Murielle Rabiller-Baudry

List of Publications by Year
in descending order

68	1,599	257357 24	315616 38
papers	citations	h-index	g-index

68	68	68	1326
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of zeta potential and size of caseins as precursors of fouling deposit on limiting and critical fluxes in spiral ultrafiltration of modified skim milks. Journal of Membrane Science, 2008, 314, 67-75.	4.1	95
2	Characterisation of cleaned and fouled membrane by ATRâ€"FTIR and EDX analysis coupled with SEM: application to UF of skimmed milk with a PES membrane. Desalination, 2002, 146, 123-128.	4.0	93
3	Treatment of dairy process waters by membrane operations for water reuse and milk constituents concentration. Desalination, 2002, 147, 89-94.	4.0	82
4	Recovery of Enlarged Olefin Metathesis Catalysts by Nanofiltration in an Ecoâ€Friendly Solvent. ChemSusChem, 2008, 1, 927-933.	3.6	63
5	Degradation of Poly(Ether Sulfone)/Polyvinylpyrrolidone Membranes by Sodium Hypochlorite: Insight from Advanced Electrokinetic Characterizations. Environmental Science & Technology, 2014, 48, 13419-13426.	4.6	52
6	Influence of PVP content on degradation of PES/PVP membranes: Insights from characterization of membranes with controlled composition. Journal of Membrane Science, 2017, 533, 261-269.	4.1	50
7	Extraction of Î±-lactalbumin from whey protein concentrate with modified inorganic membranes. Journal of Membrane Science, 1998, 148, 1-12.	4.1	49
8	Ageing of PES industrial spiral-wound membranes in acid whey ultrafiltration. Desalination, 2006, 192, 25-39.	4.0	49
9	Mapping of protein fouling by FTIR-ATR as experimental tool to study membrane fouling and fluid velocity profile in various geometries and validation by CFD simulation. Chemical Engineering and Processing: Process Intensification, 2008, 47, 1106-1117.	1.8	49
10	Retention of ions in nanofiltration at various ionic strength. Desalination, 1996, 104, 37-46.	4.0	46
11	A dual approach of membrane cleaning based on physico-chemistry and hydrodynamics. Chemical Engineering and Processing: Process Intensification, 2008, 47, 267-275.	1.8	46
12	Electrokinetic analysis of PES/PVP membranes aged by sodium hypochlorite solutions at different pH. Journal of Membrane Science, 2016, 501, 24-32.	4.1	45
13	Limiting flux in skimmed milk ultrafiltration: impact of electrostatic repulsion due to casein micelles. Desalination, 2005, 175, 49-59.	4.0	43
14	Role of the physico-chemical environment on ultrafiltration of lysozyme with modified inorganic membrane. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 136, 109-122.	2.3	40
15	Application of a convectionâ€"diffusionâ€"electrophoretic migration model to ultrafiltration of lysozyme at different pH values and ionic strengths. Journal of Membrane Science, 2000, 179, 163-174.	4.1	38
16	Methodology of analysis of a spiral-wound module. Application to PES membrane for ultrafiltration of skimmed milk. Desalination, 2006, 192, 40-53.	4.0	34
17	On the actual cleanability of polyethersulfone membrane fouled by proteins at critical or limiting flux. Journal of Membrane Science, 2013, 425-426, 40-47.	4.1	34
18	Ultrafiltration of mixed protein solutions of lysozyme and lactoferrin: role of modified inorganic membranes and ionic strength on the selectivity. Journal of Membrane Science, 2001, 184, 137-148.	4.1	32

