Luc Marchal

List of Publications by Year
in descending order

39 papers	1,521 citations	279798 23 h-index	315739 38 g-index
39 all docs	39 docs citations	39 times ranked	1651 citing authors

#	Article	IF	Citations
1	Pulsed electric field and pH assisted selective extraction of intracellular components from microalgae Nannochloropsis. Algal Research, 2015, 8, 128-134.	4.6	156
2	Separation and fractionation of exopolysaccharides from Porphyridium cruentum. Bioresource Technology, 2013, 145, 345-350.	9.6	124
3	Pulsed electric field assisted extraction of nutritionally valuable compounds from microalgae Nannochloropsis spp. using the binary mixture of organic solvents and water. Innovative Food Science and Emerging Technologies, 2015, 27, 79-85.	5.6	118
4	Physicochemical factors affecting the stability of two pigments: R-phycoerythrin of Grateloupia turuturu and B-phycoerythrin of Porphyridium cruentum. Food Chemistry, 2014, 150, 400-407.	8.2	113
5	Extraction and fractionation of polysaccharides and B-phycoerythrin from the microalga Porphyridium cruentum by membrane technology. Algal Research, 2014, 5, 258-263.	4.6	94
6	Blanching of Strawberries by Ohmic Heating: Effects on the Kinetics of Mass Transfer during Osmotic Dehydration. Food and Bioprocess Technology, 2010, 3, 406-414.	4.7	64
7	Wet lipid extraction from the microalga Nannochloropsis sp.: Disruption, physiological effects and solvent screening. Algal Research, 2017, 21, 27-34.	4.6	60
8	Centrifugal partition chromatography: A survey of its history, and our recent advances in the field. Chemical Record, 2003, 3, 133-143.	5.8	53
9	Emerging techniques for cell disruption and extraction of valuable bio-molecules of microalgae Nannochloropsis sp.. Bioprocess and Biosystems Engineering, 2019, 42, 173-186.	3.4	49
10	High pressure disruption: a two-step treatment for selective extraction of intracellular components from the microalga Porphyridium cruentum. Journal of Applied Phycology, 2013, 25, 983-989.	2.8	47
11	Rational improvement of centrifugal partition chromatographic settings for the production of 5-n-alkylresorcinols from wheat bran lipid extract. Journal of Chromatography A, 2003, 1005, 51-62.	3.7	46
12	Effects of vacuum impregnation and ohmic heating with citric acid on the behaviour of osmotic dehydration and structural changes of apple fruit. Biosystems Engineering, 2010, 106, 6-13.	4.3	44
13	Influence of flow patterns on chromatographic efficiency in centrifugal partition chromatography. Journal of Chromatography A, 2000, 869, 339-352.	3.7	43
14	Mass transport and flow regimes in centrifugal partition chromatography. AICHE Journal, 2002, 48, 1692-1704.	3.6	43
15	Bead milling disruption kinetics of microalgae: Process modeling, optimization and application to biomolecules recovery from Chlorella sorokiniana. Bioresource Technology, 2018, 267, 458-465.	9.6	40
16	Effect of ultrasonication, high pressure homogenization and their combination on efficiency of extraction of bio-molecules from microalgae Parachlorella kessleri. Algal Research, 2019, 40, 101524.	4.6	38
17	Fucoxanthin from Algae to Human, an Extraordinary Bioresource: Insights and Advances in up and Downstream Processes. Marine Drugs, 2022, 20, 222.	4.6	36
18	Industrial case study on alkaloids purification by pH-zone refining centrifugal partition chromatography. Journal of Chromatography A, 2016, 1474, 59-70.	3.7	34

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19	Methodology for optimally sized centrifugal partition chromatography columns. Journal of Chromatography A, 2015, 1388, 174-183.	3.7	33
20	Centrifugal partition extraction, a new method for direct metabolites recovery from culture broth: Case study of torularhodin recovery from Rhodotorula rubra. Bioresource Technology, 2013, 132, 406-409.	9.6	28
21	Centrifugal partition extraction of Î²-carotene from Dunaliella salina for efficient and biocompatible recovery of metabolites. Bioresource Technology, 2013, 134, 396-400.	9.6	26
22	Strong ion exchange in centrifugal partition extraction (SIX-CPE): Effect of partition cell design and dimensions on purification process efficiency. Journal of Chromatography A, 2012, 1247, 18-25.	3.7	24
23	Intensified extraction of ionized natural products by ion pair centrifugal partition extraction. Journal of Chromatography A, 2011, 1218, 5254-5262.	3.7	23
24	Effect of Blanching by Ohmic Heating on the Osmotic Dehydration Behavior of Apple Cubes. Drying Technology, 2009, 27, 739-746.	3.1	22
25	Two-step procedure for selective recovery of bio-molecules from microalga Nannochloropsis oculata assisted by high voltage electrical discharges. Bioresource Technology, 2020, 302, 122893.	9.6	22
26	Application of high-voltage electrical discharges and high-pressure homogenization for recovery of intracellular compounds from microalgae Parachlorella kessleri. Bioprocess and Biosystems Engineering, 2019, 42, 29-36.	3.4	20
27	Pulsed electric energy and ultrasonication assisted green solvent extraction of bio-molecules from different microalgal species. Innovative Food Science and Emerging Technologies, 2020, 62, 102358.	5.6	17
28	Modeling pH-zone refining countercurrent chromatography: A dynamic approach. Journal of Chromatography A, 2015, 1391, 80-87.	3.7	15
29	The centrifugal partition reactor, a novel intensified continuous reactor for liquidâ€“liquid enzymatic reactions. Biochemical Engineering Journal, 2015, 103, 227-233.	3.6	15
30	Purification of a modified cyclosporine A by co-current centrifugal partition chromatography: Process development and intensification. Journal of Chromatography A, 2013, 1311, 72-78.	3.7	14
31	Multistage aqueous and non-aqueous extraction of bio-molecules from microalga Phaeodactylum tricornutum. Innovative Food Science and Emerging Technologies, 2020, 62, 102367.	5.6	12
32	Production of oil in water emulsions in microchannels at high throughput: Evaluation of emulsions in view of cosmetic, nutraceutical or pharmaceutical applications. Chemical Engineering and Processing: Process Intensification, 2021, 161, 108301.	3.6	12
33	Comparison of aqueous extraction assisted by pulsed electric energy and ultrasonication: Efficiencies for different microalgal species. Algal Research, 2020, 47, 101857.	4.6	11
34	Producing Energy-Rich Microalgae Biomass for Liquid Biofuels: Influence of Strain Selection and Culture Conditions. Energies, 2021, 14, 1246.	3.1	9
35	Lipid recovery from Nannochloropsis gaditana using the wet pathway: Investigation of the operating parameters of bead milling and centrifugal extraction. Algal Research, 2021, 56, 102318.	4.6	8
36	Effect of combined pulsed electric energy and high pressure homogenization on selective and energy efficient extraction of bio-molecules from microalga Parachlorella kessleri. LWT - Food Science and Technology, 2021, 141, 110901.	5.2	4

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37	Chapter 5 Centrifugal partition chromatography: an engineering approach. Comprehensive Analytical Chemistry, 2002, 38, 115-157.	1.3	3
38	Two-phase solvent extraction of phenolics from Origanum vulgare subsp. glandulosum. Journal of Applied Research on Medicinal and Aromatic Plants, 2021, 20, 100273.	1.5	1
39	Optimization of continuous TAG production by Nannochloropsis gaditana in solarâ€nitrogenâ€limited culture. Biotechnology and Bioengineering, 2022, , .	3.3	0