Michele G Morais

List of Publications by Year
in descending order

130 papers	5,226 citations	87888 38 h-index	98798 67 g-index
135 all docs	135 docs citations	135 times ranked	4663 citing authors

#	Article	IF	Citations
1	Biofixation of carbon dioxide by Spirulina sp. and Scenedesmus obliquus cultivated in a three-stage serial tubular photobioreactor. Journal of Biotechnology, 2007, 129, 439-445.	3.8	480
2	Isolation and selection of microalgae from coal fired thermoelectric power plant for biofixation of carbon dioxide. Energy Conversion and Management, 2007, 48, 2169-2173.	9.2	287
3	Carbon dioxide fixation by Chlorella kessleri, C. vulgaris, Scenedesmus obliquus and Spirulina sp. cultivated in flasks and vertical tubular photobioreactors. Biotechnology Letters, 2007, 29, 1349-1352.	2.2	253
4	Biologically Active Metabolites Synthesized by Microalgae. BioMed Research International, 2015, 2015, 1-15.	1.9	250
5	The role of biochemical engineering in the production of biofuels from microalgae. Bioresource Technology, 2011, 102, 2-9.	9.6	234
6	Microalgae as a new source of bioactive compounds in food supplements. Current Opinion in Food Science, 2016, 7, 73-77.	8.0	214
7	Spirulina for snack enrichment: Nutritional, physical and sensory evaluations. LWT - Food Science and Technology, 2018, 90, 270-276.	5.2	157
8	Microalgae as source of polyhydroxyalkanoates (PHAs) â€" A review. International Journal of Biological Macromolecules, 2019, 131, 536-547.	7.5	127
9	Operational and economic aspects of Spirulina-based biorefinery. Bioresource Technology, 2019, 292, 121946.	9.6	111
10	Influence of nitrogen on growth, biomass composition, production, and properties of polyhydroxyalkanoates (PHAs) by microalgae. International Journal of Biological Macromolecules, 2018, 116, 552-562.	7.5	101
11	Ultrafine fibers of zein and anthocyanins as natural pH indicator. Journal of the Science of Food and Agriculture, 2018, 98, 2735-2741.	3.5	88
12	Pilot scale semicontinuous production of Spirulina biomass in southern Brazil. Aquaculture, 2009, 294, 60-64.	3.5	87
13	Development of electrospun nanofibers containing chitosan/PEO blend and phenolic compounds with antibacterial activity. International Journal of Biological Macromolecules, 2018, 117, 800-806.	7.5	87
14	Potential of microalgae as biopesticides to contribute to sustainable agriculture and environmental development. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2019, 54, 366-375.	1.5	84
15	Spirulina cultivated under different light emitting diodes: Enhanced cell growth and phycocyanin production. Bioresource Technology, 2018, 256, 38-43.	9.6	81
16	Preparation of nanofibers containing the microalga Spirulina (Arthrospira). Bioresource Technology, 2010, 101, 2872-2876.	9.6	80
17	Isolation and Characterization of a New Arthrospira Strain. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2008, 63, 144-150.	1.4	77
18	Phycocyanin from Microalgae: Properties, Extraction and Purification, with Some Recent Applications. Industrial Biotechnology, 2018, 14, 30-37.	0.8	73

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19	Microalgae starch: A promising raw material for the bioethanol production. International Journal of Biological Macromolecules, 2020, 165, 2739-2749.	7.5	68
20	Biological Applications of Nanobiotechnology. Journal of Nanoscience and Nanotechnology, 2014, 14, 1007-1017.	0.9	66
21	Outdoor pilot-scale cultivation of Spirulina sp. LEB-18 in different geographic locations for evaluating its growth and chemical composition. Bioresource Technology, 2018, 256, 86-94.	9.6	66
