

Laurent E Prat

List of Publications by Year in descending order

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61
papers

1,657
citations

331538

21
h-index

289141

40
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61
all docs

61
docs citations

61
times ranked

1863
citing authors

#	ARTICLE	IF	CITATIONS
1	Solid-liquid extraction of andrographolide from plants experimental study, kinetic reaction and model. Separation and Purification Technology, 2004, 40, 147-154.	3.9	130
2	Experimental and numerical study of droplets hydrodynamics in microchannels. AIChE Journal, 2006, 52, 4061-4070.	1.8	109
3	Continuous-flow photochemistry: A need for chemical engineering. Chemical Engineering and Processing: Process Intensification, 2016, 104, 120-132.	1.8	109
4	Mixing characterization inside microdroplets engineered on a microcoalescer. Chemical Engineering Science, 2007, 62, 1042-1048.	1.9	95
5	A Predictive Approach of the Influence of the Operating Parameters on the Size of Polymer Particles Synthesized in a Simplified Microfluidic System. Langmuir, 2007, 23, 7745-7750.	1.6	93
6	Experiments of mass transfer with liquid-liquid slug flow in square microchannels. Chemical Engineering Science, 2014, 105, 169-178.	1.9	83
7	Co-axial capillaries microfluidic device for synthesizing size- and morphology-controlled polymer core-polymer shell particles. Lab on A Chip, 2009, 9, 3007.	3.1	74
8	Direct numerical simulations of mass transfer in square microchannels for liquid-liquid slug flow. Chemical Engineering Science, 2008, 63, 5522-5530.	1.9	69
9	Some recent advances in the design and the use of miniaturized droplet-based continuous process: Applications in chemistry and high-pressure microflows. Lab on A Chip, 2011, 11, 779-787.	3.1	68
10	Flow profile measurement in microchannel using the optical feedback interferometry sensing technique. Microfluidics and Nanofluidics, 2013, 14, 113-119.	1.0	59
11	Hydrodynamic structures of droplets engineered in rectangular micro-channels. Microfluidics and Nanofluidics, 2008, 5, 131-137.	1.0	58
12	Effect of microchannel aspect ratio on residence time distributions and the axial dispersion coefficient. Chemical Engineering and Processing: Process Intensification, 2009, 48, 554-559.	1.8	55
13	Modelling the kinetics of transesterification reaction of sunflower oil with ethanol in microreactors. Chemical Engineering Science, 2013, 87, 258-269.	1.9	55
14	On-line monitoring of the transesterification reaction between triglycerides and ethanol using near infrared spectroscopy combined with gas chromatography. Bioresource Technology, 2011, 102, 6702-6709.	4.8	47
15	Accurate Measurement of the Photon Flux Received Inside Two Continuous Flow Microphotoreactors by Actinometry. International Journal of Chemical Reactor Engineering, 2014, 12, 257-269.	0.6	45
16	Photochemical synthesis of a cage compound in a microreactor: Rigorous comparison with a batch photoreactor. Chemical Engineering and Processing: Process Intensification, 2013, 64, 38-47.	1.8	42
17	Microfluidic synthesis and assembly of reactive polymer beads to form new structured polymer materials. Chemical Engineering Journal, 2008, 135, S93-S98.	6.6	39
18	Performance Evaluation of a Novel Concept Open Plate Reactor Applied to Highly Exothermic Reactions. Chemical Engineering and Technology, 2005, 28, 1028-1034.	0.9	33

