Clemens Posten

List of Publications by Year
in descending order

91 papers	6,533 citations	136950 32 h-index	64796 79 g-index
100 all docs	100 docs citations	100 times ranked	6441 citing authors

#	Article	IF	Citations
1	Second Generation Biofuels: High-Efficiency Microalgae for Biodiesel Production. Bioenergy Research, 2008, 1, 20-43.	3.9	1,932
2	Design principles of photoâ€bioreactors for cultivation of microalgae. Engineering in Life Sciences, 2009, 9, 165-177.	3.6	636
3	An economic and technical evaluation of microalgal biofuels. Nature Biotechnology, 2010, 28, 126-128.	17.5	412
4	Future prospects of microalgal biofuel production systems. Trends in Plant Science, 2010, 15, 554-564.	8.8	288
5	Microalgae and terrestrial biomass as source for fuelsâ€"A process view. Journal of Biotechnology, 2009, 142, 64-69.	3.8	269
6	Photosynthetic biomass and H2production by green algae: from bioengineering to bioreactor scale-up. Physiologia Plantarum, 2007, 131, 10-21.	5.2	189
7	Closed photo-bioreactors as tools for biofuel production. Current Opinion in Biotechnology, 2009, 20, 280-285.	6.6	189
8	Simulations of light intensity variation in photobioreactors. Journal of Biotechnology, 2007, 131, 276-285.	3.8	172
9	Harvesting fresh water and marine algae by magnetic separation: Screening of separation parameters and high gradient magnetic filtration. Bioresource Technology, 2012, 118, 289-295.	9.6	159
10	Developments and perspectives of photobioreactors for biofuel production. Applied Microbiology and Biotechnology, 2010, 87, 1291-1301.	3.6	137
11	The adsorption kinetics of metal ions onto different microalgae and siliceous earth. Water Research, 2001, 35, 779-785.	11.3	126
12	2H-NMR Study and Molecular Dynamics Simulation of the Location, Alignment, and Mobility of Pyrene in POPC Bilayers. Biophysical Journal, 2005, 88, 1818-1827.	0.5	117
13	Cultivation of microalgae with recovered nutrients after hydrothermal liquefaction. Algal Research, 2015, 9, 99-106.	4.6	101
14	Biorefinery of microalgae â€“ opportunities and constraints for different production scenarios. Biotechnology Journal, 2014, 9, 739-752.	3.5	98
15	Composition of Algal Oil and Its Potential as Biofuel. Journal of Combustion, 2012, 2012, 1-14.	1.0	96
16	Scale-down of microalgae cultivations in tubular photo-bioreactorsâ€"A conceptual approach. Journal of Biotechnology, 2007, 132, 127-133.	3.8	91
17	Accumulation of CdS nanoparticles by yeasts in a fed-batch bioprocess. Journal of Biotechnology, 2007, 132, 481-486.	3.8	87
18	Effect of UV-C and UV-B treatment on polyphenol oxidase activity and shelf life of apple and grape juices. Innovative Food Science and Emerging Technologies, 2014, 26, 498-504.	5.6	76

