

# João Varela

## List of Publications by Year in descending order

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97  
papers

4,327  
citations

87723

38  
h-index

123241

61  
g-index

100  
all docs

100  
docs citations

100  
times ranked

5268  
citing authors

#	ARTICLE	IF	CITATIONS
1	Light emitting diodes (LEDs) applied to microalgal production. Trends in Biotechnology, 2014, 32, 422-430.	4.9	282
2	Polyunsaturated Fatty Acids of Marine Macroalgae: Potential for Nutritional and Pharmaceutical Applications. Marine Drugs, 2012, 10, 1920-1935.	2.2	252
3	Alternative Sources of n-3 Long-Chain Polyunsaturated Fatty Acids in Marine Microalgae. Marine Drugs, 2013, 11, 2259-2281.	2.2	236
4	Evolutionary Origins and Functions of the Carotenoid Biosynthetic Pathway in Marine Diatoms. PLoS ONE, 2008, 3, e2896.	1.1	134
5	Halophytes: Gourmet food with nutritional health benefits?. Journal of Food Composition and Analysis, 2017, 59, 35-42.	1.9	127
6	Microplate-based high throughput screening procedure for the isolation of lipid-rich marine microalgae. Biotechnology for Biofuels, 2011, 4, 61.	6.2	122
7	Osmostress-induced changes in yeast gene expression. Molecular Microbiology, 1992, 6, 2183-2190.	1.2	112
8	Nutrient Limitation is the Main Regulatory Factor for Carotenoid Accumulation and for Psy and Pds Steady State Transcript Levels in Dunaliella salina (Chlorophyta) Exposed to High Light and Salt Stress. Marine Biotechnology, 2008, 10, 602-11.	1.1	110
9	Osmostress response of the yeast Saccharomyces. Molecular Microbiology, 1993, 10, 253-258.	1.2	94
10	Microalgae of different phyla display antioxidant, metal chelating and acetylcholinesterase inhibitory activities. Food Chemistry, 2012, 131, 134-140.	4.2	91
11	Effect of light quality supplied by light emitting diodes (LEDs) on growth and biochemical profiles of Nannochloropsis oculata and Tetraselmis chuii. Algal Research, 2016, 16, 387-398.	2.4	82
12	In vitro antioxidant and anti-inflammatory properties of Limonium algarvense flowers™ infusions and decoctions: A comparison with green tea (Camellia sinensis). Food Chemistry, 2016, 200, 322-329.	4.2	78
13	Trends and strategies to enhance triacylglycerols and high-value compounds in microalgae. Algal Research, 2017, 25, 263-273.	2.4	75
14	Iron Deprivation in Synechocystis: Inference of Pathways, Non-coding RNAs, and Regulatory Elements from Comprehensive Expression Profiling. G3: Genes, Genomes, Genetics, 2012, 2, 1475-1495.	0.8	73
15	Maritime Halophyte Species from Southern Portugal as Sources of Bioactive Molecules. Marine Drugs, 2014, 12, 2228-2244.	2.2	72
16	Unravelling the antioxidant potential and the phenolic composition of different anatomical organs of the marine halophyte Limonium algarvense. Industrial Crops and Products, 2015, 77, 315-322.	2.5	67
17	Fatty acid composition and biological activities of Isochrysis galbana T-ISO, Tetraselmis sp. and Scenedesmus sp.: possible application in the pharmaceutical and functional food industries. Journal of Applied Phycology, 2014, 26, 151-161.	1.5	66
18	Heterotrophy as a tool to overcome the long and costly autotrophic scale-up process for large scale production of microalgae. Scientific Reports, 2019, 9, 13935.	1.6	66

