Francisco Garcia-Camacho

List of Publications by Year
in descending order

122 papers	6,618 citations	76196 40 h-index	82410 72 g-index
127 all docs	127 docs citations	127 times ranked	4623 citing authors

#	Article	IF	Citations
1	Photobioreactors: light regime, mass transfer, and scaleup. Journal of Biotechnology, 1999, 70, 231-247.	1.9	456
2	Comparative evaluation of compact photobioreactors for large-scale monoculture of microalgae. Journal of Biotechnology, 1999, 70, 249-270.	1.9	286
3	Prediction of dissolved oxygen and carbon dioxide concentration profiles in tubular photobioreactors for microalgal culture. , 1999, 62, 71-86.		262
4	Shear stress tolerance and biochemical characterization of Phaeodactylum tricornutum in quasi steady-state continuous culture in outdoor photobioreactors. Biochemical Engineering Journal, 2003, 16, 287-297.	1.8	235
5	A mathematical model of microalgal growth in light-limited chemostat culture. Journal of Chemical Technology and Biotechnology, 1994, 61, 167-173.	1.6	220
6	A mechanistic model of photosynthesis in microalgae. Biotechnology and Bioengineering, 2003, 81, 459-473.	1.7	214
7	A model for light distribution and average solar irradiance inside outdoor tubular photobioreactors for the microalgal mass culture. , 1997, 55, 701-714.		202
8	Modeling of biomass productivity in tubular photobioreactors for microalgal cultures: Effects of dilution rate, tube diameter, and solar irradiance. , 1998, 58, 605-616.		188
9	Growth and biochemical characterization of microalgal biomass produced in bubble column and airlift photobioreactors: studies in fed-batch culture. Enzyme and Microbial Technology, 2002, 31, 1015-1023.	1.6	165
10	A study on simultaneous photolimitation and photoinhibition in dense microalgal cultures taking into account incident and averaged irradiances. Journal of Biotechnology, 1996, 45, 59-69.	1.9	164
11	Biotechnological significance of toxic marine dinoflagellates. Biotechnology Advances, 2007, 25, 176-194.	6.0	160
12	Mixotrophic growth of the microalga Phaeodactylum tricornutum. Process Biochemistry, 2005, 40, 297-305.	1.8	153
13	Biomass Nutrient Profiles of the MicroalgaNannochloropsis. Journal of Agricultural and Food Chemistry, 2001, 49, 2966-2972.	2.4	140
14	Producing drugs from marine sponges. Biotechnology Advances, 2003, 21, 585-598.	6.0	136
15	Comparison between extraction of lipids and fatty acids from microalgal biomass. JAOCS, Journal of the American Oil Chemists' Society, 1994, 71, 955-959.	0.8	134
16	Interaction between CO2-mass transfer, light availability, and hydrodynamic stress in the growth ofPhaeodactylum tricornutum in a concentric tube airlift photobioreactor. , 1998, 60, 317-325.		131
17	Protein production using the baculovirusâ€insect cell expression system. Biotechnology Progress, 2014, 30, 1-18.	1.3	113
18	Mixing in Bubble Column and Airlift Reactors. Chemical Engineering Research and Design, 2004, 82, 1367-1374.	2.7	97