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19	Optimisation of solvent replacement procedures according to economic and environmental criteria. <i>Chemical Engineering Journal</i> , 2006, 117, 169-177.	6.6	27
20	Impact of the diffusion limitation in microphotoreactors. <i>AIChE Journal</i> , 2015, 61, 1284-1299.	1.8	27
21	On-line monitoring of the transesterification reaction carried out in microreactors using near infrared spectroscopy. <i>Fuel</i> , 2013, 104, 318-325.	3.4	26
22	Dynamic models for start-up operations of batch distillation columns with experimental validation. <i>Computers and Chemical Engineering</i> , 2004, 28, 2735-2747.	2.0	22
23	Two phase residence time distribution in a modified twin screw extruder. <i>Chemical Engineering and Processing: Process Intensification</i> , 1999, 38, 73-83.	1.8	20
24	Numerical study of the coupling between reaction and mass transfer for liquid-liquid slug flow in square microchannels. <i>AIChE Journal</i> , 2011, 57, 1719-1732.	1.8	19
25	Optical Feedback Interferometry for Velocity Measurement of Parallel Liquid-Liquid Flows in a Microchannel. <i>Sensors</i> , 2016, 16, 1233.	2.1	18
26	What are the needs for Process Intensification?. <i>Oil and Gas Science and Technology</i> , 2015, 70, 463-473.	1.4	17
27	A one dimensional model for the prediction of extraction yields in a two phases modified twin-screw extruder. <i>Chemical Engineering and Processing: Process Intensification</i> , 2002, 41, 743-751.	1.8	16
28	Online Monitoring of Vinyl Chloride Polymerization in a Microreactor Using Raman Spectroscopy. <i>Chemical Engineering and Technology</i> , 2012, 35, 705-712.	0.9	15
29	Real time monitoring of the quiescent suspension polymerization of methyl methacrylate in microreactorsâ€”Part 1. A kinetic study by Raman spectroscopy and evolution of droplet size. <i>Chemical Engineering Science</i> , 2015, 131, 340-352.	1.9	15
30	Fast Batch to Continuous Solid-Liquid Extraction from Plants in Continuous Industrial Extractor. <i>Chemical Engineering and Technology</i> , 2007, 30, 46-51.	0.9	14
31	Handling of Polymer Particles in Microchannels. <i>Chemical Engineering and Technology</i> , 2010, 33, 1779-1787.	0.9	14
32	Influence of solvent choice on the optimisation of a reactionâ€”separation operation: application to a Beckmann rearrangement reaction. <i>Separation and Purification Technology</i> , 2004, 34, 273-281.	3.9	13
33	Microreactors as a Tool for Acquiring Kinetic Data on Photochemical Reactions. <i>Chemical Engineering and Technology</i> , 2016, 39, 115-122.	0.9	13
34	General design methodology for reactive liquidâ€”liquid extraction: Application to dicarboxylic acid recovery in fermentation broth. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 113, 20-34.	1.8	13
35	Fast Batch to Continuous Transposition: Application to the Extraction of Andrographolide from Plants. <i>Chemical Engineering and Technology</i> , 2006, 29, 401-407.	0.9	12
36	Increasing and decreasing droplets velocity in microchannels. <i>Microfluidics and Nanofluidics</i> , 2006, 2, 271-274.	1.0	11