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19	Isolation and characterization of a stress-inducible <i>Dunaliella salina</i> Lcy-Î² gene encoding a functional lycopene Î²-cyclase. <i>Applied Microbiology and Biotechnology</i> , 2008, 79, 819-28.	1.7	65
20	Searching for new sources of innovative products for the food industry within halophyte aromatic plants: In vitro antioxidant activity and phenolic and mineral contents of infusions and decoctions of <i>Crithmum maritimum</i> L.. <i>Food and Chemical Toxicology</i> , 2017, 107, 581-589.	1.8	65
21	Flashing LEDs for Microalgal Production. <i>Trends in Biotechnology</i> , 2017, 35, 1088-1101.	4.9	65
22	Algae as Food in Europe: An Overview of Species Diversity and Their Application. <i>Foods</i> , 2022, 11, 1871.	1.9	63
23	Isolation and Characterization of Novel <i>Chlorella Vulgaris</i> Mutants With Low Chlorophyll and Improved Protein Contents for Food Applications. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 469.	2.0	61
24	Response of <i>Saccharomyces cerevisiae</i> to changes in external osmolarity. <i>Microbiology (United Kingdom)</i> , 2007, 159, 1059-1067.	0.7	59
25	Scale-up and large-scale production of <i>Tetraselmis</i> sp. CTP4 (Chlorophyta) for CO <sub>2</sub> mitigation: from an agar plate to 100-m <sup>3</sup> industrial photobioreactors. <i>Scientific Reports</i> , 2018, 8, 5112.	1.6	57
26	Nutritional Potential and Toxicological Evaluation of <i>Tetraselmis</i> sp. CTP4 Microalgal Biomass Produced in Industrial Photobioreactors. <i>Molecules</i> , 2019, 24, 3192.	1.7	57
27	Isolation and Fatty Acid Profile of Selected Microalgae Strains from the Red Sea for Biofuel Production. <i>Energies</i> , 2013, 6, 2773-2783.	1.6	56
28	Natural products from extreme marine environments: Searching for potential industrial uses within extremophile plants. <i>Industrial Crops and Products</i> , 2016, 94, 299-307.	2.5	56
29	Isololiolide, a carotenoid metabolite isolated from the brown alga <i>Cystoseira tamariscifolia</i> , is cytotoxic and able to induce apoptosis in hepatocarcinoma cells through caspase-3 activation, decreased Bcl-2 levels, increased p53 expression and PARP cleavage. <i>Phytomedicine</i> , 2016, 23, 550-557.	2.3	55
30	Urban wastewater treatment by <i>Tetraselmis</i> sp. CTP4 (Chlorophyta). <i>Bioresource Technology</i> , 2017, 223, 175-183.	4.8	54
31	Fluorescence activated cell-sorting principles and applications in microalgal biotechnology. <i>Algal Research</i> , 2018, 30, 113-120.	2.4	54
32	Influence of cultivation salinity in the nutritional composition, antioxidant capacity and microbial quality of <i>Salicornia ramosissima</i> commercially produced in soilless systems. <i>Food Chemistry</i> , 2020, 333, 127525.	4.2	48
33	Novel approach to bis(indolyl)methanes: De novo synthesis of 1-hydroxyiminomethyl derivatives with anti-cancer properties. <i>European Journal of Medicinal Chemistry</i> , 2015, 93, 9-15.	2.6	45
34	Biological Activities and Chemical Composition of Methanolic Extracts of Selected Autochthonous Microalgae Strains from the Red Sea. <i>Marine Drugs</i> , 2015, 13, 3531-3549.	2.2	44
35	Isolation of a euryhaline microalgal strain, <i>Tetraselmis</i> sp. CTP4, as a robust feedstock for biodiesel production. <i>Scientific Reports</i> , 2016, 6, 35663.	1.6	44
36	Wild vs cultivated halophytes: Nutritional and functional differences. <i>Food Chemistry</i> , 2020, 333, 127536.	4.2	43