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19	Light distribution in a novel photobioreactor â€“ modelling for optimization. Journal of Applied Phycology, 2001, 13, 325-333.	2.8	67
20	Highly efficient methane generation from untreated microalgae biomass. Biotechnology for Biofuels, 2017, 10, 186.	6.2	63
21	Improvement of dead-end filtration of biopolymers with pressure electrofiltration. Chemical Engineering Science, 2003, 58, 3847-3858.	3.8	57
22	Biofuels from microalgae: Photoconversion efficiency during lipid accumulation. Bioresource Technology, 2013, 142, 647-654.	9.6	57
23	Characterization and utilization of hydrothermal carbonization aqueous phase as nutrient source for microalgal growth. Bioresource Technology, 2019, 290, 121758.	9.6	56
24	Modeling microalgae cultivation productivities in different geographic locations â€“ estimation method for idealized photobioreactors. Biotechnology Journal, 2012, 7, 546-557.	3.5	49
25	A Lipophilic Fucoxanthin-Rich Phaeodactylum tricornutum Extract Ameliorates Effects of Diet-Induced Obesity in C57BL/6J Mice. Nutrients, 2019, 11, 796.	4.1	44
26	Design of a photo-bioreactor for modelling purposes. Chemical Engineering and Processing: Process Intensification, 1999, 38, 517-523.	3.6	40
27	Advanced photobioreactor <scp>LED</scp> illumination system: Scaleâ€down approach to study microalgal growth kinetics. Engineering in Life Sciences, 2012, 12, 621-630.	3.6	40
28	Investigating the dynamics of recombinant protein secretion from a microalgal host. Journal of Biotechnology, 2015, 215, 62-71.	3.8	38
29	Evaluation of Liquid Handling Conditions in Microplates. Journal of Biomolecular Screening, 2001, 6, 47-56.	2.6	36
30	Integration in microalgal bioprocess development: Design of efficient, sustainable, and economic processes. Engineering in Life Sciences, 2014, 14, 560-573.	3.6	35
31	Effect of Traditional Household Processes on Iron, Zinc and Copper Bioaccessibility in Black Bean (Phaseolus vulgaris L.). Foods, 2018, 7, 123.	4.3	35
32	Monoâ€•and dichromatic LED illumination leads to enhanced growth and energy conversion for highâ€efficiency cultivation of microalgae for application in space. Biotechnology Journal, 2016, 11, 1060-1071.	3.5	34
33	Towards sustainable microalgal biomass processing: anaerobic induction of autolytic cell-wall self-ingestion in lipid-rich Nannochloropsis slurries. Green Chemistry, 2019, 21, 2967-2982.	9.0	34
34	Kinetic model of in vivo folding and inclusion body formation in recombinantEscherichia coli. Biotechnology and Bioengineering, 2001, 72, 315-322.	3.3	33
35	Effect of phosphate availability on cyanophycin accumulation in Synechocystis sp. PCC 6803 and the production strain BW86. Algal Research, 2016, 20, 189-196.	4.6	30
36	Establishment of long-term perfusion cultures of recombinant moss in a pilot tubular photobioreactor. Process Biochemistry, 2006, 41, 2180-2187.	3.7	29

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37	Pilot-scale press electrofiltration of biopolymers. Separation and Purification Technology, 2006, 51, 303-309.	7.9	29
38	Chemical composition and nutritional characteristics for ruminants of the microalgae Chlorella vulgaris obtained using different cultivation conditions. Algal Research, 2019, 38, 101385.	4.6	28
39	Modelling of growth and product formation of Porphyridium purpureum. Journal of Biotechnology, 2007, 132, 134-141.	3.8	26
40	Fractionation of proteins with two-sided electro-ultrafiltration. Journal of Biotechnology, 2007, 128, 895-907.	3.8	25
41	Enhancing the growth of Physcomitrella patens by combination of monochromatic red and blue light â€“ a kinetic study. Biotechnology Journal, 2012, 7, 527-526.	3.5	24
42	Fate of H 2 S during the cultivation of Chlorella sp. deployed for biogas upgrading. Journal of Environmental Management, 2017, 191, 252-257.	7.8	24
43	In situ magnetic separation for extracellular protein production. Biotechnology and Bioengineering, 2009, 102, 535-545.	3.3	23
44	Effect of sonication on bioaccessibility and cellular uptake of carotenoids from preparations of photoautotrophic Phaeodactylum tricornutum. Food Research International, 2019, 118, 40-48.	6.2	23
45	Electrofiltration of Biopolymers. Food Engineering Reviews, 2010, 2, 131-146.	5.9	22
46	Microalgal kinetics â€” a guideline for photobioreactor design and process development. Engineering in Life Sciences, 2019, 19, 830-843.	3.6	21
47	Biogenic calcite particles from microalgaeâ€”Coccoliths as a potential raw material. Engineering in Life Sciences, 2017, 17, 605-612.	3.6	20
48	Growth and product formation of Porphyridium purpureum. Journal of Applied Phycology, 2001, 13, 317-324.	2.8	19
49	Process development for hydrogen production with Chlamydomonas reinhardtii based on growth and product formation kinetics. Journal of Biotechnology, 2012, 162, 89-96.	3.8	19
50	Performance and dose validation of a coiled tube UV-C reactor for inactivation of microorganisms in absorbing liquids. Journal of Food Engineering, 2014, 138, 45-52.	5.2	18
51	Reduction of Î²-ODAP and IP6 contents in Lathyrus sativus L. seed by high hydrostatic pressure. Food Research International, 2019, 120, 73-82.	6.2	17
52	Hypotonic osmotic shock treatment to enhance lipid and protein recoveries from concentrated saltwater Nannochloropsis slurries. Fuel, 2021, 287, 119442.	6.4	16
53	Effect of physical properties of the liquid on the efficiency of a UV-C treatment in a coiled tube reactor. Innovative Food Science and Emerging Technologies, 2015, 29, 240-246.	5.6	13
54	Advanced near-zero waste treatment of food processing wastewater with water, carbon, and nutrient recovery. Science of the Total Environment, 2021, 779, 146373.	8.0	13