#	Article	IF	Citations
19	A mechanistic model of photosynthesis in microalgae including photoacclimation dynamics. Journal of Theoretical Biology, 2012, 304, 1-15.	0.8	91
20	Use of concentric-tube airlift photobioreactors for microalgal outdoor mass cultures. Enzyme and Microbial Technology, 1999, 24, 164-172.	1.6	90
21	Bioactives from microalgal dinoflagellates. Biotechnology Advances, 2012, 30, 1673-1684.	6.0	88
22	Studies of mixing in a concentric tube airlift bioreactor with different spargers. Chemical Engineering Science, 1998, 53, 709-719.	1.9	86
23	Concentration and purification of stearidonic, eicosapentaenoic, and docosahexaenoic acids from cod liver oil and the marine microalgalsochrysis galbana. JAOCS, Journal of the American Oil Chemists' Society, 1995, 72, 575-583.	0.8	85
24	Carbon dioxide uptake efficiency by outdoor microalgal cultures in tubular airlift photobioreactors. , 2000, 67, 465-475.		82
25	Carboxymethyl cellulose protects algal cells against hydrodynamic stress. Enzyme and Microbial Technology, 2001, 29, 602-610.	1.6	81
26	Maximizing carotenoid extraction from microalgae used as food additives and determined by liquid chromatography (HPLC). Food Chemistry, 2018, 257, 316-324.	4.2	81
27	A process for biodiesel production involving the heterotrophic fermentation of Chlorella protothecoides with glycerol as the carbon source. Applied Energy, 2013, 103, 341-349.	5.1	78
28	n-3 PUFA productivity in chemostat cultures of microalgae. Applied Microbiology and Biotechnology, 1993, 38, 599.	1.7	74
29	Determination of shear stress thresholds in toxic dinoflagellates cultured in shaken flasks. Process Biochemistry, 2007, 42, 1506-1515.	1.8	74
30	Effect of growth rate on the eicosapentaenoic acid and docosahexaenoic acid content of Isochrysis galbana in chemostat culture. Applied Microbiology and Biotechnology, 1994, 41, 23-27.	1.7	67
31	Analysis of photobioreactors for culturing high-value microalgae and cyanobacteria via an advanced diagnostic technique: CARPT. Chemical Engineering Science, 2003, 58, 2519-2527.	1.9	67
32	EPA from Isochrysis galbana. Growth conditions and productivity. Process Biochemistry, 1992, 27, 299-305.	1.8	65
33	Photobioreactor scale-up for a shear-sensitive dinoflagellate microalga. Process Biochemistry, 2011, 46, 936-944.	1.8	64
34	Causes of shear sensitivity of the toxic dinoflagellate Protoceratium reticulatum. Biotechnology Progress, 2009, 25, 792-800.	1.3	62
35	Mixotrophic growth of Phaeodactylum tricornutum on fructose and glycerol in fed-batch and semi-continuous modes. Bioresource Technology, 2013, 147, 569-576.	4.8	58
36	Influence of sparger on energy dissipation, shear rate, and mass transfer to sea water in a concentric-tube airlift bioreactor. Enzyme and Microbial Technology, 1999, 25, 820-830.	1.6	57

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37	Modeling of eicosapentaenoic acid (EPA) production fromPhaeodactylum tricornutum cultures in tubular photobioreactors. Effects of dilution rate, tube diameter, and solar irradiance. , 2000, 68, 173-183.		56
38	Isolation of clones of Isochrysis galbana rich in eicosapentaenoic acid. Aquaculture, 1992, 102, 363-371.	1.7	50
39	Biofouling in photobioreactors for marine microalgae. Critical Reviews in Biotechnology, 2017, 37, 1006-1023.	5.1	50
40	The production of polyunsaturated fatty acids by microalgae: from strain selection to product purification. Process Biochemistry, 1995, 30, 711-719.	1.8	49
41	Pilot-Plant-Scale Outdoor Mixotrophic Cultures of Phaeodactylum tricornutum Using Glycerol in Vertical Bubble Column and Airlift Photobioreactors: Studies in Fed-Batch Mode. Biotechnology Progress, 2004, 20, 728-736.	1.3	49
42	Outdoor culture of Isochrysis galbana ALII-4 in a closed tubular photobioreactor. Journal of Biotechnology, 1994, 37, 159-166.	1.9	48
43	Preservation of the marine microalga, Isochrysis galbana: influence on the fatty acid profile. Aquaculture, 1994, 123, 377-385.	1.7	44
44	Artificial neural network modeling for predicting the growth of the microalga Karlodinium veneficum. Algal Research, 2016, 14, 58-64.	2.4	43
45	An optimisation approach for culturing shear-sensitive dinoflagellate microalgae in bench-scale bubble column photobioreactors. Bioresource Technology, 2015, 197, 375-382.	4.8	42
46	Pilot-scale bubble column photobioreactor culture of a marine dinoflagellate microalga illuminated with light emission diodes. Bioresource Technology, 2016, 216, 845-855.	4.8	42
47	Long-term culture of the marine dinoflagellate microalga Amphidinium carterae in an indoor LED-lighted raceway photobioreactor: Production of carotenoids and fatty acids. Bioresource Technology, 2018, 265, 257-267.	4.8	42
48	Biomass and icosapentaenoic acid productivities from an outdoor batch culture of Phaeodactylum tricornutum UTEX 640 in an airlift tubular photobioreactor. Applied Microbiology and Biotechnology, 1995, 42, 658-663.	1.7	41
49	Photolimitation and photoinhibition as factors determining optimal dilution rate to produce eicosapentaenoic acid from cultures of the microalga Isochrysis galbana. Applied Microbiology and Biotechnology, 1998, 50, 199-205.	1.7	38
50	Pathogens and predators impacting commercial production of microalgae and cyanobacteria. Biotechnology Advances, 2022, 55, 107884.	6.0	38
51	Simultaneous Effect of Temperature and Irradiance on Growth and Okadaic Acid Production from the Marine Dinoflagellate Prorocentrum belizeanum. Toxins, 2014, 6, 229-253.	1.5	35
52	Fatty acid variation among different isolates of a single strain of Isochrysis galbana. Phytochemistry, 1992, 31, 3901-3904.	1.4	31
53	Macronutrients requirements of the dinoflagellate Protoceratium reticulatum. Harmful Algae, 2009, 8, 239-246.	2.2	30
54	Culture of dinoflagellates in a fed-batch and continuous stirred-tank photobioreactors: Growth, oxidative stress and toxin production. Process Biochemistry, 2010, 45, 660-666.	1.8	30