22	Development of pH indicator from PLA/PEO ultrafine fibers containing pigment of microalgae origin. International Journal of Biological Macromolecules, 2018, 118, 1855-1862.	7.5	61
23	Innovative polyhydroxybutyrate production by Chlorella fusca grown with pentoses. Bioresource Technology, 2018, 265, 456-463.	9.6	56
24	Progress in the physicochemical treatment of microalgae biomass for value-added product recovery. Bioresource Technology, 2020, 301, 122727.	9.6	55
25	Antioxidant ultrafine fibers developed with microalga compounds using a free surface electrospinning. Food Hydrocolloids, 2019, 93, 131-136.	10.7	53
26	Pentoses and light intensity increase the growth and carbohydrate production and alter the protein profile of Chlorella minutissima. Bioresource Technology, 2017, 238, 248-253.	9.6	51
27	A New Biomaterial of Nanofibers with the Microalga <I>Spirulinaas</I> Scaffolds to Cultivate with Stem Cells for Use in Tissue Engineering. Journal of Biomedical Nanotechnology, 2013, 9, 710-718.	1.1	50
28	Microalgal biorefinery from CO2 and the effects under the Blue Economy. Renewable and Sustainable Energy Reviews, 2019, 99, 58-65.	16.4	50
29	Innovative pH sensors developed from ultrafine fibers containing aÃ§aÃ-(Euterpe oleracea) extract. Food Chemistry, 2019, 294, 397-404.	8.2	48
30	Innovative nanofiber technology to improve carbon dioxide biofixation in microalgae cultivation. Bioresource Technology, 2019, 273, 592-598.	9.6	46
31	Cultivation strategy to stimulate high carbohydrate content in Spirulina biomass. Bioresource Technology, 2018, 269, 221-226.	9.6	45
32	Microalgae Polysaccharides: An Overview of Production, Characterization, and Potential Applications. Polysaccharides, 2021, 2, 759-772.	4.8	45
33	Biological Effects of<i>Spirulina</i>(<i>Arthrospira</i>) Biopolymers and Biomass in the Development of Nanostructured Scaffolds. BioMed Research International, 2014, 2014, 1-9.	1.9	44
34	Development of a new nanofiber scaffold for use with stem cells in a third degree burn animal model. Burns, 2014, 40, 1650-1660.	1.9	44
35	Polyhydroxybutyrate and phenolic compounds microalgae electrospun nanofibers: A novel nanomaterial with antibacterial activity. International Journal of Biological Macromolecules, 2018, 113, 1008-1014.	7.5	43
36	CO2 conversion by the integration of biological and chemical methods: Spirulina sp. LEB 18 cultivation with diethanolamine and potassium carbonate addition. Bioresource Technology, 2018, 267, 77-83.	9.6	42

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37	Development of a colorimetric pH indicator using nanofibers containing Spirulina sp. LEB 18. Food Chemistry, 2020, 328, 126768.	8.2	41
38	CO2 Biofixation by the Cyanobacterium Spirulina sp. LEB 18 and the Green Alga Chlorella fusca LEB 111 Grown Using Gas Effluents and Solid Residues of Thermoelectric Origin. Applied Biochemistry and Biotechnology, 2016, 178, 418-429.	2.9	40
39	A novel nanocomposite for food packaging developed by electrospinning and electrospraying. Food Packaging and Shelf Life, 2019, 20, 100314.	7.5	40
40	Improvement of Thermal Stability of C-Phycocyanin by Nanofiber and Preservative Agents. Journal of Food Processing and Preservation, 2016, 40, 1264-1269.	2.0	39
41	Recent Advances and Future Perspectives of PHB Production by Cyanobacteria. Industrial Biotechnology, 2018, 14, 249-256.	0.8	37
42	Microalgae Polysaccharides: An Alternative Source for Food Production and Sustainable Agriculture. Polysaccharides, 2022, 3, 441-457.	4.8	37