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55	Electrofiltration as a purification strategy for microbial poly-(3-hydroxybutyrate). Bioresource Technology, 2012, 123, 272-278.	9.6	12
56	Cost-Effective and Uniform 13C- and 15N-Labeling of the 24-kDa N-Terminal Domain of the Escherichia coli Gyrase B by Overexpression in the Photoautotrophic Cyanobacterium Anabaena sp. PCC 7120. Protein Expression and Purification, 2001, 23, 207-217.	1.3	11
57	In situ magnetic separation of antibody fragments from Escherichia coli in complex media. BMC Biotechnology, 2013, 13, 44.	3.3	11
58	Characterization of an aerated submerged hollow fiber ultrafiltration device for efficient microalgae harvesting. Engineering in Life Sciences, 2021, 21, 607-622.	3.6	11
59	The effect of cell disruption on the extraction of oil and protein from concentrated microalgae slurries. Bioresource Technology, 2022, 346, 126597.	9.6	11
60	A Linear Programming Approach for Modeling and Simulation of Growth and Lipid Accumulation of Phaeodactylum tricornutum. Energies, 2013, 6, 5333-5356.	3.1	9
61	Submerged hollow-fiber-ultrafiltration for harvesting microalgae used for bioremediation of a secondary wastewater. Separation and Purification Technology, 2022, 289, 120744.	7.9	9
62	Filtration kinetics of chitosan separation by electrofiltration. Biotechnology Journal, 2012, 7, 262-274.	3.5	7
63	Semiâ€continuous in situ magnetic separation for enhanced extracellular protease productionâ€"modeling and experimental validation. Biotechnology and Bioengineering, 2013, 110, 2161-2172.	3.3	7
64	Relationship between light intensity and morphology of the moss Physcomitrella patens in a draft tube photo bioreactor. Biochemical Engineering Journal, 2012, 60, 119-126.	3.6	6
65	Miniaturization of an Enzyme Assay (Î²-Galactosidase) in the 384- and 1536-Well Plate Format. Journal of the Association for Laboratory Automation, 1999, 4, 64-67.	2.8	5
66	Pressure reduction affects growth and morphology of Chlamydomonas reinhardtii. Engineering in Life Sciences, 2017, 17, 552-560.	3.6	5
67	Effects of phytase-supplemented fermentation and household processing on the nutritional quality of Lathyrus sativus L. seeds. Heliyon, 2020, 6, e05484.	3.2	5
68	Process Engineering of Biopharmaceutical Production in Moss Bioreactors via Model-Based Description and Evaluation of Phytohormone Impact. Frontiers in Bioengineering and Biotechnology, 2022, 10, 837965.	4.1	5
69	Energy Considerations of Photobioreactors. , 2013, , 223-232.		4
70	Modeling of Microalgae Bioprocesses. Advances in Chemical Engineering, 2016, 48, 151-184.	0.9	4
71	Electrofiltration improves deadâ€end filtration of hyaluronic acid and presents an alternative downstream processing step that overcomes technological challenges of conventional methods. Engineering in Life Sciences, 2017, 17, 970-975.	3.6	4
72	Lipophilic compounds, but not fucoxanthin, mediate the genotoxic effect of photoautotrophic grown Phaeodactylum tricornutum in Caco-2 and HT-29 cells. Journal of Functional Foods, 2020, 64, 103671.	3.4	4

