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	The effect of cell disruption on the extraction of oil and protein from concentrated microalgae slurries. Bioresource Technology, 2022, 346, 126597.	9.6	11
2	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
3	Submerged hollow-fiber-ultrafiltration for harvesting microalgae used for bioremediation of a secondary wastewater. Separation and Purification Technology, 2022, 289, 120744.	7.9	9
4	Hypotonic osmotic shock treatment to enhance lipid and protein recoveries from concentrated saltwater Nannochloropsis slurries. Fuel, 2021, 287, 119442.	6.4	16
5	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
6	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
7	Characterization of an aerated submerged hollow fiber ultrafiltration device for efficient microalgae harvesting. Engineering in Life Sciences, 2021, 21, 607-622.	3.6	11
8	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
9	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
10	Effects of phytase-supplemented fermentation and household processing on the nutritional quality of Lathyrus sativus L. seeds. Heliyon, 2020, 6, e05484.	3.2	5
11	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
12	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
13	Characterization and utilization of hydrothermal carbonization aqueous phase as nutrient source for microalgal growth. Bioresource Technology, 2019, 290, 121758.	9.6	56
14	Microalgal kinetics â€” a guideline for photobioreactor design and process development. Engineering in Life Sciences, 2019, 19, 830-843.	3.6	21
15	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
16	A Lipophilic Fucoxanthin-Rich Phaeodactylum tricornutum Extract Ameliorates Effects of Diet-Induced Obesity in C57BL/6J Mice. Nutrients, 2019, 11, 796.	4.1	44
17	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
18	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

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19	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
20	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
21	Effect of Traditional Household Processes on Iron, Zinc and Copper Bioaccessibility in Black Bean (Phaseolus vulgaris L.). Foods, 2018, 7, 123.	4.3	35
22	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
23	Pressure reduction affects growth and morphology of Chlamydomonas reinhardtii. Engineering in Life Sciences, 2017, 17, 552-560.	3.6	5
24	Biogenic calcite particles from microalgaeâ€"Coccoliths as a potential raw material. Engineering in Life Sciences, 2017, 17, 605-612.	3.6	20
25	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
26	Highly efficient methane generation from untreated microalgae biomass. Biotechnology for Biofuels, 2017, 10, 186.	6.2	63
27	Editorial: Recent Progress in Algal Biotechnology. Biotechnology Journal, 2016, 11, 301-302.	3.5	3
28	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
29	Produktion und Charakterisierung von mikrostrukturierten Calcitpartikeln aus der Kalkalge Emiliania huxleyi. Chemie-Ingenieur-Technik, 2016, 88, 897-902.	0.8	2
30	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
31	Modeling of Microalgae Bioprocesses. Advances in Chemical Engineering, 2016, 48, 151-184.	0.9	4
32	Cultivation of microalgae with recovered nutrients after hydrothermal liquefaction. Algal Research, 2015, 9, 99-106.	4.6	101
33	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
34	Investigating the dynamics of recombinant protein secretion from a microalgal host. Journal of Biotechnology, 2015, 215, 62-71.	3.8	38
35	Photobioreactors in Life Support Systems. Advances in Biochemical Engineering/Biotechnology, 2015, 153, 143-184.	1.1	3
36	Integration in microalgal bioprocess development: Design of efficient, sustainable, and economic processes. Engineering in Life Sciences, 2014, 14, 560-573.	3.6	35

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37	In Situ Magnetic Separation on Pilot Scale: A Tool for Process Optimization. Lecture Notes in Bioengineering, 2014, , 189-211.	0.4	0
38	Biorefinery of microalgae â€“ opportunities and constraints for different production scenarios. Biotechnology Journal, 2014, 9, 739-752.	3.5	98
39	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
40	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
41	In situ magnetic separation of antibody fragments from Escherichia coli in complex media. BMC Biotechnology, 2013, 13, 44.	3.3	11
42	Energy Considerations of Photobioreactors. , 2013, , 223-232.		4
43	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
44	Biofuels from microalgae: Photoconversion efficiency during lipid accumulation. Bioresource Technology, 2013, 142, 647-654.	9.6	57
45	A Linear Programming Approach for Modeling and Simulation of Growth and Lipid Accumulation of Phaeodactylum tricornutum. Energies, 2013, 6, 5333-5356.	3.1	9
46	Composition of Algal Oil and Its Potential as Biofuel. Journal of Combustion, 2012, 2012, 1-14.	1.0	96
47	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
48	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
49	Electrofiltration as a purification strategy for microbial poly-(3-hydroxybutyrate). Bioresource Technology, 2012, 123, 272-278.	9.6	12
50	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
51	Modeling microalgae cultivation productivities in different geographic locations â€“ estimation method for idealized photobioreactors. Biotechnology Journal, 2012, 7, 546-557.	3.5	49
52	Filtration kinetics of chitosan separation by electrofiltration. Biotechnology Journal, 2012, 7, 262-274.	3.5	7
53	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
54	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

