Michele G Morais

List of Publications by Citations

129 papers	3,557 citations	31 h-index	56 g-index
135 ext. papers	4,331 ext. citations	4.9 avg, IF	6.07 L-index

#	Paper	IF	Citations
129	Biofixation of carbon dioxide by Spirulina sp. and Scenedesmus obliquus cultivated in a three-stage serial tubular photobioreactor. *Journal of Biotechnology*, **2007**, 129, 439-45	3.7	422
128	Isolation and selection of microalgae from coal fired thermoelectric power plant for biofixation of carbon dioxide. *Energy Conversion and Management*, **2007**, 48, 2169-2173	10.6	259
127	Carbon dioxide fixation by Chlorella kessleri, C. vulgaris, Scenedesmus obliquus and Spirulina sp. cultivated in flasks and vertical tubular photobioreactors. *Biotechnology Letters*, **2007**, 29, 1349-52	3	213
126	The role of biochemical engineering in the production of biofuels from microalgae. *Bioresource Technology*, **2011**, 102, 2-9	11	186
125	Microalgae as a new source of bioactive compounds in food supplements. *Current Opinion in Food Science*, **2016**, 7, 73-77	9.8	158
124	Biologically Active Metabolites Synthesized by Microalgae. *BioMed Research International*, **2015**, 2015, 835761	3	154
123	Spirulina for snack enrichment: Nutritional, physical and sensory evaluations. *LWT - Food Science and Technology*, **2018**, 90, 270-276	5.4	84
122	Microalgae as source of polyhydroxyalkanoates (PHAs) - A review. *International Journal of Biological Macromolecules*, **2019**, 131, 536-547	7.9	80
121	Pilot scale semicontinuous production of Spirulina biomass in southern Brazil. *Aquaculture*, **2009**, 294, 60-64	4.4	71
120	Influence of nitrogen on growth, biomass composition, production, and properties of polyhydroxyalkanoates (PHAs) by microalgae. *International Journal of Biological Macromolecules*, **2018**, 116, 552-562	7.9	62
119	Preparation of nanofibers containing the microalga Spirulina (Arthrospira). *Bioresource Technology*, **2010**, 101, 2872-6	11	62
118	Isolation and characterization of a new Arthrospira strain. *Zeitschrift Fur Naturforschung - Section C Journal of Biosciences*, **2008**, 63, 144-50	1.7	58
117	Development of electrospun nanofibers containing chitosan/PEO blend and phenolic compounds with antibacterial activity. *International Journal of Biological Macromolecules*, **2018**, 117, 800-806	7.9	57
116	Operational and economic aspects of Spirulina-based biorefinery. *Bioresource Technology*, **2019**, 292, 121946	11	54
115	Biological applications of nanobiotechnology. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 1007-17	1.3	54
114	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	2.2	50
113	Ultrafine fibers of zein and anthocyanins as natural pH indicator. *Journal of the Science of Food and Agriculture*, **2018**, 98, 2735-2741	4.3	50

