

# Marcel Janssen

## List of Publications by Year in descending order

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86  
papers

6,031  
citations

53660

45  
h-index

71532

76  
g-index

88  
all docs

88  
docs citations

88  
times ranked

4950  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photobiological hydrogen production: photochemical efficiency and bioreactor design. International Journal of Hydrogen Energy, 2002, 27, 1195-1208.	3.8	429
2	Enclosed outdoor photobioreactors: Light regime, photosynthetic efficiency, scale-up, and future prospects. Biotechnology and Bioengineering, 2003, 81, 193-210.	1.7	370
3	Nitrogen and phosphorus removal from municipal wastewater effluent using microalgal biofilms. Water Research, 2011, 45, 5925-5933.	5.3	271
4	Carotenoid and fatty acid metabolism in light-stressed <i>Dunaliella salina</i> . Biotechnology and Bioengineering, 2010, 106, 638-648.	1.7	221
5	Cultivation of microalgae on artificial light comes at a cost. Algal Research, 2013, 2, 333-340.	2.4	193
6	Exploring and exploiting carotenoid accumulation in <i>Dunaliella salina</i> for cell-factory applications. Trends in Biotechnology, 2008, 26, 631-638.	4.9	166
7	Carotenoid and fatty acid metabolism in nitrogen-starved <i>Dunaliella salina</i> , a unicellular green microalga. Journal of Biotechnology, 2012, 162, 21-27.	1.9	163
8	Comparison of four outdoor pilot-scale photobioreactors. Biotechnology for Biofuels, 2015, 8, 215.	6.2	152
9	Microalgae cultivation in air-lift reactors: Modeling biomass yield and growth rate as a function of mixing frequency. Biotechnology and Bioengineering, 2003, 82, 170-179.	1.7	145
10	Metabolic modeling of <i>Chlamydomonas reinhardtii</i> : energy requirements for photoautotrophic growth and maintenance. Journal of Applied Phycology, 2012, 24, 253-266.	1.5	141
11	Productivity of <i>Chlorella sorokiniana</i> in a short light-path (SLP) panel photobioreactor under high irradiance. Biotechnology and Bioengineering, 2009, 104, 352-359.	1.7	138
12	Horizontal or vertical photobioreactors? How to improve microalgae photosynthetic efficiency. Bioresource Technology, 2011, 102, 5129-5137.	4.8	137
13	Vitamin E ( $\alpha$ -tocopherol) production by the marine microalgae <i>Dunaliella tertiolecta</i> and <i>Tetraselmis suecica</i> in batch cultivation. New Biotechnology, 2003, 20, 139-147.	2.7	135
14	Impact of light color on photobioreactor productivity. Algal Research, 2016, 15, 32-42.	2.4	128
15	Photosynthetic efficiency of <i>Chlorella sorokiniana</i> in a turbulently mixed short light-path photobioreactor. Biotechnology Progress, 2010, 26, 687-696.	1.3	125
16	Biofilm growth of <i>Chlorella sorokiniana</i> in a rotating biological contactor based photobioreactor. Biotechnology and Bioengineering, 2014, 111, 2436-2445.	1.7	125
17	Balancing the organic load and light supply in symbiotic microalgal-bacterial biofilm reactors treating synthetic municipal wastewater. Ecological Engineering, 2014, 64, 213-221.	1.6	124
18	Efficiency of light utilization of <i>Chlamydomonas reinhardtii</i> under medium-duration light/dark cycles. Journal of Biotechnology, 2000, 78, 123-137.	1.9	116