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55	Development of a Process Chain for Nanoparticles Production by Yeasts. , 2011, , 197-221.		2
56	Developments and perspectives of photobioreactors for biofuel production. Applied Microbiology and Biotechnology, 2010, 87, 1291-1301.	3.6	137
57	Electrofiltration of Biopolymers. Food Engineering Reviews, 2010, 2, 131-146.	5.9	22
58	An economic and technical evaluation of microalgal biofuels. Nature Biotechnology, 2010, 28, 126-128.	17.5	412
59	Future prospects of microalgal biofuel production systems. Trends in Plant Science, 2010, 15, 554-564.	8.8	288
60	In situ magnetic separation for extracellular protein production. Biotechnology and Bioengineering, 2009, 102, 535-545.	3.3	23
61	Closed photo-bioreactors as tools for biofuel production. Current Opinion in Biotechnology, 2009, 20, 280-285.	6.6	189
62	Microalgae and terrestrial biomass as source for fuelsâ€"A process view. Journal of Biotechnology, 2009, 142, 64-69.	3.8	269
63	Design principles of photoâ€bioreactors for cultivation of microalgae. Engineering in Life Sciences, 2009, 9, 165-177.	3.6	636
64	Microalgal biofuel systems: Climate change, fuel supply and economic opportunities for sustainable development. Microbiology Australia, 2009, 30, 89.	0.4	0
65	Second Generation Biofuels: High-Efficiency Microalgae for Biodiesel Production. Bioenergy Research, 2008, 1, 20-43.	3.9	1,932
66	Fractionation of proteins with two-sided electro-ultrafiltration. Journal of Biotechnology, 2007, 128, 895-907.	3.8	25
67	Scale-down of microalgae cultivations in tubular photo-bioreactorsâ€"A conceptual approach. Journal of Biotechnology, 2007, 132, 127-133.	3.8	91
68	Simulations of light intensity variation in photobioreactors. Journal of Biotechnology, 2007, 131, 276-285.	3.8	172
69	Modelling of growth and product formation of Porphyridium purpureum. Journal of Biotechnology, 2007, 132, 134-141.	3.8	26
70	Accumulation of CdS nanoparticles by yeasts in a fed-batch bioprocess. Journal of Biotechnology, 2007, 132, 481-486.	3.8	87
71	Photosynthetic biomass and H2production by green algae: from bioengineering to bioreactor scale-up. Physiologia Plantarum, 2007, 131, 10-21.	5.2	189
72	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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73	Pilot-scale press electrofiltration of biopolymers. Separation and Purification Technology, 2006, 51, 303-309.	7.9	29
74	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
75	Improvement of dead-end filtration of biopolymers with pressure electrofiltration. Chemical Engineering Science, 2003, 58, 3847-3858.	3.8	57
76	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
77	The adsorption kinetics of metal ions onto different microalgae and siliceous earth. Water Research, 2001, 35, 779-785.	11.3	126
78	Kinetic model of in vivo folding and inclusion body formation in recombinantEscherichia coli. Biotechnology and Bioengineering, 2001, 72, 315-322.	3.3	33
79	Growth and product formation of Porphyridium purpureum. Journal of Applied Phycology, 2001, 13, 317-324.	2.8	19
80	Light distribution in a novel photobioreactor â€“ modelling for optimization. Journal of Applied Phycology, 2001, 13, 325-333.	2.8	67
81	Evaluation of Liquid Handling Conditions in Microplates. Journal of Biomolecular Screening, 2001, 6, 47-56.	2.6	36
82	Entwicklung und Beschreibung eines neuen Photo-Bioreaktors und dessen Optimierung durch Simulation des Lichteintrags. Chemie-Ingenieur-Technik, 2000, 72, 1091-1092.	0.8	0
83	Control Strategies for High-Cell Density Cultivation of Escherichia coli. , 2000, , 374-390.		3
84	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
85	Design of a photo-bioreactor for modelling purposes. Chemical Engineering and Processing: Process Intensification, 1999, 38, 517-523.	3.6	40
86	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
87	Ein Mustererkennungsystem zur Klassifikation von ProzeÃŸsituationen bei Batch und Fed-Batch Prozessen. Automatisierungstechnik, 1998, 46, 395-404.	0.8	0
88	Bestimmung von substrat-inhibierten stationÃren ZustÃnden zur Validierung von Modellen des Schadstoffabbaus. Automatisierungstechnik, 1998, 46, 381-385.	0.8	0
89	Fieldbus application in the hierarchical automation structure of a biotechnological pilot plant. Journal of Biotechnology, 1995, 40, 99-109.	3.8	3
90	11 Construction and assessment parameters of photobioreactors. , 0, , .		1

#	Article	IF	Citations
91	1 Introduction â€“ Integration in microalgal biotechnology. , 0, , 1-12.		2