

JosÃ© M FernÃ¡ndez Sevilla

List of Publications by Year in descending order

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117
papers

10,099
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times ranked

7141
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#	ARTICLE	IF	CITATIONS
1	Productivity analysis in tubular photobioreactors using a dynamic photosynthesis model coupled to computational fluid dynamics particle tracking. <i>Bioresource Technology</i> , 2022, 344, 126277.	9.6	3
2	Optimisation of <i>Scenedesmus almeriensis</i> production using pig slurry as the sole nutrient source. <i>Algal Research</i> , 2022, 61, 102580.	4.6	17
3	Respirometric assessment of bacterial kinetics in algae-bacteria and activated sludge processes. <i>Bioresource Technology</i> , 2022, 352, 127116.	9.6	6
4	Pilot-scale annual production of <i>Scenedesmus almeriensis</i> using diluted pig slurry as the nutrient source: Reduction of water losses in thin-layer cascade reactors. <i>Journal of Cleaner Production</i> , 2022, 359, 132076.	9.3	10
5	Modeling of photosynthesis and respiration rate for microalgae-bacteria consortia. <i>Biotechnology and Bioengineering</i> , 2021, 118, 952-962.	3.3	31
6	Role of Microalgae in the Recovery of Nutrients from Pig Manure. <i>Processes</i> , 2021, 9, 203.	2.8	18
7	Improvement of real-scale raceway bioreactors for microalgae production using Computational Fluid Dynamics (CFD). <i>Algal Research</i> , 2021, 54, 102207.	4.6	15
8	Analysis of productivity in raceway photobioreactor using computational fluid dynamics particle tracking coupled to a dynamic photosynthesis model. <i>Bioresource Technology</i> , 2021, 334, 125226.	9.6	7
9	Wastewater treatment using <i>Scenedesmus almeriensis</i> : effect of operational conditions on the composition of the microalgae-bacteria consortia. <i>Journal of Applied Phycology</i> , 2021, 33, 3885-3897.	2.8	22
10	ABACO: A New Model of Microalgae-Bacteria Consortia for Biological Treatment of Wastewaters. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 998.	2.5	37
11	Advanced Computational Fluid Dynamics Study of the Dissolved Oxygen Concentration within a Thin-Layer Cascade Reactor for Microalgae Cultivation. <i>Energies</i> , 2021, 14, 7284.	3.1	4
12	Flashing light does not improve photosynthetic performance and growth of green microalgae. <i>Bioresource Technology Reports</i> , 2020, 9, 100367.	2.7	30
13	Microalgae production systems. , 2020, , 127-163.		3
14	<i>Spirulina</i> for the food and functional food industries. <i>Food Research International</i> , 2020, 137, 109356.	6.2	173
15	A novel photo-respirometry method to characterize consortia in microalgae-related wastewater treatment processes. <i>Algal Research</i> , 2020, 47, 101858.	4.6	25
16	Exploring the potential of microalgae for the bioremediation of agro-industrial wastewaters. , 2020, , 641-658.		0
17	Costs analysis of microalgae production. , 2019, , 551-566.		35
18	Evaluation of native microalgae from Tunisia using the pulse-amplitude-modulation measurement of chlorophyll fluorescence and a performance study in semi-continuous mode for biofuel production. <i>Biotechnology for Biofuels</i> , 2019, 12, 119.	6.2	15

