List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/742315/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Optimal design of batch and simulated moving bed chromatographic separation processes. Journal of Chromatography A, 2002, 944, 93-117.	3.7	87
2	Defined Microbial Mixed Culture for Utilization of Polyurethane Monomers. ACS Sustainable Chemistry and Engineering, 2020, 8, 17466-17474.	6.7	60
3	Integration of Genetic and Process Engineering for Optimized Rhamnolipid Production Using Pseudomonas putida. Frontiers in Bioengineering and Biotechnology, 2020, 8, 976.	4.1	56
4	From beech wood to itaconic acid: case study on biorefinery process integration. Biotechnology for Biofuels, 2018, 11, 279.	6.2	52
5	In situ reactive extraction of itaconic acid during fermentation of Aspergillus terreus. Biochemical Engineering Journal, 2018, 135, 133-141.	3.6	41
6	Recovery of succinic acid by integrated multi-phase electrochemical pH-shift extraction and crystallization. Separation and Purification Technology, 2020, 240, 116489.	7.9	40
7	Effect of the homogeneity of the column set on the performance of a simulated moving bed unit. Journal of Chromatography A, 2002, 944, 3-22.	3.7	38
8	Tomato's Green Gold: Bioeconomy Potential of Residual Tomato Leaf Biomass as a Novel Source for the Secondary Metabolite Rutin. ACS Omega, 2019, 4, 19071-19080.	3.5	38
9	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. Environmental Sciences Europe, 2021, 33, 99.	5.5	33
10	Integrated in-situ product removal process concept for itaconic acid by reactive extraction, pH-shift back extraction and purification by pH-shift crystallization. Separation and Purification Technology, 2019, 215, 463-472.	7.9	30
11	Model-based control of batch chromatography. AICHE Journal, 2001, 47, 2493-2502.	3.6	29
12	Liquid/liquid extraction of biomass-derived lignin from lignocellulosic pretreatments. Green Chemistry, 2017, 19, 93-97.	9.0	29
13	Selection of a recyclable <i>in situ</i> liquid–liquid extraction solvent for foam-free synthesis of rhamnolipids in a two-phase fermentation. Green Chemistry, 2020, 22, 8495-8510.	9.0	25
14	Liquid-liquid equilibrium of 2-methyltetrahydrofuran/water over wide temperature range: Measurements and rigorous regression. Fluid Phase Equilibria, 2017, 433, 212-225.	2.5	24
15	Four Atom Efficient Enzyme Cascades for All 4-Methoxyphenyl-1,2-propanediol Isomers Including Product Crystallization Targeting High Product Concentrations and Excellent E-Factors. ACS Sustainable Chemistry and Engineering, 2018, 6, 11819-11826.	6.7	22
16	Recent Advances in Experimental Techniques forÂFlow and Mass Transfer Analyses in Thermal Separation Systems. Chemie-Ingenieur-Technik, 2020, 92, 926-948.	0.8	22
17	Methylformate from CO2: an integrated process combining catalytic hydrogenation and reactive distillation. Green Chemistry, 2019, 21, 6307-6317.	9.0	20
18	Fluid Dynamics of Microgel-Covered Drops Reveal Impact on Interfacial Conditions. Polymers, 2018, 10, 809.	4.5	17

#	Article	IF	CITATIONS
19	Computer tomographic detection of the liquid–liquid mixing and separation within the Annular Centrifugal Contactor/Extractor. Chemical Engineering Research and Design, 2019, 142, 143-153.	5.6	17
20	Process development for separation of lignin from OrganoCat lignocellulose fractionation using antisolvent precipitation. Separation and Purification Technology, 2020, 236, 116295.	7.9	17
21	Electrochemical pH-T-Swing Separation of Itaconic Acid for Zero Salt Waste Downstream Processing. ACS Sustainable Chemistry and Engineering, 2021, 9, 9336-9347.	6.7	16
22	Carbon2Polymer – Conceptual Design of a CO <sub>2</sub> â€Based Process for the Production of Isocyanates. Chemie-Ingenieur-Technik, 2018, 90, 1497-1503.	0.8	14
23	Development, evaluation, and optimisation of downstream process concepts for rhamnolipids and 3-(3-hydroxyalkanoyloxy)alkanoic acids. Separation and Purification Technology, 2020, 250, 117031.	7.9	14