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55	Cultivation of explants of the marine sponge Crambe crambe in closed systems. New Biotechnology, 2003, 20, 333-337.	2.7	29
56	Characterization of bubble column photobioreactors for shear-sensitive microalgae culture. Bioresource Technology, 2019, 275, 1-9.	4.8	29
57	Effect of dilution rate on eicosapentaenoic acid productivity ofPhaeodactylum tricornutum utex 640 in outdoor chemostat culture. Biotechnology Letters, 1994, 16, 1035-1040.	1.1	27
58	A pilot-scale bioprocess to produce amphidinols from the marine microalga Amphidinium carterae: Isolation of a novel analogue. Algal Research, 2018, 31, 87-98.	2.4	27
59	Production of Amphidinols and Other Bioproducts of Interest by the Marine Microalga Amphidinium carterae Unraveled by Nuclear Magnetic Resonance Metabolomics Approach Coupled to Multivariate Data Analysis. Journal of Agricultural and Food Chemistry, 2019, 67, 9667-9682.	2.4	25
60	Growth and biochemical composition with emphasis on the fatty acids of Tetraselmis sp.. Applied Microbiology and Biotechnology, 1991, 36, 21-25.	1.7	24
61	New Culture Approaches for Yessotoxin Production from the Dinoflagellate Protoceratium reticulatum. Biotechnology Progress, 2007, 23, 339-350.	1.3	24
62	Cytotoxicity of yessotoxin and okadaic acid in mouse T lymphocyte cell line EL-4. Toxicon, 2012, 60, 1049-1056.	0.8	24
63	New insights into shear-sensitivity in dinoflagellate microalgae. Bioresource Technology, 2016, 200, 699-705.	4.8	24
64	QUANTITATIVE GENETICS OF FATTY ACID VARIATION IN ISOCHRYSIS GALBANA (PRYMNESIOPHYCEAE) AND PHAEODACTYLUM TRICORNUTUM (BACILLARIOPHYCEAE)1. Journal of Phycology, 1994, 30, 553-558.	1.0	23
65	Biochemical productivity and fatty acid profiles of Isochrysis galbana Parke and Tetraselmis sp. as a function of incident light intensity. Process Biochemistry, 1994, 29, 119-126.	1.8	23
66	Immunoregulatory potential of marine algal toxins yessotoxin and okadaic acid in mouse T lymphocyte cell line EL-4. Toxicology Letters, 2011, 207, 167-172.	0.4	23
67	Modelling of multi-nutrient interactions in growth of the dinoflagellate microalga Protoceratium reticulatum using artificial neural networks. Bioresource Technology, 2013, 146, 682-688.	4.8	22
68	Shearâ€induced changes in membrane fluidity during culture of a fragile dinoflagellate microalga. Biotechnology Progress, 2012, 28, 467-473.	1.3	20
69	LC-MS/MS Detection of Karlotoxins Reveals New Variants in Strains of the Marine Dinoflagellate Karlodinium veneficum from the Ebro Delta (NW Mediterranean). Marine Drugs, 2017, 15, 391.	2.2	20
70	Analysis of kinetic, stoichiometry and regulation of glucose and glutamine metabolism in hybridoma batch cultures using logistic equations. Cytotechnology, 2007, 54, 189-200.	0.7	19
71	An optimal culture medium for growing Karlodinium veneficum : Progress towards a microalgal dinoflagellate-based bioprocess. Algal Research, 2015, 10, 177-182.	2.4	19
72	The influence of temperature and the initial N:P ratio on the growth of microalgae Tetraselmis sp.. Process Biochemistry, 1991, 26, 183-187.	1.8	18