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19	Evaluation of photosynthetic light integration by microalgae in a pilot-scale raceway reactor. <i>Bioresource Technology</i> , 2019, 280, 404-411.	9.6	45
20	Effect of pretreatments on biogas production from microalgae biomass grown in pig manure treatment plants. <i>Bioresource Technology</i> , 2018, 257, 30-38.	9.6	50
21	Recovery of Nutrients From Wastewaters Using Microalgae. <i>Frontiers in Sustainable Food Systems</i> , 2018, 2, .	3.9	129
22	A simple equation to quantify the effect of frequency of light/dark cycles on the photosynthetic response of microalgae under intermittent light. <i>Algal Research</i> , 2018, 35, 479-487.	4.6	18
23	Experimental characterization and optimization of multi-channel spiral wound air gap membrane distillation modules for seawater desalination. <i>Separation and Purification Technology</i> , 2018, 205, 212-222.	7.9	75
24	Preparative Recovery of Carotenoids from Microalgal Biomass. <i>Methods in Molecular Biology</i> , 2018, 1852, 107-115.	0.9	5
25	CHAPTER 16. Development of Photobioreactors for H ₂ Production from Algae. <i>Comprehensive Series in Photochemical and Photobiological Sciences</i> , 2018, , 385-418.	0.3	1
26	Effect of temperature and photon absorption on the kinetics of micropollutant removal by solar photo-Fenton in raceway pond reactors. <i>Chemical Engineering Journal</i> , 2017, 310, 464-472.	12.7	38
27	Modeling and optimization of a commercial permeate gap spiral wound membrane distillation module for seawater desalination. <i>Desalination</i> , 2017, 419, 160-168.	8.2	61
28	Modeling of biomass productivity in dense microalgal culture using computational fluid dynamics. <i>Acta Horticulturae</i> , 2017, , 111-118.	0.2	4
29	Economics of microalgae production. , 2017, , 485-503.		38
30	Light regime optimization in photobioreactors using a dynamic photosynthesis model. <i>Algal Research</i> , 2016, 16, 399-408.	4.6	36
31	Wastewater treatment using microalgae: how realistic a contribution might it be to significant urban wastewater treatment?. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 9013-9022.	3.6	223
32	Outdoor production of <i>Tisochrysis lutea</i> in pilot-scale tubular photobioreactors. <i>Journal of Applied Phycology</i> , 2016, 28, 3159-3166.	2.8	22
33	Modeling of photosynthesis and respiration rate for <i>Isochrysis galbana</i> (T-Iso) and its influence on the production of this strain. <i>Bioresource Technology</i> , 2016, 203, 71-79.	9.6	46
34	Long-term preservation of concentrated <i>Nannochloropsis gaditana</i> cultures for use in aquaculture. <i>Journal of Applied Phycology</i> , 2016, 28, 299-312.	2.8	24
35	Utilization of secondary-treated wastewater for the production of freshwater microalgae. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 6931-6944.	3.6	51
36	The influence of culture conditions on biomass and high value product generation by <i>Nannochloropsis gaditana</i> in aquaculture. <i>Algal Research</i> , 2015, 11, 63-73.	4.6	29

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37	Production of microalgae using centrate from anaerobic digestion as the nutrient source. <i>Algal Research</i> , 2015, 9, 297-305.	4.6	120
38	Direct supercritical methanolysis of wet and dry unwashed marine microalgae (<i>Nannochloropsis</i>). <i>Journal of Applied Microbiology</i> , 2015, 117, 101-107.	10.1	75
39	A whole biodiesel conversion process combining isolation, cultivation and in situ supercritical methanol transesterification of native microalgae. <i>Bioresource Technology</i> , 2015, 190, 281-288.	9.6	77
40	Selection of native Tunisian microalgae for simultaneous wastewater treatment and biofuel production. <i>Bioresource Technology</i> , 2015, 198, 424-430.	9.6	39
41	Outdoor production of <i>Scenedesmus</i> sp. in thin-layer and raceway reactors using centrate from anaerobic digestion as the sole nutrient source. <i>Algal Research</i> , 2015, 12, 99-108.	4.6	111
42	Improvement of stability and carotenoids fraction of virgin olive oils by addition of microalgae <i>Scenedesmus almeriensis</i> extracts. <i>Food Chemistry</i> , 2015, 175, 203-211.	8.2	39
43	Genetic algorithm for the medium optimization of the microalga <i>Nannochloropsis gaditana</i> cultured to aquaculture. <i>Bioresource Technology</i> , 2015, 177, 102-109.	9.6	28
44	A quantitative study of eicosapentaenoic acid (EPA) production by <i>Nannochloropsis gaditana</i> for aquaculture as a function of dilution rate, temperature and average irradiance. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 2429-2440.	3.6	68
45	Photobioreactors Design for Hydrogen Production. <i>Advances in Photosynthesis and Respiration</i> , 2014, 291-320.	1.0	7
46	Photobioreactors for the production of microalgae. <i>Reviews in Environmental Science and Biotechnology</i> , 2013, 12, 131-151.	8.1	211
47	A low-cost culture medium for the production of <i>Nannochloropsis gaditana</i> biomass optimized for aquaculture. <i>Bioresource Technology</i> , 2013, 144, 57-66.	9.6	50
48	Comprehensive model of microalgae photosynthesis rate as a function of culture conditions in photobioreactors. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 7627-7637.	3.6	126
49	Medium recycling for <i>Nannochloropsis gaditana</i> cultures for aquaculture. <i>Bioresource Technology</i> , 2013, 129, 430-438.	9.6	63
50	Mixotrophic growth of <i>Phaeodactylum tricornutum</i> on fructose and glycerol in fed-batch and semi-continuous modes. <i>Bioresource Technology</i> , 2013, 147, 569-576.	9.6	58
51	Use of secondary-treated wastewater for the production of <i>Muriellopsis</i> sp.. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 2239-2249.	3.6	35
52	Filtered Smith Predictor to control pH during enzymatic hydrolysis of microalgae to produce l-aminoacids concentrates. <i>Chemical Engineering Science</i> , 2012, 82, 121-131.	3.8	15
53	Evaluation of flocculants for the recovery of freshwater microalgae. <i>Bioresource Technology</i> , 2012, 118, 102-110.	9.6	211
54	Production cost of a real microalgae production plant and strategies to reduce it. <i>Biotechnology Advances</i> , 2012, 30, 1344-1353.	11.7	529