24	Electrochemical Crystallization Concept for Succinic Acid Reduces Waste Salt Production. Chemie-Ingenieur-Technik, 2020, 92, 221-228.	0.8	14
25	Performance Map for the Design of Liquid‣iquid Extraction Columns. Chemie-Ingenieur-Technik, 2019, 91, 1674-1680.	0.8	13
26	Reactive extraction for the recovery of primary amines from aqueous streams. Separation and Purification Technology, 2021, 277, 118229.	7.9	13
27	Modelâ€based equipment design for the biphasic production of 5â€hydroxymethylfurfural in a tubular reactor. AICHE Journal, 2020, 66, e16849.	3.6	12
28	Extractive <i>in situ</i> product removal for the application of naturally produced <scp>l</scp> -alanine as an amine donor in enzymatic metaraminol production. Green Chemistry, 2021, 23, 4892-4901.	9.0	12
29	Compartment Model for Liquid-Liquid Extraction Columns. Solvent Extraction and Ion Exchange, 2020, 38, 66-87.	2.0	11
30	Two-Dimensional CFD based compartment modeling for dynamic simulation of semi-batch crystallization processes in stirred tank reactors. Computers and Chemical Engineering, 2020, 140, 106933.	3.8	11
31	Liquid–liquid centrifugal separation — New equipment for optical (photographic) evaluation at laboratory scale. Chemical Engineering Research and Design, 2017, 127, 170-179.	5.6	10
32	Prediction and Characterization of Flooding in Pulsed Sieve Plate Extraction Columns Using Data-Driven Models. Industrial & Engineering Chemistry Research, 2020, 59, 19726-19735.	3.7	10
33	Metabolic and process engineering for microbial production of protocatechuate with <i>Corynebacterium glutamicum</i> . Biotechnology and Bioengineering, 2021, 118, 4414-4427.	3.3	10
34	Towards a holistic solvent screening: On the importance of fluid dynamics in a rate-based extraction model. Chemical Engineering Science, 2020, 227, 115905.	3.8	9
35	<i>In situ</i> reactive extraction with oleic acid for process intensification in amine transaminase catalyzed reactions. Green Chemistry, 2022, 24, 295-304.	9.0	9
36	Enzymatic Cascade in a Simultaneous, One-Pot Approach with <i>In Situ</i> Product Separation for the Asymmetric Production of (4 <i>S</i> ,5 <i>S</i> )-Octanediol. Organic Process Research and Development, 2022, 26, 2038-2045.	2.7	9

#	Article	IF	CITATIONS
37	Automated measurement of pH-dependent solid-liquid equilibria of itaconic acid and protocatechuic acid. Fluid Phase Equilibria, 2021, 532, 112893.	2.5	8
38	Droplet Size Distributions of Liquid‣iquid Dispersions in Centrifugal Pumps. Chemie-Ingenieur-Technik, 2021, 93, 129-142.	0.8	8
39	Determination of the Metastable Zone Width and Nucleation Parameters of Succinic Acid for Electrochemically Induced Crystallization. Crystals, 2021, 11, 1090.	2.2	8
40	Electrochemical membrane-assisted pH-swing extraction and back-extraction of lactic acid. Separation and Purification Technology, 2022, 289, 120702.	7.9	8
41	Toward the Sustainable Production of the Active Pharmaceutical Ingredient Metaraminol. ACS Sustainable Chemistry and Engineering, 2022, 10, 5117-5128.	6.7	8
42	Compartmentâ€model for the simulation of the separation performance of stirred liquid–liquidâ€extraction columns. AICHE Journal, 2020, 66, e16286.	3.6	6
43	Selective lignin fractionation using CO <sub>2</sub> -expanded 2-methyltetrahydrofuran (2-MTHF). Green Chemistry, 2021, 23, 6330-6336.	9.0	6
44	Molecular Weight Distribution in Di Metal Cyanide Catalyzed Polymerization 2: Numerical Simulation of Chain Activation/Deactivation and Diffusion Effects. Macromolecular Theory and Simulations, 2021, 30, 2100013.	1.4	6
45	CFD based compartment-model for a multiphase loop-reactor. Chemical Engineering Science: X, 2019, 2, 100010.	1.5	5
46	Ternary System CO <sub>2</sub> /2-MTHF/Water—Experimental Study and Thermodynamic Modeling. Journal of Chemical & Engineering Data, 2020, 65, 993-1004.	1.9	5