112	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	11	47
111	Phycocyanin from Microalgae: Properties, Extraction and Purification, with Some Recent Applications. *Industrial Biotechnology*, **2018**, 14, 30-37	1.3	46
110	Spirulina cultivated under different light emitting diodes: Enhanced cell growth and phycocyanin production. *Bioresource Technology*, **2018**, 256, 38-43	11	43
109	Pentoses and light intensity increase the growth and carbohydrate production and alter the protein profile of Chlorella minutissima. *Bioresource Technology*, **2017**, 238, 248-253	11	37
108	A new biomaterial of nanofibers with the microalga Spirulina as scaffolds to cultivate with stem cells for use in tissue engineering. *Journal of Biomedical Nanotechnology*, **2013**, 9, 710-8	4	37
107	Microalgal biorefinery from CO2 and the effects under the Blue Economy. *Renewable and Sustainable Energy Reviews*, **2019**, 99, 58-65	16.2	37
106	Development of pH indicator from PLA/PEO ultrafine fibers containing pigment of microalgae origin. *International Journal of Biological Macromolecules*, **2018**, 118, 1855-1862	7.9	36
105	Antioxidant ultrafine fibers developed with microalga compounds using a free surface electrospinning. *Food Hydrocolloids*, **2019**, 93, 131-136	10.6	35
104	Polyhydroxybutyrate and phenolic compounds microalgae electrospun nanofibers: A novel nanomaterial with antibacterial activity. *International Journal of Biological Macromolecules*, **2018**, 113, 1008-1014	7.9	34
103	Development of a new nanofiber scaffold for use with stem cells in a third degree burn animal model. *Burns*, **2014**, 40, 1650-60	2.3	34
102	Biological effects of Spirulina (Arthrospira) biopolymers and biomass in the development of nanostructured scaffolds. *BioMed Research International*, **2014**, 2014, 762705	3	34
101	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, 418-29	3.2	33
100	Cultivation strategy to stimulate high carbohydrate content in Spirulina biomass. *Bioresource Technology*, **2018**, 269, 221-226	11	33
99	Progress in the physicochemical treatment of microalgae biomass for value-added product recovery. *Bioresource Technology*, **2020**, 301, 122727	11	32
98	Innovative pH sensors developed from ultrafine fibers containing aï¿½(Euterpe oleracea) extract. *Food Chemistry*, **2019**, 294, 397-404	8.5	31
97	Innovative polyhydroxybutyrate production by Chlorella fusca grown with pentoses. *Bioresource Technology*, **2018**, 265, 456-463	11	31
96	Vertical tubular photobioreactor for semicontinuous culture of Cyanobium sp. *Bioresource Technology*, **2011**, 102, 4897-900	11	30
95	CO 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	11	29

94	Microalgae starch: A promising raw material for the bioethanol production. *International Journal of Biological Macromolecules*, **2020**, 165, 2739-2749	7.9	29
93	Improvement of Thermal Stability of C-Phycocyanin by Nanofiber and Preservative Agents. *Journal of Food Processing and Preservation*, **2016**, 40, 1264-1269	2.1	29
92	Bioprocess Engineering Aspects of Biopolymer Production by the CyanobacteriumSpirulinaStrain LEB 18. *International Journal of Polymer Science*, **2014**, 2014, 1-6	2.4	27
91	A novel nanocomposite for food packaging developed by electrospinning and electrospraying. *Food Packaging and Shelf Life*, **2019**, 20, 100314	8.2	25
90	Polyhydroxybutyrate production by Spirulina sp. LEB 18 grown under different nutrient concentrations. *African Journal of Microbiology Research*, **2015**, 9, 1586-1594	0.5	25
89	Recent Advances and Future Perspectives of PHB Production by Cyanobacteria. *Industrial Biotechnology*, **2018**, 14, 249-256	1.3	25
88	Innovative nanofiber technology to improve carbon dioxide biofixation in microalgae cultivation. *Bioresource Technology*, **2019**, 273, 592-598	11	24
87	Green alga cultivation with monoethanolamine: Evaluation of CO fixation and macromolecule production. *Bioresource Technology*, **2018**, 261, 206-212	11	23
86	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	2.2	22
85	Development of a colorimetric pH indicator using nanofibers containing Spirulina sp. LEB 18. *Food Chemistry*, **2020**, 328, 126768	8.5	22
84	Polyhydroxybutyrate (PHB) Synthesis by Spirulina sp. LEB 18 Using Biopolymer Extraction Waste. *Applied Biochemistry and Biotechnology*, **2018**, 185, 822-833	3.2	22
83	Fed-batch cultivation with CO and monoethanolamine: Influence on Chlorella fusca LEB 111 cultivation, carbon biofixation and biomolecules production. *Bioresource Technology*, **2019**, 273, 627-633	11	21
82	Chlorella minutissima cultivation with CO and pentoses: Effects on kinetic and nutritional parameters. *Bioresource Technology*, **2017**, 244, 338-344	11	20
81	Simultaneous cultivation of Spirulina platensis and the toxigenic cyanobacteria Microcystis aeruginosa. *Zeitschrift Fur Naturforschung - Section C Journal of Biosciences*, **2006**, 61, 105-10	1.7	20
80	Encapsulation of phycocyanin by electrospraying: A promising approach for the protection of sensitive compounds. *Food and Bioproducts Processing*, **2020**, 119, 206-215	4.9	18
79	Production of Nanofibers Containing the Bioactive Compound C-Phycocyanin. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 944-9	1.3	17
78	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	4.8	17
77	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	17	16