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19	Photosynthetic efficiency of <i>Chlamydomonas reinhardtii</i> in flashing light. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2905-2913.	1.7	112
20	Design Process of an Area-Efficient Photobioreactor. <i>Marine Biotechnology</i> , 2008, 10, 404-415.	1.1	108
21	Maximum Photosynthetic Yield of Green Microalgae in Photobioreactors. <i>Marine Biotechnology</i> , 2010, 12, 708-718.	1.1	106
22	Nutrient removal and microalgal biomass production on urine in a short light-path photobioreactor. <i>Water Research</i> , 2014, 55, 162-174.	5.3	103
23	Growth of oil accumulating microalga <i>Neochloris oleoabundans</i> under alkaline saline conditions. <i>Bioresource Technology</i> , 2012, 104, 593-599.	4.8	102
24	Antenna size reduction as a strategy to increase biomass productivity: a great potential not yet realized. <i>Journal of Applied Phycology</i> , 2015, 27, 1063-1077.	1.5	88
25	Photosynthetic efficiency of <i>Dunaliella tertiolecta</i> under short light/dark cycles. <i>Enzyme and Microbial Technology</i> , 2001, 29, 298-305.	1.6	87
26	Scale-up aspects of photobioreactors: effects of mixing-induced light/dark cycles. <i>Journal of Applied Phycology</i> , 2000, 12, 225-237.	1.5	82
27	Selecting microalgae with high lipid productivity and photosynthetic activity under nitrogen starvation. <i>Journal of Applied Phycology</i> , 2015, 27, 1425-1431.	1.5	81
28	Scenario Analysis of Nutrient Removal from Municipal Wastewater by Microalgal Biofilms. <i>Water (Switzerland)</i> , 2012, 4, 460-473.	1.2	79
29	Impact of hydraulic retention time on community assembly and function of photogranules for wastewater treatment. <i>Water Research</i> , 2020, 173, 115506.	5.3	79
30	Specific growth rate of <i>Chlamydomonas reinhardtii</i> and <i>Chlorella sorokiniana</i> under medium duration light/dark cycles: 13 <sup>h</sup> 87 s. <i>Journal of Biotechnology</i> , 1999, 70, 323-333.	1.9	73
31	A pneumatically agitated flat-panel photobioreactor with gas re-circulation: anaerobic photoheterotrophic cultivation of a purple non-sulfur bacterium. <i>International Journal of Hydrogen Energy</i> , 2002, 27, 1331-1338.	3.8	72
32	Predicting microalgae growth. <i>Algal Research</i> , 2016, 14, 28-38.	2.4	69
33	Carotenoid fluorescence in <i>Dunaliella salina</i> . <i>Journal of Applied Phycology</i> , 2010, 22, 645-649.	1.5	62
34	Photosynthetic efficiency and oxygen evolution of <i>Chlamydomonas reinhardtii</i> under continuous and flashing light. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1523-1532.	1.7	61
35	Effect of O <sub>2</sub> :CO <sub>2</sub> ratio on the primary metabolism of <i>Chlamydomonas reinhardtii</i> . <i>Biotechnology and Bioengineering</i> , 2011, 108, 2390-2402.	1.7	57
36	The effect of harvesting on biomass production and nutrient removal in phototrophic biofilm reactors for effluent polishing. <i>Journal of Applied Phycology</i> , 2014, 26, 1439-1452.	1.5	57