47	Microgels for the Intensification of Liquidâ€Liquid Extraction Processes – Feasibility and Advantages. Chemical Engineering and Technology, 2020, 43, 137-142.	1.5	5
48	Lignin Precipitation and Fractionation from OrganoCat Pulping to Obtain Lignin with Different Sizes and Chemical Composition. Molecules, 2020, 25, 3330.	3.8	5
49	Molcular Weight Distribution in Di Metal Cyanide Catalyzed Polymerization 1: Fundamental Distribution for Length Dependent Propagation Constant and Segments. Macromolecular Theory and Simulations, 2021, 30, 2100012.	1.4	5
50	Model-Based Simultaneous Solvent Screening and Column Design Based on a Holistic Consideration of Extraction and Solvent Recovery. Industrial & Engineering Chemistry Research, 2022, 61, 3374-3382.	3.7	5
51	Development of a CFD model for the simulation of a novel multiphase counter-current loop reactor. Chemical Engineering Science, 2017, 161, 350-359.	3.8	4
52	Aerated extraction columns for <i>in situ</i> separation of bioâ€based diamines from cell suspensions. Journal of Chemical Technology and Biotechnology, 2019, 94, 426-434.	3.2	4
53	Prediction of Flooding in Packed Liquidâ€Liquid andÂHighâ€Pressure Extraction Columns Using aÂGaussian Process. Chemie-Ingenieur-Technik, 2021, 93, 1907-1916.	0.8	4
54	Optimaler Betrieb von SMB-Chromatographieprozessen. Chemie-Ingenieur-Technik, 2000, 72, 589-593.	0.8	3

#	Article	IF	CITATIONS
55	Experimentell verifizierte Prozess modelle als Grundlage zur Synthese chromatographischer Prozesse. Chemie-Ingenieur-Technik, 2000, 72, 593-598.	0.8	3
56	Modeling the fluid dynamics of a high-pressure extraction column. Journal of Supercritical Fluids, 2019, 154, 104636.	3.2	3
57	Automation of a Procedure for the Experimental Investigation of Liquidâ€Liquid Phase Separation. Chemie-Ingenieur-Technik, 2019, 91, 1787-1793.	0.8	3
58	Design of Extractive Reaction Systems. Chemie-Ingenieur-Technik, 2019, 91, 1766-1776.	0.8	3
59	Model-based selection of the degree of cross-linking of cation exchanger resins for an optimised separation of monosaccharides. Journal of Chromatography A, 2020, 1610, 460565.	3.7	3
60	Yeast-based production and in situ purification of acetaldehyde. Bioprocess and Biosystems Engineering, 2022, 45, 761-769.	3.4	3
61	Extracorporeal Hyperoxygenation Therapy (EHT) for Carbon Monoxide Poisoning: In-Vitro Proof of Principle. Membranes, 2022, 12, 56.	3.0	3
62	Investigation of the elution behavior of dissociating itaconic acid on a hydrophobic polymeric adsorbent using in-line Raman spectroscopy. Journal of Chromatography A, 2022, 1675, 463140.	3.7	3
63	Comparison of the impact of anion and cation selection onto cation exchange chromatography of model proteins. Journal of Chromatography A, 2022, 1673, 463054.	3.7	2
64	Dynamic Modeling of Electrochemical pHâ€Swing Extraction. Chemie-Ingenieur-Technik, 2020, 92, 1953-1961.	0.8	1
65	Porous organic frameworks for preferable adsorption of trans-1,2-diols over cis-1,2-diols. Applied Materials Today, 2022, 28, 101523.	4.3	1
66	Online monitoring of transient L/L phase separation using locally resolved impedance measurements. Chemical Engineering Research and Design, 2016, 115, 251-259.	5.6	0
67	Influence of Reaction Conditions on the Settling Behavior of Liquidâ€Liquid Dispersions. Chemie-Ingenieur-Technik, 2020, 92, 1501-1507.	0.8	0
68	Inline Measurement of the Residence Time Distribution in Highâ€Pressure Extraction Columns. Chemical Engineering and Technology, 2020, 43, 1659-1666.	1.5	0
69	Solvent accessibility limitation by plant matrix compounds in extraction of rutin from <i>Solanum lycopersicum</i> . Separation Science Plus, 2020, 3, 63-71.	0.6	0
70	Evaluation of ePC-SAFT for pH Calculation in Aqueous Itaconic Acid Solutions at High Ionic Strengths. Journal of Solution Chemistry, 0, , 1.	1.2	0