76	Microalgae protein heating in acid/basic solution for nanofibers production by free surface electrospinning. *Journal of Food Engineering*, **2018**, 230, 49-54	6	15
75	Effect of Spirulina addition on the physicochemical and structural properties of extruded snacks. *Food Science and Technology*, **2017**, 37, 16-23	2	15
74	Biofunctionalized nanofibers using Arthrospira (Spirulina) biomass and biopolymer. *BioMed Research International*, **2015**, 2015, 967814	3	15
73	Extraction of poly(3-hydroxybutyrate) from Spirulina LEB 18 for developing nanofibers. *Polimeros*, **2015**, 25, 161-167	1.6	13
72	Bioprocessos para remoção de dióxido de carbono e óxido de nitrogênio por micro-algas visando a utilização de gases gerados durante a combustão do carvão. *Quimica Nova*, **2008**, 31, 1038-1042	1.6	13
71	Glycerol increases growth, protein production and alters the fatty acids profile of Spirulina (Arthrospira) sp LEB 18. *Process Biochemistry*, **2019**, 76, 40-45	4.8	13
70	Efficacy of Spirulina sp. polyhydroxyalkanoates extraction methods and influence on polymer properties and composition. *Algal Research*, **2018**, 33, 231-238	5	13
69	Biological CO mitigation by microalgae: technological trends, future prospects and challenges. *World Journal of Microbiology and Biotechnology*, **2019**, 35, 78	4.4	12
68	Nitrogen balancing and xylose addition enhances growth capacity and protein content in Chlorella minutissima cultures. *Bioresource Technology*, **2016**, 218, 129-33	11	12
67	Nanoencapsulation of the Bioactive Compounds of Spirulina with a Microalgal Biopolymer Coating. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 81-91	1.3	12
66	Enhancement of the carbohydrate content in Spirulina by applying CO, thermoelectric fly ashes and reduced nitrogen supply. *International Journal of Biological Macromolecules*, **2019**, 123, 1241-1247	7.9	12
65	Preparation of beta-carotene nanoemulsion and evaluation of stability at a long storage period. *Food Science and Technology*, **2019**, 39, 599-604	2	11
64	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	5.4	11
63	Green alga cultivation with nanofibers as physical adsorbents of carbon dioxide: Evaluation of gas biofixation and macromolecule production. *Bioresource Technology*, **2019**, 287, 121406	11	10
62	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	6	10
61	An Open Pond System for Microalgal Cultivation **2014**, 1-22		10
60	Spirulina sp. LEB 18 cultivation in seawater and reduced nutrients: Bioprocess strategy for increasing carbohydrates in biomass. *Bioresource Technology*, **2020**, 316, 123883	11	10
59	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	11	10