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73	Growth yield determination in a chemostat culture of the marine microalgalsochrysis galbana. Journal of Applied Phycology, 1996, 8, 529-534.	1.5	18
74	New insights into developing antibiofouling surfaces for industrial photobioreactors. Biotechnology and Bioengineering, 2019, 116, 2212-2222.	1.7	17
75	LC-MS/MS Method Development for the Discovery and Identification of Amphidinols Produced by Amphidinium. Marine Drugs, 2020, 18, 497.	2.2	17
76	A methodological study of adhesion dynamics in a batch culture of the marine microalga Nannochloropsis gaditana. Algal Research, 2017, 23, 240-254.	2.4	16
77	Modeling shear-sensitive dinoflagellate microalgae growth in bubble column photobioreactors. Bioresource Technology, 2017, 245, 250-257.	4.8	16
78	Improved extraction of bioactive compounds from biomass of the marine dinoflagellate microalga Amphidinium carterae. Bioresource Technology, 2020, 313, 123518.	4.8	16
79	CuantificaciÃ³n de Ã¡cidos grasos a partir de biomasa microalgal. Grasas Y Aceites, 1993, 44, 348-353.	0.3	16
80	Variation of fatty acid profile with solar cycle in outdoor chemostat culture ofIsochrysis galbana ALII-4. Journal of Applied Phycology, 1995, 7, 129-134.	1.5	15
81	Genetic algorithm-based medium optimization for a toxic dinoflagellate microalga. Harmful Algae, 2011, 10, 697-701.	2.2	15
82	Assessment of multi-step processes for an integral use of the biomass of the marine microalga Amphidinium carterae. Bioresource Technology, 2019, 282, 370-377.	4.8	15
83	Carboxymethyl cellulose and Pluronic F68 protect the dinoflagellate Protoceratium reticulatum against shear-associated damage. Bioprocess and Biosystems Engineering, 2011, 34, 3-12.	1.7	14
84	Pilot-scale outdoor photobioreactor culture of the marine dinoflagellate Karlodinium veneficum: Production of a karlotoxins-rich extract. Bioresource Technology, 2018, 253, 94-104.	4.8	14
85	Influence of culture medium recycling on the growth of a marine dinoflagellate microalga and bioactives production in a raceway photobioreactor. Algal Research, 2020, 47, 101820.	2.4	14
86	Longâ€term biofouling formation mediated by extracellular proteins in Nannochloropsis gaditana microalga cultures at different medium N/P ratios. Biotechnology and Bioengineering, 2021, 118, 1152-1165.	1.7	14
87	Shear effects on suspended marine sponge cells. Biochemical Engineering Journal, 2005, 26, 115-121.	1.8	13
88	Sustained Growth of Explants from Mediterranean Sponge Crambe crambe Cultured In Vitro with Enriched RPMI 1640. Biotechnology Progress, 2006, 22, 781-790.	1.3	12
89	Continuous culture of the marine microalga Tetraselmis sp. â€" productivity analysis. Aquaculture, 1990, 90, 75-84.	1.7	10
90	A new approach to finding optimal centrifugation conditions for shear-sensitive microalgae. Algal Research, 2019, 44, 101677.	2.4	10