43	Vertical tubular photobioreactor for semicontinuous culture of Cyanobium sp.. Bioresource Technology, 2011, 102, 4897-4900.	9.6	35
44	Encapsulation of phycocyanin by electrospraying: A promising approach for the protection of sensitive compounds. Food and Bioproducts Processing, 2020, 119, 206-215.	3.6	35
45	Fed-batch cultivation with CO2 and monoethanolamine: Influence on Chlorella fusca LEB 111 cultivation, carbon biofixation and biomolecules production. Bioresource Technology, 2019, 273, 627-633.	9.6	33
46	Bioprocess Engineering Aspects of Biopolymer Production by the Cyanobacterium<i>Spirulina</i>Strain LEB 18. International Journal of Polymer Science, 2014, 2014, 1-6.	2.7	32
47	Green alga cultivation with monoethanolamine: Evaluation of CO2 fixation and macromolecule production. Bioresource Technology, 2018, 261, 206-212.	9.6	32
48	Microalgae biosynthesis of silver nanoparticles for application in the control of agricultural pathogens. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2019, 54, 709-716.	1.5	32
49	Polyhydroxybutyrate production by Spirulina sp. LEB 18 grown under different nutrient concentrations. African Journal of Microbiology Research, 2015, 9, 1586-1594.	0.4	28
50	Spirulina sp. LEB 18 cultivation in seawater and reduced nutrients: Bioprocess strategy for increasing carbohydrates in biomass. Bioresource Technology, 2020, 316, 123883.	9.6	28
51	Polyhydroxybutyrate (PHB) Synthesis by Spirulina sp. LEB 18 Using Biopolymer Extraction Waste. Applied Biochemistry and Biotechnology, 2018, 185, 822-833.	2.9	27
52	Effect of Spirulina addition on the physicochemical and structural properties of extruded snacks. Food Science and Technology, 2017, 37, 16-23.	1.7	26
53	Development of time-pH indicator nanofibers from natural pigments: An emerging processing technology to monitor the quality of foods. LWT - Food Science and Technology, 2021, 142, 111020.	5.2	26
54	Simultaneous Cultivation of Spirulina platensis and the Toxigenic Cyanobacteria Microcystis aeruginosa. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2006, 61, 105-110.	1.4	25

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55	Biofunctionalized Nanofibers Using<i>Arthrospira</i>(<i>Spirulina</i>) Biomass and Biopolymer. BioMed Research International, 2015, 2015, 1-8.	1.9	25
56	Enhancement of the carbohydrate content in Spirulina by applying CO2, thermoelectric fly ashes and reduced nitrogen supply. International Journal of Biological Macromolecules, 2019, 123, 1241-1247.	7.5	25
57	Physical and biological fixation of CO2 with polymeric nanofibers in outdoor cultivations of Chlorella fusca LEB 111. International Journal of Biological Macromolecules, 2020, 151, 1332-1339.	7.5	25
58	Role of light emitting diode (LED) wavelengths on increase of protein productivity and free amino acid profile of Spirulina sp. cultures. Bioresource Technology, 2020, 306, 123184.	9.6	25
59	UTILIZATION OF CO2 IN SEMI-CONTINUOUS CULTIVATION OF Spirulina sp. AND Chlorella fusca AND EVALUATION OF BIOMASS COMPOSITION. Brazilian Journal of Chemical Engineering, 2016, 33, 691-698.	1.3	24
60	Green alga cultivation with nanofibers as physical adsorbents of carbon dioxide: Evaluation of gas biofixation and macromolecule production. Bioresource Technology, 2019, 287, 121406.	9.6	24
61	Glycerol increases growth, protein production and alters the fatty acids profile of Spirulina (Arthrospira) sp LEB 18. Process Biochemistry, 2019, 76, 40-45.	3.7	24
62	Renewal of nanofibers in Chlorella fusca microalgae cultivation to increase CO2 fixation. Bioresource Technology, 2021, 321, 124452.	9.6	24