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37	Continuous production of carotenoids from <i>Dunaliella salina</i> . <i>Enzyme and Microbial Technology</i> , 2011, 48, 253-259.	1.6	56
38	Photosynthetic efficiency of <i>Chlamydomonas reinhardtii</i> in attenuated, flashing light. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2567-2574.	1.7	55
39	Light respiration in <i>Chlorella sorokiniana</i> . <i>Journal of Applied Phycology</i> , 2011, 23, 935-947.	1.5	52
40	Growth of the microalgae <i>Neochloris oleoabundans</i> at high partial oxygen pressures and sub-saturating light intensity. <i>Bioresource Technology</i> , 2012, 104, 565-570.	4.8	51
41	Design and construction of the microalgal pilot facility AlgaePARC. <i>Algal Research</i> , 2014, 6, 160-169.	2.4	51
42	Microalgae based production of single-cell protein. <i>Current Opinion in Biotechnology</i> , 2022, 75, 102705.	3.3	51
43	Nutrient Removal and Biomass Production in an Outdoor Pilot-Scale Phototrophic Biofilm Reactor for Effluent Polishing. <i>Applied Biochemistry and Biotechnology</i> , 2014, 172, 405-422.	1.4	50
44	Luminostat operation: A tool to maximize microalgae photosynthetic efficiency in photobioreactors during the daily light cycle?. <i>Bioresource Technology</i> , 2011, 102, 7871-7878.	4.8	49
45	Two-phase systems: Potential for in situ extraction of microalgal products. <i>Biotechnology Advances</i> , 2011, 29, 502-507.	6.0	46
46	Microalgae growth on concentrated human urine. <i>Journal of Applied Phycology</i> , 2014, 26, 287-297.	1.5	46
47	Doubling of Microalgae Productivity by Oxygen Balanced Mixotrophy. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6065-6074.	3.2	46
48	Performance of <i>Chlorella sorokiniana</i> under simulated extreme winter conditions. <i>Journal of Applied Phycology</i> , 2012, 24, 693-699.	1.5	43
49	The Selectivity of Milking of <i>Dunaliella salina</i> . <i>Marine Biotechnology</i> , 2010, 12, 14-23.	1.1	42
50	Capturing sunlight into a photobioreactor: Ray tracing simulations of the propagation of light from capture to distribution into the reactor. <i>Chemical Engineering Journal</i> , 2008, 145, 316-327.	6.6	39
51	The effect of irradiance on long-term skeletal growth and net photosynthesis in <i>Galaxea fascicularis</i> under four light conditions. <i>Journal of Experimental Marine Biology and Ecology</i> , 2008, 367, 75-80.	0.7	37
52	Controlling light-use by <i>Rhodobacter capsulatus</i> continuous cultures in a flat-panel photobioreactor. <i>Biotechnology and Bioengineering</i> , 2006, 95, 613-626.	1.7	33
53	Biomass and lipid productivity of <i>Neochloris oleoabundans</i> under alkaline saline conditions. <i>Algal Research</i> , 2013, 2, 204-211.	2.4	32
54	A liquid foam-bed photobioreactor for microalgae production. <i>Chemical Engineering Journal</i> , 2017, 313, 1206-1214.	6.6	31

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55	Phase toxicity of dodecane on the microalga <i>Dunaliella salina</i> . <i>Journal of Applied Phycology</i> , 2011, 23, 949-958.	1.5	29
56	A study of the growth for the microalga <i>Chlorella vulgaris</i> by photo-bio-calorimetry and other on-line and off-line techniques. <i>Biotechnology and Bioengineering</i> , 2007, 96, 757-767.	1.7	27
57	Opportunities to improve the areal oil productivity of microalgae. <i>Bioresource Technology</i> , 2015, 186, 294-302.	4.8	27
58	Turbidostat operation of outdoor pilot-scale photobioreactors. <i>Algal Research</i> , 2016, 18, 198-208.	2.4	27
59	The role of an electron pool in algal photosynthesis during sub-second light-dark cycling. <i>Algal Research</i> , 2015, 12, 43-51.	2.4	26
60	Optimizing carbon dioxide utilization for microalgae biofilm cultivation. <i>Biotechnology and Bioengineering</i> , 2017, 114, 769-776.	1.7	25
61	Mixotrophic cultivation of <i>Galdieria sulphuraria</i> for C-phycoyanin and protein production. <i>Algal Research</i> , 2022, 61, 102603.	2.4	25
62	Effect of photoacclimation on microalgae mass culture productivity. <i>Algal Research</i> , 2017, 22, 56-67.	2.4	23
63	Optimization of algae production on urine. <i>Algal Research</i> , 2019, 44, 101667.	2.4	21
64	Microalgal Photosynthesis and Growth in Mass Culture. <i>Advances in Chemical Engineering</i> , 2016, , 185-256.	0.5	20
65	Application of bench-scale biocalorimetry to photoautotrophic cultures. <i>Thermochimica Acta</i> , 2005, 435, 18-27.	1.2	18
66	Improved liquid foam-bed photobioreactor design for microalgae cultivation. <i>Algal Research</i> , 2018, 33, 55-70.	2.4	18
67	Autotrophic and mixotrophic biomass production of the acidophilic <i>Galdieria sulphuraria</i> ACUF 64. <i>Algal Research</i> , 2021, 60, 102513.	2.4	17
68	Microalgal biofilm growth under day-night cycles. <i>Algal Research</i> , 2017, 21, 16-26.	2.4	15
69	Calorimetry and thermodynamic aspects of heterotrophic, mixotrophic, and phototrophic growth. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 104, 45-52.	2.0	14
70	Potential of a liquid foam-bed photobioreactor for microalgae cultivation. <i>Algal Research</i> , 2018, 36, 193-208.	2.4	14
71	Acid Tolerant and Acidophilic Microalgae: An Underexplored World of Biotechnological Opportunities. <i>Frontiers in Microbiology</i> , 2022, 13, 820907.	1.5	13
72	Biocalorimetric monitoring of photoautotrophic batch cultures. <i>Thermochimica Acta</i> , 2007, 458, 54-64.	1.2	12