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55	Conversion of CO ₂ into biomass by microalgae: how realistic a contribution may it be to significant CO ₂ removal?. Applied Microbiology and Biotechnology, 2012, 96, 577-586.	3.6	168
56	Dynamic model of microalgal production in tubular photobioreactors. Bioresource Technology, 2012, 126, 172-181.	9.6	66
57	Obtaining Lutein-Rich Extract from Microalgal Biomass at Preparative Scale. Methods in Molecular Biology, 2012, 892, 307-314.	0.9	9
58	Development of a process for efficient use of CO ₂ from flue gases in the production of photosynthetic microorganisms. Biotechnology and Bioengineering, 2012, 109, 1637-1650.	3.3	54
59	Utilization of Anabaena sp. in CO ₂ removal processes. Applied Microbiology and Biotechnology, 2012, 94, 613-624.	3.6	16
60	Development of a process for the production of l-amino-acids concentrates from microalgae by enzymatic hydrolysis. Bioresource Technology, 2012, 112, 164-170.	9.6	111
61	Analysis of light regime in continuous light distributions in photobioreactors. Bioresource Technology, 2011, 102, 3138-3148.	9.6	51
62	Development of a process for large-scale purification of C-phycoerythrin from Synechocystis aquatilis using expanded bed adsorption chromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 511-519.	2.3	49
63	Biotechnological production of lutein and its applications. Applied Microbiology and Biotechnology, 2010, 86, 27-40.	3.6	323
64	The oxygen evolution methodology affects photosynthetic rate measurements of microalgae in well-defined light regimes. Biotechnology and Bioengineering, 2010, 106, 228-237.	3.3	37
65	Large-scale isolation and purification of C-phycoerythrin from the cyanobacteria <i>Anabaena marina</i> using expanded bed adsorption chromatography. Journal of Chemical Technology and Biotechnology, 2010, 85, 783-792.	3.2	26
66	Protein measurements of microalgal and cyanobacterial biomass. Bioresource Technology, 2010, 101, 7587-7591.	9.6	465
67	Supercritical fluid extraction of carotenoids from <i>Scenedesmus almeriensis</i> . Food Chemistry, 2010, 123, 928-935.	8.2	130
68	Stability of Carotenoids in <i>Scenedesmus almeriensis</i> Biomass and Extracts under Various Storage Conditions. Journal of Agricultural and Food Chemistry, 2010, 58, 6944-6950.	5.2	20
69	Production of astaxanthin by <i>Haematococcus pluvialis</i> : Taking the one-step system outdoors. Biotechnology and Bioengineering, 2009, 102, 651-657.	3.3	101
70	Utilization of the cyanobacteria <i>Anabaena</i> sp. ATCC 33047 in CO ₂ removal processes. Bioresource Technology, 2009, 100, 5904-5910.	9.6	140
71	In vitro bioaccessibility of lutein and zeaxanthin from the microalgae <i>Scenedesmus almeriensis</i> . Food Chemistry, 2009, 114, 747-752.	8.2	80
72	Characterization of a flat plate photobioreactor for the production of microalgae. Chemical Engineering Journal, 2008, 138, 136-147.	12.7	360