58	Cultivation of different microalgae with pentose as carbon source and the effects on the carbohydrate content. *Environmental Technology (United Kingdom)*, **2019**, 40, 1062-1070	2.6	10
57	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	11	9
56	Microalgae biopeptides applied in nanofibers for the development of active packaging. *Polimeros*, **2017**, 27, 290-297	1.6	9
55	Quercetin and curcumin in nanofibers of polycaprolactone and poly(hydroxybutyrate-co-hydroxyvalerate): Assessment of in vitro antioxidant activity. *Journal of Applied Polymer Science*, **2016**, 133,	2.9	9
54	Electrospun Polymeric Nanofibers in Food Packaging **2018**, 387-417		9
53	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	0.5	9
52	Perfil de ácidos graxos de microalgas cultivadas com dióxido de carbono. *Ciencia E Agrotecnologia*, **2008**, 32, 1245-1251	1.6	9
51	Physical and biological fixation of CO with polymeric nanofibers in outdoor cultivations of Chlorella fusca LEB 111. *International Journal of Biological Macromolecules*, **2020**, 151, 1332-1339	7.9	9
50	Renewal of nanofibers in Chlorella fusca microalgae cultivation to increase CO fixation. *Bioresource Technology*, **2021**, 321, 124452	11	9
49	INDUSTRIAL PLANT FOR PRODUCTION OF Spirulina sp. LEB 18. *Brazilian Journal of Chemical Engineering*, **2019**, 36, 51-63	1.7	8
48	New technologies from the bioworld: selection of biopolymer-producing microalgae. *Polimeros*, **2017**, 27, 285-289	1.6	8
47	Scaffolds Containing Spirulina sp. LEB 18 Biomass: Development, Characterization and Evaluation of In Vitro Biodegradation. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 1050-9	1.3	8
46	Effect of the carbon concentration, blend concentration, and renewal rate in the growth kinetic of Chlorella sp. *Scientific World Journal, The*, **2014**, 2014, 205184	2.2	8
45	Snack bars enriched with Spirulina for schoolchildren nutrition. *Food Science and Technology*, **2020**, 40, 146-152	2	8
44	Brackish Groundwater from Brazilian Backlands in Spirulina Cultures: Potential of Carbohydrate and Polyunsaturated Fatty Acid Production. *Applied Biochemistry and Biotechnology*, **2020**, 190, 907-917	3.2	8
43	Open pond systems for microalgal culture **2019**, 199-223		7
42	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	0.5	7
41	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	0.5	7

40	Microalgae-Based Biorefineries as a Promising Approach to Biofuel Production **2017**, 113-140		5
39	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	7.9	5
38	Role of microalgae in circular bioeconomy: from waste treatment to biofuel production. *Clean Technologies and Environmental Policy*,1	4.3	5
37	Use of Solid Waste from Thermoelectric Plants for the Cultivation of Microalgae. *Brazilian Archives of Biology and Technology*, **2016**, 59,	1.8	5
36	Evaluation of different modes of operation for the production of Spirulina sp.. *Journal of Chemical Technology and Biotechnology*, **2016**, 91, 1345-1348	3.5	4
35	Biodiesel and Bioethanol from Microalgae. *Green Energy and Technology*, **2016**, 359-386	0.6	4
34	Microalgal biotechnology applied in biomedicine **2020**, 429-439		4
33	Evaluation of CO2 Biofixation and Biodiesel Production by Spirulina (Arthospira) Cultivated In Air-Lift Photobioreactor. *Brazilian Archives of Biology and Technology*, **2018**, 61,	1.8	4
32	Simultaneous Biosynthesis of Silver Nanoparticles with Spirulina sp. LEB 18 Cultivation. *Industrial Biotechnology*, **2019**, 15, 263-267	1.3	3
31	Production of polymeric nanofibers with different conditions of the electrospinning process. *Revista Materia*, **2017**, 22,	0.8	3
30	Microalgae Cultivation and Industrial Waste: New Biotechnologies for Obtaining Silver Nanoparticles. *Mini-Reviews in Organic Chemistry*, **2019**, 16, 369-376	1.7	3
29	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	1.7	3
28	Microalgae Polysaccharides: An Overview of Production, Characterization, and Potential Applications. *Polysaccharides*, **2021**, 2, 759-772	3	3
27	Increase in biomass productivity and protein content of Spirulina sp. LEB 18 (Arthrospira) cultivated with crude glycerol. *Biomass Conversion and Biorefinery*, **2020**, 1	2.3	3
26	Biofixation of CO2 on a pilot scale: Scaling of the process for industrial application. *African Journal of Microbiology Research*, **2016**, 10, 768-774	0.5	3
25	Liquid Biofuels From Microalgae: Recent Trends **2019**, 351-372		2
24	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* ,62,	1.8	2
23	Innovative application of brackish groundwater without the addition of nutrients in the cultivation of Spirulina and Chlorella for carbohydrate and lipid production.. *Bioresource Technology*, **2021**, 345, 126543	11	2