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19	Immobilisation of an ionically tagged Hoveyda catalyst on a supported ionic liquid membrane: An innovative approach for metathesis reactions in a catalytic membrane reactor. Catalysis Today, 2010, 156, 268-275.	2.2	27
20	Comparison of two nanofiltration membrane reactors for a model reaction of olefin metathesis achieved in toluene. Separation and Purification Technology, 2013, 116, 46-60.	3.9	27
21	Evidencing the chemical degradation of a hydrophilised PES ultrafiltration membrane despite protein fouling. Separation and Purification Technology, 2015, 147, 62-81.	3.9	27
22	Convenient syntheses of chevrel phase compounds from soluble sulfide precursors under flowing hydrogen atmosphere. Materials Research Bulletin, 1991, 26, 519-526.	2.7	26
23	Retention of heavy metal ions with nanofiltration inorganic membranes by grafting chelating groups. Separation and Purification Technology, 2001, 25, 219-227.	3.9	26
24	On the electrostatic interactions in the transfer mechanisms of iron during nanofiltration in high concentrated phosphoric acid. Journal of Membrane Science, 2013, 427, 37-47.	4.1	26
25	Physico-chemical characterization of proteins by capillary electrophoresis. Biomedical Applications, 1998, 706, 23-32.	1.7	25
26	Specific adsorption of phosphate ions on proteins evidenced by capillary electrophoresis and reversed-phase high-performance liquid chromatography. Biomedical Applications, 2001, 753, 67-77.	1.7	24
27	Alkaline cleaning of PES membranes used in skimmed milk ultrafiltration: from reactor to spiral-wound module via a plate-and-frame module. Desalination, 2006, 191, 334-343.	4.0	23
28	Cleaning efficiency and impact on production fluxes of oxidising disinfectants on a pes ultrafiltration membrane fouled with proteins. Food and Bioproducts Processing, 2010, 88, 425-429.	1.8	23
29	Spectroscopic Characterization of Zirconia Coated by Polymers with Amine Groups. Langmuir, 2000, 16, 1852-1860.	1.6	22
30	Small molecular ion adsorption on proteins and DNAs revealed by separation techniques. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 797, 331-345.	1.2	22
31	Silica and zirconia supported olefin metathesis pre-catalysts: Synthesis, catalytic activity and multiple-use in dimethyl carbonate. Journal of Molecular Catalysis A, 2012, 357, 73-80.	4.8	22
32	Cleaning of skim milk PES ultrafiltration membrane: On the real effect of nitric acid step. Journal of Membrane Science, 2013, 428, 275-280.	4.1	22
33	Selective extraction of lysozyme from a mixture with lactoferrin by ultrafiltration. Role of the physico-chemical environment. Dairy Science and Technology, 2000, 80, 197-203.	0.9	22
34	On the origin of flux dependence in pH-modified skim milk filtration. Dairy Science and Technology, 2009, 89, 363-385.	2.2	21
35	Influence of bulk concentration on the organisation of molecules at a membrane surface and flux decline during reverse osmosis of an anionic surfactant. Journal of Membrane Science, 2016, 499, 257-268.	4.1	21
36	Recent progress in chevrel phase syntheses: A new low temperature synthesis of the superconducting lead compound. Materials Research Bulletin, 1994, 29, 567-574.	2.7	19

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37	Adsorption of lysozyme on membrane material and cleaning with non-ionic surfactant characterized through contact angle measurements. Desalination, 2002, 146, 149-154.	4.0	19
38	Interest of the Precatalyst Design for Olefin Metathesis Operating in a Discontinuous Nanofiltration Membrane Reactor. ChemPlusChem, 2013, 78, 728-736.	1.3	16
39	Effect of operating parameters on the selectivity of nanofiltration phosphates transfer through a Nanomax-50 membrane. Arabian Journal of Chemistry, 2016, 9, S334-S341.	2.3	13
40	Design of membrane cascades according to the method of McCabe-Thiele: An organic solvent nanofiltration case study for olefin hydroformylation in toluene. Separation and Purification Technology, 2018, 195, 339-357.	3.9	13
41	Structural modifications of globular proteins in an ultrafiltration loop as evidenced by intrinsic fluorescence and reverse-phase liquid chromatography. Separation and Purification Technology, 2012, 96, 274-288.	3.9	12
42	How the experimental knowledge of the irreversible fouling distribution can contribute to understand the fluid circulation in a spiral ultrafiltration membrane. Separation and Purification Technology, 2014, 136, 157-167.	3.9	12
43	Physico-chemical characterisations of a UF membrane used in dairy application to estimate chemical efficiency of cleaning. Desalination, 2006, 200, 189-191.	4.0	11
44	Role of physico-chemical and hydrodynamic aspects in cleaning of spiral PES ultrafiltration membranes of dairy industry. Desalination, 2006, 199, 390-392.	4.0	10
45	A methodology for monitoring globular milk protein changes induced by ultrafiltration: A dual structural and functional approach. Journal of Dairy Science, 2010, 93, 3910-3924.	1.4	10
46	Synthesis and characterization of new ultrafiltration ceramic membranes for water treatment. Journal of Water Process Engineering, 2019, 30, 100620.	2.6	10
47	Filterability of exopolysaccharides solutions from the red microalga Porphyridium cruentum by tangential filtration on a polymeric membrane. Environmental Technology (United Kingdom), 2020, 41, 1167-1184.	1.2	9
48	Syntheses of bulk and supported Chevrel phases. Journal of Alloys and Compounds, 1992, 178, 441-445.	2.8	8
49	Separation of solutes with an organic solvent nanofiltration cascade: Designs, simulations and systematic study of all configurations. Separation and Purification Technology, 2018, 194, 111-122.	3.9	8
50	Efficient and rapid multiscale approach of polymer membrane degradation and stability: Application to formulation of harmless non-oxidative biocide for polyamide and PES/PVP membranes. Separation and Purification Technology, 2021, 259, 118054.	3.9	8
51	Physico-chemical effect of simple alkaline and acid solutions in cleaning sequences of spiral ultrafiltration membranes fouled by skim milk. Desalination, 2006, 200, 192-194.	4.0	7
52	First elaboration of an olefin metathesis catalytic membrane by grafting a Hoveydaâ€“Grubbs precatalyst on zirconia membranes. Comptes Rendus Chimie, 2017, 20, 952-966.	0.2	7
53	Syntheses and characterization of molecular weight enlarged olefin metathesis pre-catalysts. Comptes Rendus Chimie, 2017, 20, 717-723.	0.2	7
54	New insights into the structure of membrane fouling by biomolecules using comparison with isotherms and ATR-FTIR local quantification. Environmental Technology (United Kingdom), 2022, 43, 207-224.	1.2	7