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73	Biomass and lutein productivity of <i>Scenedesmus almeriensis</i> : influence of irradiance, dilution rate and temperature. <i>Applied Microbiology and Biotechnology</i> , 2008, 79, 719-729.	3.6	204
74	Influence of culture conditions on the productivity and lutein content of the new strain <i>Scenedesmus almeriensis</i> . <i>Process Biochemistry</i> , 2008, 43, 398-405.	3.7	203
75	Recovery of Lutein from Microalgae Biomass: Development of a Process for <i>Scenedesmus almeriensis</i> Biomass. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 11761-11766.	5.2	133
76	Antioxidant activity of <i>Haematococcus pluvialis</i> cells grown in continuous culture as a function of their carotenoid and fatty acid content. <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 1112-1119.	3.6	112
77	Comparative analysis of the outdoor culture of <i>Haematococcus pluvialis</i> in tubular and bubble column photobioreactors. <i>Journal of Biotechnology</i> , 2006, 123, 329-342.	3.8	124
78	Simultaneous Determination of Oxygen Consumption Rate and Volumetric Oxygen Transfer Coefficient in Pneumatically Agitated Bioreactors. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 1167-1171.	3.7	38
79	<i>Aspergillus terreus</i> Broth Rheology, Oxygen Transfer, and Lovastatin Production in a Gas-Agitated Slurry Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 4837-4843.	3.7	32
80	Continuous production of green cells of <i>Haematococcus pluvialis</i> : Modeling of the irradiance effect. <i>Enzyme and Microbial Technology</i> , 2006, 38, 981-989.	3.2	61
81	Shear rate in stirred tank and bubble column bioreactors. <i>Chemical Engineering Journal</i> , 2006, 124, 1-5.	12.7	221
82	Modelling of growth and accumulation of carotenoids in <i>Haematococcus pluvialis</i> as a function of irradiance and nutrients supply. <i>Biochemical Engineering Journal</i> , 2005, 26, 107-114.	3.6	60
83	Effects of pellet morphology on broth rheology in fermentations of <i>Aspergillus terreus</i> . <i>Biochemical Engineering Journal</i> , 2005, 26, 139-144.	3.6	90
84	Mixotrophic growth of the microalga <i>Phaeodactylum tricornutum</i> . <i>Process Biochemistry</i> , 2005, 40, 297-305.	3.7	153
85	Rapid screening of <i>Aspergillus terreus</i> mutants for overproduction of lovastatin. <i>World Journal of Microbiology and Biotechnology</i> , 2005, 21, 123-125.	3.6	30
86	Pellet morphology, culture rheology and lovastatin production in cultures of <i>Aspergillus terreus</i> . <i>Journal of Biotechnology</i> , 2005, 116, 61-77.	3.8	147
87	Cost-effective production of ¹³ C, ¹⁵ N stable isotope-labelled biomass from phototrophic microalgae for various biotechnological applications. <i>New Biotechnology</i> , 2005, 22, 193-200.	2.7	30
88	Pilot-Plant-Scale Outdoor Mixotrophic Cultures of <i>Phaeodactylum tricornutum</i> Using Glycerol in Vertical Bubble Column and Airlift Photobioreactors: Studies in Fed-Batch Mode. <i>Biotechnology Progress</i> , 2004, 20, 728-736.	2.6	49
89	Lovastatin inhibits its own synthesis in <i>Aspergillus terreus</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2004, 31, 48-50.	3.0	26
90	Influence of power supply in the feasibility of <i>Phaeodactylum tricornutum</i> cultures. <i>Biotechnology and Bioengineering</i> , 2004, 87, 723-733.	3.3	81