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37	Cystoseira algae (Fucaceae): update on their chemical entities and biological activities. Tetrahedron: Asymmetry, 2017, 28, 1486-1505.	1.8	40
38	Chemical profiling of infusions and decoctions of <i>Helichrysum italicum</i> subsp. <i>picardii</i> by UHPLC-PDA-MS and in vitro biological activities comparatively with green tea ( <i>Camellia sinensis</i> ) and rooibos tisane ( <i>Aspalathus linearis</i> ). Journal of Pharmaceutical and Biomedical Analysis, 2017, 145, 593-603.	1.4	39
39	Methanol extracts from <i>Cystoseira tamariscifolia</i> and <i>Cystoseira nodicaulis</i> are able to inhibit cholinesterases and protect a human dopaminergic cell line from hydrogen peroxide-induced cytotoxicity. Pharmaceutical Biology, 2016, 54, 1687-1696.	1.3	38
40	Fatty acid profiles of the main lipid classes of green seaweeds from fish pond aquaculture. Food Science and Nutrition, 2017, 5, 1186-1194.	1.5	37
41	Flashing light emitting diodes (LEDs) induce proteins, polyunsaturated fatty acids and pigments in three microalgae. Journal of Biotechnology, 2021, 325, 15-24.	1.9	37
42	Random Mutagenesis as a Promising Tool for Microalgal Strain Improvement towards Industrial Production. Marine Drugs, 2022, 20, 440.	2.2	36
43	Antileishmanial activity of meroditerpenoids from the macroalgae <i>Cystoseira baccata</i> . Experimental Parasitology, 2017, 174, 1-9.	0.5	35
44	Biochemical profile and in vitro neuroprotective properties of <i>Carpobrotus edulis</i> L., a medicinal and edible halophyte native to the coast of South Africa. South African Journal of Botany, 2017, 111, 222-231.	1.2	35
45	The marine halophytes <i>Carpobrotus edulis</i> L. and <i>Arthrocnemum macrostachyum</i> L. are potential sources of nutritionally important PUFAs and metabolites with antioxidant, metal chelating and anticholinesterase inhibitory activities. Botanica Marina, 2012, 55, 281-288.	0.6	34
46	Can macroalgae provide promising anti-tumoral compounds? A closer look at <i>Cystoseira tamariscifolia</i> as a source for antioxidant and anti-hepatocarcinoma compounds. PeerJ, 2016, 4, e1704.	0.9	33
47	Unlocking the in vitro anti-inflammatory and antidiabetic potential of <i>Polygonum maritimum</i> . Pharmaceutical Biology, 2017, 55, 1348-1357.	1.3	33
48	Composition and bioaccessibility of elements in green seaweeds from fish pond aquaculture. Food Research International, 2018, 105, 271-277.	2.9	33
49	Improvement of carotenoid extraction from a recently isolated, robust microalga, <i>Tetraselmis</i> sp. CTP4 (chlorophyta). Bioprocess and Biosystems Engineering, 2020, 43, 785-796.	1.7	33
50	<i>Botryococcus braunii</i> and <i>Nannochloropsis oculata</i> extracts inhibit cholinesterases and protect human dopaminergic SH-SY5Y cells from H <sub>2</sub> O <sub>2</sub> -induced cytotoxicity. Journal of Applied Phycology, 2015, 27, 839-848.	1.5	31
51	Health promoting potential of herbal teas and tinctures from <i>Artemisia campestris</i> subsp. <i>maritima</i> : from traditional remedies to prospective products. Scientific Reports, 2018, 8, 4689.	1.6	31
52	Lipid composition and some bioactivities of 3 newly isolated microalgae ( <i>Tetraselmis</i> sp. IMP3,) Tj ETQq0 0 0 rgBT / Overlock 10 Tf 50 14	1.1	31
53	Fatty acid profile of different species of algae of the <i>Cystoseira</i> genus: a nutraceutical perspective. Natural Product Research, 2015, 29, 1264-1270.	1.0	30
54	Incorporation of defatted microalgal biomass ( <i>Tetraselmis</i> sp. CTP4) at the expense of soybean meal as a feed ingredient for juvenile gilthead seabream ( <i>Sparus aurata</i> ). Algal Research, 2020, 47, 101869.	2.4	29