63	Snack bars enriched with Spirulina for schoolchildren nutrition. Food Science and Technology, 2020, 40, 146-152.	1.7	24
64	Biological CO2 mitigation by microalgae: technological trends, future prospects and challenges. World Journal of Microbiology and Biotechnology, 2019, 35, 78.	3.6	23
65	Efficacy of Spirulina sp. polyhydroxyalkanoates extraction methods and influence on polymer properties and composition. Algal Research, 2018, 33, 231-238.	4.6	22
66	Bioprocessos para remoÃ§Ã£o de diÃ³xido de carbono e Ã³xido de nitrogÃªnio por micro-algas visando a utilizaÃ§Ã£o de gases gerados durante a combustÃ£o do carvÃ£o. Quimica Nova, 2008, 31, 1038-1042.	0.3	21
67	An Open Pond System for Microalgal Cultivation. , 2014, , 1-22.		21
68	Production of Nanofibers Containing the Bioactive Compound C-Phycocyanin. Journal of Nanoscience and Nanotechnology, 2016, 16, 944-949.	0.9	21
69	Chlorella minutissima cultivation with CO2 and pentoses: Effects on kinetic and nutritional parameters. Bioresource Technology, 2017, 244, 338-344.	9.6	21
70	Nanoencapsulation of the Bioactive Compounds of <i>Spirulina</i> with a Microalgal Biopolymer Coating. Journal of Nanoscience and Nanotechnology, 2016, 16, 81-91.	0.9	19
71	Microalgae protein heating in acid/basic solution for nanofibers production by free surface electrospinning. Journal of Food Engineering, 2018, 230, 49-54.	5.2	19
72	Open pond systems for microalgal culture. , 2019, , 199-223.		19

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73	Potential of Chlorella fusca LEB 111 cultivated with thermoelectric fly ashes, carbon dioxide and reduced supply of nitrogen to produce macromolecules. Bioresource Technology, 2019, 277, 55-61.	9.6	18
74	Engineering strategies for the enhancement of Nannochloropsis gaditana outdoor production: Influence of the CO2 flow rate on the culture performance in tubular photobioreactors. Process Biochemistry, 2019, 76, 171-177.	3.7	18
75	Preparation of beta-carotene nanoemulsion and evaluation of stability at a long storage period. Food Science and Technology, 2019, 39, 599-604.	1.7	16
76	Brackish Groundwater from Brazilian Backlands in Spirulina Cultures: Potential of Carbohydrate and Polyunsaturated Fatty Acid Production. Applied Biochemistry and Biotechnology, 2020, 190, 907-917.	2.9	16
77	Exopolysaccharides from microalgae: Production in a biorefinery framework and potential applications. Bioresource Technology Reports, 2022, 18, 101006.	2.7	16
78	Extraction of poly(3-hydroxybutyrate) from Spirulina LEB 18 for developing nanofibers. Polimeros, 2015, 25, 161-167.	0.7	15
79	Nitrogen balancing and xylose addition enhances growth capacity and protein content in Chlorella minutissima cultures. Bioresource Technology, 2016, 218, 129-133.	9.6	15
80	Quercetin and curcumin in nanofibers of polycaprolactone and poly(hydroxybutyrateâ€<i>co</i>â€hydroxyvalerate): Assessment of <i>in vitro</i> antioxidant activity. Journal of Applied Polymer Science, 2016, 133, .	2.6	15
81	Electrospun chitosan/poly(ethylene oxide) nanofibers applied for the removal of glycerol impurities from biodiesel production by biosorption. Journal of Molecular Liquids, 2018, 268, 365-370.	4.9	15
82	Perfil de Ã¡cidos graxos de microalgas cultivadas com diÃ³xido de carbono. Ciencia E Agrotecnologia, 2008, 32, 1245-1251.	1.5	14
83	Cultivation of different microalgae with pentose as carbon source and the effects on the carbohydrate content. Environmental Technology (United Kingdom), 2019, 40, 1062-1070.	2.2	13
84	New technologies from the bioworld: selection of biopolymer-producing microalgae. Polimeros, 2017, 27, 285-289.	0.7	12