22	Development of Bioactive Nanopeptide of Microalgal Origin. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 1025-030	1.3	1
21	Microalgae as a source of sustainable biofuels **2020**, 253-271		1
20	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, 313-8	1.7	1
19	Degradation Effects on the Mechanical and Thermal Properties of the Bio-Composites Due to Accelerated Weathering. *Composites Science and Technology*, **2022**, 159-172		1
18	Polyhydroxybutyrate (PHB)-based blends and composites **2022**, 389-413		1
17	Advances in the synthesis and applications of nanomaterials to increase CO2 biofixation in microalgal cultivation. *Clean Technologies and Environmental Policy*,1	4.3	1
16	Cyanobacterial Biomass by Reuse of Wastewater-Containing Hypochlorite. *Industrial Biotechnology*, **2018**, 14, 265-269	1.3	1
15	Development of pH indicators from nanofibers containing microalgal pigment for monitoring of food quality. *Food Bioscience*, **2021**, 44, 101387	4.9	1
14	Outdoor Production of Biomass and Biomolecules by Spirulina (Arthrospira) and Synechococcus cultivated with Reduced Nutrient Supply. *Bioenergy Research*,1	3.1	1
13	Recent Advances of Microalgae Exopolysaccharides for Application as Bioflocculants. *Polysaccharides*, **2022**, 3, 264-276	3	1
12	Exopolysaccharides from microalgae: Production in a biorefinery framework and potential applications. *Bioresource Technology Reports*, **2022**, 18, 101006	4.1	1
11	Magnetic Field Action on Limnospira indica PCC8005 Cultures: Enhancement of Biomass Yield and Protein Content. *Applied Sciences (Switzerland)*, **2022**, 12, 1533	2.6	0
10	Microfiltration membranes developed from nanofibers via an electrospinning process. *Materials Chemistry and Physics*, **2022**, 277, 125509	4.4	0
9	Microalgal Applications in Nanotechnology: An Outstanding Tool for Nanocompounds Synthesis and Bioproducts Obtention. *Nanotechnology in the Life Sciences*, **2021**, 95-116	1.1	0
8	Microalgae-Based UV Protection Compounds **2021**, 201-224		
7	Biomolecule concentrations increase in Chlorella fusca LEB 111 cultured using chemical absorbents and nutrient reuse. *Bioenergy Research*,1	3.1	
6	Microalgae as source of edible lipids **2021**, 147-175		
5	Nanofiber-Reinforced Bionanocomposites in Agriculture Applications. *Composites Science and Technology*, **2022**, 311-332		

List of Publications

4	Increasing the cell productivity of mixotrophic growth of Spirulina sp. LEB 18 with crude glycerol. *Biomass Conversion and Biorefinery*,1	2.3
3	Metabolism of microalgae and metabolic engineering for biomaterial applications **2022**, 1-20	
2	Encapsulation of Bioactive Compounds in Electrospun Nanofibers for Food Packaging **2022**, 473-490	
1	Electrospun Polymeric Nanofibers: An Innovative Application for Preservation of Fruits and Vegetables **2022**, 451-471	