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55	First report of the nutritional profile and antioxidant potential of <i>Holothuria arguinensis</i> , a new resource for aquaculture in Europe. <i>Natural Product Research</i> , 2016, 30, 2034-2040.	1.0	28
56	Improved phylogeny of brown algae <i>Cystoseira</i> (Fucales) from the Atlantic-Mediterranean region based on mitochondrial sequences. <i>PLoS ONE</i> , 2019, 14, e0210143.	1.1	27
57	In vitro and in silico approaches to appraise <i>Polygonum maritimum</i> L. as a source of innovative products with anti-ageing potential. <i>Industrial Crops and Products</i> , 2018, 111, 391-399.	2.5	26
58	Growth performance, biochemical composition and sedimentation velocity of <i>Tetraselmis</i> sp. CTP4 under different salinities using low-cost lab- and pilot-scale systems. <i>Heliyon</i> , 2019, 5, e01553.	1.4	25
59	Antioxidant, Antimicrobial, and Bioactive Potential of Two New Haloarchaeal Strains Isolated from Odiel Salterns (Southwest Spain). <i>Biology</i> , 2020, 9, 298.	1.3	24
60	Effect of temperature on growth, photosynthesis and biochemical composition of <i>Nannochloropsis oceanica</i> , grown outdoors in tubular photobioreactors. <i>Algal Research</i> , 2020, 49, 101923.	2.4	23
61	A first glance into the nutritional properties of the sea cucumber <i>Parastichopus regalis</i> from the Mediterranean Sea (SE Spain). <i>Natural Product Research</i> , 2018, 32, 116-120.	1.0	21
62	Carotenoid biosynthetic gene expression, pigment and n-3 fatty acid contents in carotenoid-rich <i>Tetraselmis striata</i> CTP4 strains under heat stress combined with high light. <i>Bioresource Technology</i> , 2021, 337, 125385.	4.8	21
63	Microalgal Systems for Wastewater Treatment: Technological Trends and Challenges towards Waste Recovery. <i>Energies</i> , 2021, 14, 8112.	1.6	21
64	Molecular and functional characterization of a cDNA encoding 4-hydroxy-3-methylbut-2-enyl diphosphate reductase from <i>Dunaliella salina</i> . <i>Journal of Plant Physiology</i> , 2009, 166, 968-977.	1.6	20
65	In vitro Antitumoral Activity of Compounds Isolated from <i>Artemisia gorgonum</i> Webb. <i>Phytotherapy Research</i> , 2014, 28, 1329-1334.	2.8	20
66	Coupling sea lavender ( <i>Limonium algarvense</i> Erben) and green tea ( <i>Camellia sinensis</i> (L.) Kuntze) to produce an innovative herbal beverage with enhanced enzymatic inhibitory properties. <i>South African Journal of Botany</i> , 2019, 120, 87-94.	1.2	19
67	<i>Nannochloropsis oceanica</i> Cultivation in Pilot-Scale Raceway Ponds – From Design to Cultivation. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1725.	1.3	19
68	Profiling of antioxidant potential and phytoconstituents of <i>Plantago coronopus</i> . <i>Brazilian Journal of Biology</i> , 2017, 77, 632-641.	0.4	17
69	Anti-Hepatocellular Carcinoma (HepG2) Activities of Monoterpene Hydroxy Lactones Isolated from the Marine Microalga <i>Tisochrysis lutea</i> . <i>Marine Drugs</i> , 2020, 18, 567.	2.2	17
70	Microalgae as Potential Sources of Bioactive Compounds for Functional Foods and Pharmaceuticals. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5877.	1.3	17
71	A comparative study of the in vitro enzyme inhibitory and antioxidant activities of <i>Butea monosperma</i> (Lam.) Taub. and <i>Sesbania grandiflora</i> (L.) Poiret from Pakistan: New sources of natural products for public health problems. <i>South African Journal of Botany</i> , 2019, 120, 146-156.	1.2	16
72	Industrial production of <i>Phaeodactylum tricorutum</i> for CO <sub>2</sub> mitigation: biomass productivity and photosynthetic efficiency using photobioreactors of different volumes. <i>Journal of Applied Phycology</i> , 2019, 31, 2187-2196.	1.5	15