85	Microalgae biopeptides applied in nanofibers for the development of active packaging. Polimeros, 2017, 27, 290-297.	0.7	12
86	Role of microalgae in circular bioeconomy: from waste treatment to biofuel production. Clean Technologies and Environmental Policy, 0, , 1.	4.1	12
87	Development of pH indicators from nanofibers containing microalgal pigment for monitoring of food quality. Food Bioscience, 2021, 44, 101387.	4.4	12
88	Scaffolds Containing Spirulina sp. LEB 18 Biomass: Development, Characterization and Evaluation of In Vitro Biodegradation. Journal of Nanoscience and Nanotechnology, 2016, 16, 1050-1059.	0.9	11
89	Polyhydroxybutyrate production and increased macromolecule content in Chlamydomonas reinhardtii cultivated with xylose and reduced nitrogen levels. International Journal of Biological Macromolecules, 2020, 158, 875-883.	7.5	11
90	Recent Advances of Microalgae Exopolysaccharides for Application as Bioflocculants. Polysaccharides, 2022, 3, 264-276.	4.8	11

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91	Electrospun Polymeric Nanofibers in Food Packaging. , 2018, , 387-417.		10
92	INDUSTRIAL PLANT FOR PRODUCTION OF Spirulina sp. LEB 18. Brazilian Journal of Chemical Engineering, 2019, 36, 51-63.	1.3	10
93	Effect of the Carbon Concentration, Blend Concentration, and Renewal Rate in the Growth Kinetic of<i>Chlorella</i>sp.. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	9
94	The cultivation of microalgae Cyanobium sp. and Chlorella sp. in different culture media and stirring setting. African Journal of Microbiology Research, 2015, 9, 1431-1439.	0.4	9
95	Biofixation of carbon dioxide from coal station flue gas using Spirulina sp. LEB 18 and Scenedesmus obliquus LEB 22. African Journal of Microbiology Research, 2015, 9, 2202-2208.	0.4	9
96	Innovative application of brackish groundwater without the addition of nutrients in the cultivation of Spirulina and Chlorella for carbohydrate and lipid production. Bioresource Technology, 2022, 345, 126543.	9.6	9
97	Increase in biomass productivity and protein content of Spirulina sp. LEB 18 (Arthrospira) cultivated with crude glycerol. Biomass Conversion and Biorefinery, 2022, 12, 597-605.	4.6	8
98	Microalgae Cultivation and Industrial Waste: New Biotechnologies for Obtaining Silver Nanoparticles. Mini-Reviews in Organic Chemistry, 2019, 16, 369-376.	1.3	8
99	Carbon dioxide mitigation by microalga in a vertical tubular reactor with recycling of the culture medium. African Journal of Microbiology Research, 2015, 9, 1935-1940.	0.4	7
100	Use of Solid Waste from Thermoelectric Plants for the Cultivation of Microalgae. Brazilian Archives of Biology and Technology, 2016, 59, .	0.5	7
101	Microalgae-Based Biorefineries as a Promising Approach to Biofuel Production. , 2017, , 113-140.		7
102	Production of polymeric nanofibers with different conditions of the electrospinning process. Revista Materia, 2017, 22, .	0.2	7
103	Evaluation of CO2 Biofixation and Biodiesel Production by Spirulina (Arthospira) Cultivated In Air-Lift Photobioreactor. Brazilian Archives of Biology and Technology, 2018, 61, .	0.5	6
104	Microalgal biotechnology applied in biomedicine. , 2020, , 429-439.		6
105	Evaluation of different modes of operation for the production of<i>Spirulina</i>sp.. Journal of Chemical Technology and Biotechnology, 2016, 91, 1345-1348.	3.2	5
106	Simultaneous Biosynthesis of Silver Nanoparticles with <i>Spirulina</i> sp. LEB 18 Cultivation. Industrial Biotechnology, 2019, 15, 263-267.	0.8	5
