Value Compounds. , 2009, , 91-110.		0
88	Optimization of biomass, vitamins, and carotenoid yield on light energy in a flat-panel reactor using the A-stat technique. Biotechnology and Bioengineering, 2005, 89, 233-242.	1.7	83
89	Overcoming shear stress of microalgae cultures in sparged photobioreactors. Biotechnology and Bioengineering, 2004, 85, 78-85.	1.7	123
90	Microalgae cultivation in air-lift reactors: Modeling biomass yield and growth rate as a function of mixing frequency. Biotechnology and Bioengineering, 2003, 82, 170-179.	1.7	145

#	Article	IF	Citations
91	Hydrodynamic stress and lethal events in sparged microalgae cultures. Biotechnology and Bioengineering, 2003, 83, 112-120.	1.7	111
92	Optimisation of cultivation parameters in photobioreactors for microalgae cultivation using the A-stat technique. New Biotechnology, 2003, 20, 115-123.	2.7	55
93	Realizing the promises of marine biotechnology. New Biotechnology, 2003, 20, 429-439.	2.7	54
94	Acetate as a carbon source for hydrogen production by photosynthetic bacteria. Journal of Biotechnology, 2001, 85, 25-33.	1.9	306
95	Effect of carotenoid source and dietary lipid content on blood astaxanthin concentration in rainbow trout (Oncorhynchus mykiss). Aquaculture, 1999, 176, 331-341.	1.7	72
96	11 Biorefining of microalgae: Production of highvalue products, bulk chemicals and biofuels. , 0, , .		2