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73	Isolation, Identification and Biotechnological Applications of a Novel, Robust, Free-living Chlorococcum ( <i>Oophila</i> ) amblystomatis Strain Isolated from a Local Pond. Applied Sciences (Switzerland), 2020, 10, 3040.	1.3	15
74	A comparative evaluation of biological activities and bioactive compounds of the seagrasses <i>Zostera marina</i> and <i>Zostera noltei</i> from southern Portugal. Natural Product Research, 2016, 30, 724-728.	1.0	14
75	Operation Regimes: A Comparison Based on Nannochloropsis oceanica Biomass and Lipid Productivity. Energies, 2021, 14, 1542.	1.6	14
76	Assessment and comparison of the properties of biodiesel synthesized from three different types of wet microalgal biomass. Journal of Applied Phycology, 2016, 28, 1571-1578.	1.5	13
77	Drying Microalgae Using an Industrial Solar Dryer: A Biomass Quality Assessment. Foods, 2022, 11, 1873.	1.9	13
78	Natural products from marine invertebrates against Leishmania parasites: a comprehensive review. Phytochemistry Reviews, 2016, 15, 663-697.	3.1	12
79	Juncaceae species as sources of innovative bioactive compounds for the food industry: In vitro antioxidant activity, neuroprotective properties and in silico studies. Food and Chemical Toxicology, 2017, 107, 590-596.	1.8	12
80	First report of the <i>in vitro</i> antileishmanial properties of extremophile plants from the Algarve Coast. Natural Product Research, 2018, 32, 600-604.	1.0	12
81	Lab-Scale Optimization of Aurantiochytrium sp. Culture Medium for Improved Growth and DHA Production. Applied Sciences (Switzerland), 2020, 10, 2500.	1.3	12
82	Proximate biochemical composition and mineral content of edible species from the genus Cystoseira in Portugal. Botanica Marina, 2016, .	0.6	10
83	Nutritional and Functional Evaluation of Inula crithmoides and Mesembryanthemum nodiflorum Grown in Different Salinities for Human Consumption. Molecules, 2021, 26, 4543.	1.7	9
84	Medicinal Effects of Microalgae-Derived Fatty Acids. , 2015, , 209-231.		7
85	Microalgae-based unsaponifiable matter as source of natural antioxidants and metal chelators to enhance the value of wet Tetraselmis chuii biomass. Open Chemistry, 2016, 14, 299-307.	1.0	7
86	Development of an Organic Culture Medium for Autotrophic Production of Chlorella vulgaris Biomass. Applied Sciences (Switzerland), 2020, 10, 2156.	1.3	7
87	Diel biochemical and photosynthetic monitorization of Skeletonema costatum and Phaeodactylum tricornutum grown in outdoor pilot-scale flat panel photobioreactors. Journal of Biotechnology, 2022, 343, 110-119.	1.9	7
88	Optimisation of Biomass Production and Nutritional Value of Two Marine Diatoms (Bacillariophyceae), Skeletonema costatum and Chaetoceros calcitrans. Biology, 2022, 11, 594.	1.3	7
89	<i>Bursatella leachii</i> from Mar Menor as a Source of Bioactive Molecules: Preliminary Evaluation of the Nutritional Profile, In Vitro Biological Activities, and Fatty Acids Contents. Journal of Aquatic Food Product Technology, 2017, 26, 1337-1350.	0.6	5
90	Report of <i>in vitro</i> antileishmanial properties of Iberian macroalgae. Natural Product Research, 2019, 33, 1778-1782.	1.0	5

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91	Effects of LED lighting on <i>Nannochloropsis oceanica</i> grown in outdoor raceway ponds. <i>Algal Research</i> , 2022, 64, 102685.	2.4	5
92	In vitro and in silico approaches to unveil the mechanisms underlying the cytotoxic effect of juncunol on human hepatocarcinoma cells. <i>Pharmacological Reports</i> , 2018, 70, 896-899.	1.5	4
93	In situ monitoring of chlorophyll <i>a</i> fluorescence in <i>Nannochloropsis oceanica</i> cultures to assess photochemical changes and the onset of lipid accumulation during nitrogen deprivation. <i>Biotechnology and Bioengineering</i> , 2021, 118, 4375-4388.	1.7	4
94	Brown macroalgae produce anti-leukemia compounds. <i>Planta Medica</i> , 2012, 78, .	0.7	2
95	High-value compound induction by flashing light in <i>Diacronema lutheri</i> and <i>Tetraselmis striata</i> CTP4. <i>Bioresource Technology Reports</i> , 2022, 19, 101158.	1.5	2
96	Biochemistry and molecular biology in Portugal: An overview of past and current contributions. <i>IUBMB Life</i> , 2008, 60, 265-269.	1.5	0
97	Microalgae as source of edible lipids. , 2021, , 147-175.		0