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91	Treatment of secondary urban wastewater with a low ammonium-tolerant marine microalga using zeolite-based adsorption. Bioresource Technology, 2022, 359, 127490.	4.8	9
92	Adaptation of the Se301 insect cell line to suspension culture. Effect of turbulence on growth and on production of nucleopolyhedrovius (SeMNPV). Cytotechnology, 2011, 63, 543-552.	0.7	8
93	Rapid method for the assessment of cell lysis in microalgae cultures. Journal of Applied Phycology, 2016, 28, 105-112.	1.5	7
94	Data on the Amphidinium carterae Dn241EHU isolation and morphological and molecular characterization. Data in Brief, 2018, 20, 1-5.	0.5	7
95	Assessment of a photobioreactor-coupled modified Robbins device to compare the adhesion of Nannochloropsis gaditana on different materials. Algal Research, 2019, 37, 277-287.	2.4	7
96	Acclimation of the microalga Amphidinium carterae to different nitrogen sources: potential application in the treatment of marine aquaculture effluents. Journal of Applied Phycology, 2020, 32, 1075-1094.	1.5	7
97	Isolation and Structural Elucidation of New Amphidinol Analogues from Amphidinium carterae Cultivated in a Pilot-Scale Photobioreactor. Marine Drugs, 2021, 19, 432.	2.2	7
98	Estudio de macronutrientes para la producciÃ³n de PUFAs a partir de la microalga marina Isochrysis galbana. Grasas Y Aceites, 1994, 45, 323-331.	0.3	7
99	The influence of flow rate and the composition of supplied CO2/air mixtures on discontinuous growth of Tetraselmis sp.. Applied Microbiology and Biotechnology, 1990, 34, 103.	1.7	6
100	Production of extracts with anaesthetic activity from the culture of Heterosigma akashiwo in pilot-scale photobioreactors. Algal Research, 2020, 45, 101760.	2.4	6
101	An integrated approach for the efficient separation of specialty compounds from biomass of the marine microalgae Amphidinium carterae. Bioresource Technology, 2021, 342, 125922.	4.8	6
102	The Effect of Spent Medium Recycle on Cell Proliferation, Metabolism and Baculovirus Production by the Lepidopteran Se301 Cell Line Infected at Very Low MOI. Journal of Microbiology and Biotechnology, 2013, 23, 1747-1756.	0.9	6
103	Induction of CD40 Expression and Enhancement of Monoclonal Antibody Production on Murine B Cell Hybridomas by Cross-Linking of IgG Receptors. Biotechnology Progress, 2007, 23, 452-457.	1.3	5
104	Enhanced Monoclonal Antibody Production in Hybridoma Cells by LPS and Anti-mIgG. Biotechnology Progress, 2007, 23, 1447-1453.	1.3	5
105	Adaptation of the Spodoptera exigua Se301 insect cell line to grow in serum-free suspended culture. Comparison of SeMNPV productivity in serum-free and serum-containing media. Applied Microbiology and Biotechnology, 2013, 97, 3373-3381.	1.7	5
106	CFD-aided optimization of a laboratory-scale centrifugation for a shear-sensitive insect cell line. Food and Bioproducts Processing, 2018, 107, 113-120.	1.8	5
107	A bioreactionâ€“diffusion model for growth of marine sponge explants in bioreactors. Applied Microbiology and Biotechnology, 2006, 73, 525-532.	1.7	4
108	Effects of Synchronization on CD40 Expression and Antibody Production in Hybridoma Cells Stimulated with Anti-mIgG. Biotechnology Progress, 2007, 23, 958-963.	1.3	4

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109	Effects of Synchronization on CD40 Expression and Antibody Production in Hybridoma Cells Stimulated with Anti-mIgG. Biotechnology Progress, 2007, 23, 958-963.	1.3	3
110	CFD-based prediction of initial microalgal adhesion to solid surfaces using force balances. Biofouling, 2021, 37, 1-18.	0.8	3
111	Influence of abiotic conditions on the biofouling formation of flagellated microalgae culture. Biofouling, 2022, 38, 507-520.	0.8	3
112	Photobioreactors â€“ Models of Photosynthesis and Related Effects. , 2011, , 227-247.		2
113	Culture of Microalgal Dinoflagellates. , 2014, , 551-566.		2
114	Infection Units: A Novel Approach for Modeling COVID-19 Spread. Processes, 2021, 9, 2272.	1.3	2
115	Effects of hydroxyurea on monoclonal antibody production induced by anti-mIgG and LPS stimulation on murine B cell hybridomas. Cytotechnology, 2010, 62, 205-215.	0.7	1
116	Co-culture of the 55-6 B cell hybridoma with the EL-4 thymoma cell. Effect on cell growth and monoclonal antibody production. Cytotechnology, 2013, 65, 655-662.	0.7	1
117	The use of an artificial neural network to model the infection strategy for baculovirus production in suspended insect cell cultures. Cytotechnology, 2018, 70, 555-565.	0.7	1
118	Photobioreactors â€“ Models of Photosynthesis and Related Effects. , 2019, , 320-360.		1
119	Improving the learning of thickening design through graphical methods with the freeware software SMath studio. Computer Applications in Engineering Education, 2020, 28, 1391-1405.	2.2	1
120	Influence of turbulence on the adaptation of the baculovirus-producer Spodoptera exigua Se301 cell line to suspension culture. New Biotechnology, 2009, 25, S218-S219.	2.4	0
121	Evaluation of the grazerâ€“prey interaction as a biotechnological strategy to increase toxin production by dinoflagellate cultures in photobioreactors. Journal of Applied Phycology, 2014, 26, 257-263.	1.5	0
122	A new culture medium based on genetic algorithms for Isochrysis galbana production relevant to hatcheries. Journal of Applied Phycology, 0, , 1.	1.5	0