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73	Second primary tumours in oropharyngeal squamous cell carcinoma. <i>Clinical Oral Investigations</i> , 2004, 8, 56-62.	1.4	11
74	Surfactant selection for a liquid foam-bed photobioreactor. <i>Biotechnology Progress</i> , 2018, 34, 711-720.	1.3	11
75	Specific growth rate of <i>Chlamydomonas reinhardtii</i> and <i>Chlorella sorokiniana</i> under medium duration light/dark cycles: 13h87 s. <i>Progress in Industrial Microbiology</i> , 1999, 35, 323-333.	0.0	10
76	Biohydrogen 2002. <i>International Journal of Hydrogen Energy</i> , 2002, 27, 1123-1124.	3.8	10
77	Oxygen Balanced Mixotrophy under Day-Night Cycles. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 11682-11691.	3.2	10
78	Cyanobacterial growth and cyanophycin production with urea and ammonium as nitrogen source. <i>Journal of Applied Phycology</i> , 2021, 33, 3565-3577.	1.5	9
79	Modeling the competition between antenna size mutant and wild type microalgae in outdoor mass culture. <i>Journal of Biotechnology</i> , 2016, 240, 1-13.	1.9	8
80	Growth parameter estimation and model simulation for three industrially relevant microalgae: <i>Picochlorum</i> , <i>Nannochloropsis</i> , and <i>Neochloris</i> . <i>Biotechnology and Bioengineering</i> , 2022, 119, 1416-1425.	1.7	7
81	Deceleration saves much time during phototrophic culture optimization. <i>Biotechnology and Bioengineering</i> , 2014, 111, 792-802.	1.7	6
82	A novel V-shaped photobioreactor design for microalgae cultivation at low latitudes: Modelling biomass productivities of <i>Chlorella sorokiniana</i> on Bonaire. <i>Chemical Engineering Journal</i> , 2022, 449, 137793.	6.6	3
83	Enhanced Phototrophic Biomass Productivity through Supply of Hydrogen Gas. <i>Environmental Science and Technology Letters</i> , 2020, 7, 861-865.	3.9	1
84	Model-Based Prediction of Perceived Light Flashing in Recirculated Inclined Wavy-Bottomed Photobioreactors. <i>Processes</i> , 2021, 9, 1158.	1.3	1
85	Exploration of the hydrogen producing potential of <i>Rhodobacter capsulatus</i> chemostat cultures: The application of deceleration and gradient methodology. <i>Biotechnology Progress</i> , 2009, 25, 1343-1352.	1.3	0
86	Cultivation of <i>Dunaliella</i> for High Value Compounds. , 2009, , 91-110.		0