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73	Fieldbus application in the hierarchical automation structure of a biotechnological pilot plant. Journal of Biotechnology, 1995, 40, 99-109.	3.8	3
74	Photobioreactors in Life Support Systems. Advances in Biochemical Engineering/Biotechnology, 2015, 153, 143-184.	1.1	3
75	Editorial: Recent Progress in Algal Biotechnology. Biotechnology Journal, 2016, 11, 301-302.	3.5	3
76	New Possibilities to Design Biogenic Calcite Particles. Influence of Cultivation Parameters and Purification on Coccolith Properties. Chemie-Ingenieur-Technik, 2018, 90, 456-463.	0.8	3
77	Medium optimization for biomass production of three peat moss (Sphagnum L.) species using fractional factorial design and response surface methodology. Bioresource Technology Reports, 2021, 15, 100729.	2.7	3
78	Control Strategies for High-Cell Density Cultivation of Escherichia coli. , 2000, , 374-390.		3
79	Development of a Process Chain for Nanoparticles Production by Yeasts. , 2011, , 197-221.		2
80	1 Introduction â€“ Integration in microalgal biotechnology. , 0, , 1-12.		2
81	Produktion und Charakterisierung von mikrostrukturierten Calcitpartikeln aus der Kalkalge Emiliania huxleyi. Chemie-Ingenieur-Technik, 2016, 88, 897-902.	0.8	2
82	Photoautotrophically Grown Chlorella vulgaris Shows Genotoxic Potential but No Apoptotic Effect in Epithelial Cells. Journal of Agricultural and Food Chemistry, 2019, 67, 8668-8676.	5.2	2
83	Iron limitation â€“ A perspective on a growth-restricted cultivation strategy for a H2 production system using the diazotrophic cyanobacterium Nostoc PCC 7120 Î”hupW. Bioresource Technology Reports, 2020, 11, 100508.	2.7	2
84	Production and particle characterization of the frustules of Cyclotella cryptica in comparison with siliceous earth. Progress in Industrial Microbiology, 1999, 35, 71-75.	0.0	1
85	11 Construction and assessment parameters of photobioreactors. , 0, , .		1
86	Ein Mustererkennungsystem zur Klassifikation von ProzeÃŸsituationen bei Batch und Fed-Batch Prozessen. Automatisierungstechnik, 1998, 46, 395-404.	0.8	0
87	Bestimmung von substrat-inhibierten stationÃren ZustÃnden zur Validierung von Modellen des Schadstoffabbaus. Automatisierungstechnik, 1998, 46, 381-385.	0.8	0
88	Entwicklung und Beschreibung eines neuen Photo-Bioreaktors und dessen Optimierung durch Simulation des Lichteintrags. Chemie-Ingenieur-Technik, 2000, 72, 1091-1092.	0.8	0
89	In Situ Magnetic Separation on Pilot Scale: A Tool for Process Optimization. Lecture Notes in Bioengineering, 2014, , 189-211.	0.4	0
90	Lipid, biomass productivity and growth rates of freshwater picoplankton Nannochloropsis limnetica SAG 18.99 cultivated in variant nitrate concentrations. Journal of Cellular Biotechnology, 2020, , 1-10.	0.5	0

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91	Microalgal biofuel systems: Climate change, fuel supply and economic opportunities for sustainable development. Microbiology Australia, 2009, 30, 89.	0.4	0