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37	Selection of Sensors by a New Methodology Coupling a Classification Technique and Entropy Criteria. <i>Chemical Engineering Research and Design</i> , 2007, 85, 825-838.	2.7	11
38	Real time monitoring of the quiescent suspension polymerization of vinyl chloride in microreactors " Part 2. A kinetic study by Raman spectroscopy and evolution of droplet size. <i>Chemical Engineering Science</i> , 2016, 145, 279-293.	1.9	11
39	Transparent and Inexpensive Microfluidic Device for Two-Phase Flow Systems with High-Pressure Performance. <i>Chemical Engineering and Technology</i> , 2014, 37, 1929-1937.	0.9	9
40	Experimental Methodology for Kinetic Acquisitions Using High Velocities in a Microfluidic Device. <i>Chemical Engineering and Technology</i> , 2019, 42, 2223-2230.	0.9	5
41	Exploration of a Two-Step Aqueous Process for the Valorization of Sodium Fluorosilicate (Na ₂ SiF ₆), an Intermediate Product of the Fluorosilicic Acid Conversion. <i>Waste and Biomass Valorization</i> , 2022, 13, 547-562.	1.8	5
42	Solid-liquid transport in a modified co-rotating twin-screw extruder" dynamic simulator and experimental validations. <i>Chemical Engineering and Processing: Process Intensification</i> , 2004, 43, 881-886.	1.8	4
43	A New Pulsation Policy in a Disk and Doughnut Pulsed Column Applied to Solid-Liquid Extraction of Andrographolide from Plants. <i>Chemical Engineering and Technology</i> , 2005, 28, 110-118.	0.9	4
44	An Innovative Pulsed Column Applied to Solid-Liquid Contacting the BPC Column. <i>Chemical Engineering and Technology</i> , 2006, 29, 729-735.	0.9	4
45	Transposition of a triphosgene-based process for pharmaceutical development: from mg·h ⁻¹ to kg·h ⁻¹ of an unsymmetrical urea. <i>Green Processing and Synthesis</i> , 2013, 2, .	1.3	4
46	Stoichio-kinetic model discrimination and parameter identification in continuous microreactors. <i>Chemical Engineering Research and Design</i> , 2016, 114, 39-51.	2.7	4
47	Intensification of Ester Production in a Continuous Reactor. <i>International Journal of Chemical Reactor Engineering</i> , 2009, 7, .	0.6	3
48	Real time monitoring of the quiescent suspension copolymerization of vinyl chloride with methyl methacrylate in microreactors " Part 3. A kinetic study by raman spectroscopy and evolution of droplet size. <i>Chemical Engineering Science</i> , 2017, 173, 493-506.	1.9	3
49	Effects of Process Parameters on an Inverse Concentrated Miniemulsion Flowing in a Microchannel. <i>Chemical Engineering and Technology</i> , 2018, 41, 1965-1974.	0.9	3
50	Optimisation of a Methyl Acetate Production Process by Reactive Batch Distillation. <i>Computer Aided Chemical Engineering</i> , 2002, , 475-480.	0.3	2
51	Fast Built and Designed Microdevices for Early-Stage Liquid-Liquid System Studies. <i>Chemical Engineering and Technology</i> , 2009, 32, 1823-1830.	0.9	2
52	Mise en Œuvre de micro-réacteurs à échelle de micro-gouttes: caractérisation du mélange. <i>Houille Blanche</i> , 2006, 92, 50-55.	0.3	2
53	Carbonation of Calcium Silicate Hydrates as Secondary Raw Material from the Recovery of Hexafluorosilicic Acid. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6023-6032.	3.2	2
54	Optimisation of global pharmaceutical syntheses integrating environmental aspects. <i>Computer Aided Chemical Engineering</i> , 2001, 9, 1127-1132.	0.3	1

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55	Measurement-based run-to-run optimization of a batch reaction-distillation system. Computer Aided Chemical Engineering, 2005, 20, 1417-1422.	0.3	1
56	Pre-Design of a Continuous Intensified Reactor Based on Pure Thermo-Chemical Optimisation. Chemical Product and Process Modeling, 2008, 3, .	0.5	1
57	Gas-liquid flow characterization and mass transfer study in a microreactor for oligomerization catalyst testing. Chemical Engineering and Processing: Process Intensification, 2021, 166, 108476.	1.8	1
58	A global approach for the optimisation of batch reaction-separation processes. Computer Aided Chemical Engineering, 2003, 14, 641-646.	0.3	0
59	Use of Pulsation to Control Polydispersed Particle Flow in a New Type of Pulsed Column. Chemical Engineering and Technology, 2007, 30, 1571-1575.	0.9	0
60	Development of continuous processes for vegetable oil alcoholysis in microfluidic devices. Oleagineux Corps Gras Lipides, 2013, 20, 23-32.	0.2	0
61	Recovery of succinic acid in fermentation broth via reactive LL extraction: effect of chemical kinetics and solvent choice. Computer Aided Chemical Engineering, 2017, , 1099-1104.	0.3	0