107	Polyhydroxybutyrate (PHB)-based blends and composites. , 2022, , 389-413.		5
108	Biodiesel and Bioethanol from Microalgae. Green Energy and Technology, 2016, , 359-386.	0.6	4

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109	Outdoor Production of Biomass and Biomolecules by Spirulina (Arthrospira) and Synechococcus cultivated with Reduced Nutrient Supply. Bioenergy Research, 2022, 15, 121-130.	3.9	4
110	Microfiltration membranes developed from nanofibers via an electrospinning process. Materials Chemistry and Physics, 2022, 277, 125509.	4.0	4
111	Biofixation of CO2 on a pilot scale: Scaling of the process for industrial application. African Journal of Microbiology Research, 2016, 10, 768-774.	0.4	3
112	Biofixation of CO2 from Synthetic Combustion Gas Using Cultivated Microalgae in Three-Stage Serial Tubular Photobioreactors. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2011, 66, 0313.	1.4	3
113	Advances in the synthesis and applications of nanomaterials to increase CO2 biofixation in microalgal cultivation. Clean Technologies and Environmental Policy, 0, , 1.	4.1	3
114	Magnetic Field Action on Limnospira indica PCC8005 Cultures: Enhancement of Biomass Yield and Protein Content. Applied Sciences (Switzerland), 2022, 12, 1533.	2.5	3
115	Biofi xation of CO₂ from Synthetic Combustion Gas Using Cultivated Microalgae in Three-Stage Serial Tubular Photobioreactors. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2011, 66, 313-318.	1.4	2
116	Cyanobacterial Biomass by Reuse of Wastewater-Containing Hypochlorite. Industrial Biotechnology, 2018, 14, 265-269.	0.8	2
117	Liquid Biofuels From Microalgae: Recent Trends. , 2019, , 351-372.		2
118	Microalgae as a source of sustainable biofuels. , 2020, , 253-271.		2
119	Chlorella minutissima grown with xylose and arabinose in tubular photobioreactors: Evaluation of kinetics, carbohydrate production, and protein profile. Canadian Journal of Chemical Engineering, 0, , .	1.7	2
120	Pentoses Used in Cultures of Synechococcus nidulans and Spirulina paracas: Evaluation of Effects in Growth and in Content of Proteins and Carbohydrates. Brazilian Archives of Biology and Technology, 0, 62, .	0.5	2
121	Biomolecule concentrations increase in Chlorella fusca LEB 111 cultured using chemical absorbents and nutrient reuse. Bioenergy Research, 2022, 15, 131-140.	3.9	2
122	Development of Bioactive Nanopeptide of Microalgal Origin. Journal of Nanoscience and Nanotechnology, 2017, 17, 1025-1030.	0.9	1
123	Degradation Effects on the Mechanical and Thermal Properties of the Bio-Composites Due to Accelerated Weathering. Composites Science and Technology, 2022, , 159-172.	0.6	1
124	Nanofiber-Reinforced Bionanocomposites in Agriculture Applications. Composites Science and Technology, 2022, , 311-332.	0.6	1
125	Microalgae as source of edible lipids. , 2021, , 147-175.		0
126	Conducting biopolymer-carbon nanotube composite materials for sensing applications. Journal of Material Science & Engineering, 2015, 04, .	0.2	0

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127	Industrial Effluents as a Nutritional Source in Microalgae Cultivation. Mini-Reviews in Organic Chemistry, 2018, 15, .	1.3	0
128	Increasing the cell productivity of mixotrophic growth of Spirulina sp. LEB 18 with crude glycerol. Biomass Conversion and Biorefinery, 0, , 1.	4.6	0
129	Nanotechnology Perspectives for Bacteriocin Applications in Active Food Packaging. Industrial Biotechnology, 2022, 18, 137-146.	0.8	0
130	Metabolism of microalgae and metabolic engineering for biomaterial applications. , 2022, , 1-20.		0