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91	Fermentation optimization for the production of lovastatin by <i>Aspergillus terreus</i> : use of response surface methodology. <i>Journal of Chemical Technology and Biotechnology</i> , 2004, 79, 1119-1126.	3.2	46
92	Production of ¹³ C polyunsaturated fatty acids from the microalga <i>Phaeodactylum tricornutum</i> . <i>Journal of Applied Phycology</i> , 2003, 15, 229-237.	2.8	4
93	A mechanistic model of photosynthesis in microalgae. <i>Biotechnology and Bioengineering</i> , 2003, 81, 459-473.	3.3	214
94	Minimization of carbon losses in pilot-scale outdoor photobioreactors by model-based predictive control. <i>Biotechnology and Bioengineering</i> , 2003, 84, 533-543.	3.3	43
95	Analysis of photobioreactors for culturing high-value microalgae and cyanobacteria via an advanced diagnostic technique: CARPT. <i>Chemical Engineering Science</i> , 2003, 58, 2519-2527.	3.8	67
96	Production of lovastatin by <i>Aspergillus terreus</i> : effects of the C:N ratio and the principal nutrients on growth and metabolite production. <i>Enzyme and Microbial Technology</i> , 2003, 33, 270-277.	3.2	171
97	Assessment of the production of ¹³ C labeled compounds from phototrophic microalgae at laboratory scale. <i>New Biotechnology</i> , 2003, 20, 149-162.	2.7	15
98	Preparative purification of B-phycoerythrin from the microalga <i>Porphyridium cruentum</i> by expanded-bed adsorption chromatography. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2003, 790, 317-325.	2.3	100
99	Tubular photobioreactor design for algal cultures. <i>Journal of Biotechnology</i> , 2001, 92, 113-131.	3.8	491
100	Airlift-driven external-loop tubular photobioreactors for outdoor production of microalgae: assessment of design and performance. <i>Chemical Engineering Science</i> , 2001, 56, 2721-2732.	3.8	247
101	Acyl lipid composition variation related to culture age and nitrogen concentration in continuous culture of the microalga <i>Phaeodactylum tricornutum</i> . <i>Phytochemistry</i> , 2000, 54, 461-471.	2.9	163
102	Use of concentric-tube airlift photobioreactors for microalgal outdoor mass cultures. <i>Enzyme and Microbial Technology</i> , 1999, 24, 164-172.	3.2	90
103	Outdoor continuous culture of <i>Porphyridium cruentum</i> in a tubular photobioreactor: quantitative analysis of the daily cyclic variation of culture parameters. <i>Journal of Biotechnology</i> , 1999, 70, 271-288.	3.8	83
104	Modeling of biomass productivity in tubular photobioreactors for microalgal cultures: Effects of dilution rate, tube diameter, and solar irradiance. , 1998, 58, 605-616.		188
105	Photolimitation and photoinhibition as factors determining optimal dilution rate to produce eicosapentaenoic acid from cultures of the microalga <i>Isochrysis galbana</i> . <i>Applied Microbiology and Biotechnology</i> , 1998, 50, 199-205.	3.6	38
106	Evaluation of photosynthetic efficiency in microalgal cultures using averaged irradiance. <i>Enzyme and Microbial Technology</i> , 1997, 21, 375-381.	3.2	99
107	A model for light distribution and average solar irradiance inside outdoor tubular photobioreactors for the microalgal mass culture. , 1997, 55, 701-714.		202
108	A study on simultaneous photolimitation and photoinhibition in dense microalgal cultures taking into account incident and averaged irradiances. <i>Journal of Biotechnology</i> , 1996, 45, 59-69.	3.8	164

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109	Variation of fatty acid profile with solar cycle in outdoor chemostat culture of <i>Isochrysis galbana</i> ALII-4. <i>Journal of Applied Phycology</i> , 1995, 7, 129-134.	2.8	15
110	Long-term preservation of <i>Tetraselmis suecica</i> : influence of storage on viability and fatty acid profile. <i>Aquaculture</i> , 1995, 134, 81-90.	3.5	65
111	Biomass and icosapentaenoic acid productivities from an outdoor batch culture of <i>Phaeodactylum tricornutum</i> UTEX 640 in an airlift tubular photobioreactor. <i>Applied Microbiology and Biotechnology</i> , 1995, 42, 658-663.	3.6	41
112	Effect of dilution rate on eicosapentaenoic acid productivity of <i>Phaeodactylum tricornutum</i> utex 640 in outdoor chemostat culture. <i>Biotechnology Letters</i> , 1994, 16, 1035-1040.	2.2	27
113	Effect of growth rate on the eicosapentaenoic acid and docosahexaenoic acid content of <i>Isochrysis galbana</i> in chemostat culture. <i>Applied Microbiology and Biotechnology</i> , 1994, 41, 23-27.	3.6	67
114	A mathematical model of microalgal growth in light-limited chemostat culture. <i>Journal of Chemical Technology and Biotechnology</i> , 1994, 61, 167-173.	3.2	220
115	Microalgae: The Basis of Mankind Sustainability. , 0, , .		7
116	Comparative characterization of three commercial spiral-wound membrane distillation modules. , 0, 61, 152-159.		7
117	Virtual labs for the study of enzymatic stirred tank bioreactors. <i>Computer Applications in Engineering Education</i> , 0, , .	3.4	1