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55	Consequences of membrane aging on real or misleading evaluation of membrane cleaning by flux measurements. Separation and Purification Technology, 2021, 259, 118044.	3.9	7
56	Role of electrophoretic mobility of protein on its retention by an ultrafiltration membrane. Biomedical Applications, 2001, 753, 3-16.	1.7	6
57	Mapping of protein fouling by FTIR-ATR as experimental tool to study fluid velocity profile in spiral membrane. Desalination, 2006, 200, 205-207.	4.0	6
58	Assessment and potential of membrane cascades for organic solvent nanofiltration of hydroformylation media through a graphical representation composed of performance maps. Chemical Engineering Science, 2018, 183, 240-259.	1.9	5
59	Simulation of membrane ageing to go ahead in fouling and cleaning understanding during skim milk ultrafiltration. Food and Bioproducts Processing, 2019, 113, 22-31.	1.8	5
60	Coupling Rhodiumâ€Catalyzed Hydroformylation of 10â€Undecenitrile with Organic Solvent Nanofiltration: Toluene Solution versus Solventâ€Free Processes. ChemPlusChem, 2019, 84, 1744-1760.	1.3	4
61	How microwaves can help to study membrane ageing. Environmental Technology (United Kingdom), 2020, 41, 2314-2336.	1.2	3
62	On the relative influence of the hydrodynamics of lab-scale set-ups and the membrane materials on the rejection of homogeneous metal catalysts in solvent resistant nanofiltration. Separation Science and Technology, 2021, 56, 766-778.	1.3	3
63	Fluxes in reverse osmosis of model acidic and alkaline transient effluents issued from skim milk filtration. Desalination and Water Treatment, 2012, 43, 52-62.	1.0	2
64	Cleanability Versus Limiting and Critical Fluxes of a Polyethersulfone Membrane of Skim Milk Ultrafiltration. Procedia Engineering, 2012, 44, 72-74.	1.2	2
65	Skim Milk Ultrafiltration with a PES Membrane: Effect of Milk Thermal Pretreatment and Concentration on the Irreversible Fouling. Procedia Engineering, 2012, 44, 2038-2040.	1.2	2
66	Interest and Limitations of a Nanofiltration Membrane Reactor in a Model Ring Closing Olefin Metathesis Reaction Performed in Toluene. Procedia Engineering, 2012, 44, 304-306.	1.2	1
67	On the impact of ethanol on the rejection and transfer mechanism during ultrafiltration of a charged macromolecule in water/ethanol. Environmental Technology (United Kingdom), 2020, 41, 1950-1979.	1.2	1
68	Coupling UF and Micro-Waves to Accelerate Ageing of PES Membrane by Sodium Hypochlorite: A Lab Scale Methodology Allowing Preparation of Aged Membrane Similar to Long Term Aged Membrane Obtained at Industrial Scale. Procedia Engineering, 2012, 44, 1035-1037.	1.2	0