Erik von Harbou

List of Publications by Year
in descending order

62	672	567281 15	713466 21
papers	citations	h-index	g-index

64	64	64	608
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experiments and fully transient coupled CFD-PBM 3D flow simulations of disperse liquid-liquid flow in a baffled stirred tank. Chemical Engineering Science, 2022, 253, 117518.	3.8	14
2	Model-based signal tracking in the quantitative analysis of time series of NMR spectra. Journal of Magnetic Resonance, 2022, 339, 107212.	2.1	1
3	Experimental Investigation and Modelling of the Droplet Size in a DN300 Stirred Vessel at High Disperse Phase Content Using a Telecentric Shadowgraphic Probe. Applied Sciences (Switzerland), 2022, 12, 4069.	2.5	4
4	Model-Based Investigation of the Interaction of Gas-Consuming Reactions and Internal Circulation Flow within Jet Loop Reactors. Processes, 2022, 10, 1297.	2.8	0
5	Speciation in CO2-loaded aqueous solutions of sixteen triacetoneamine-derivates (EvAs) and elucidation of structure-property relationships. Chemical Engineering Science, 2021, 229, 115999.	3.8	2
6	A comparison of nonâ€uniform sampling and modelâ€based analysis of NMR spectra for reaction monitoring. Magnetic Resonance in Chemistry, 2021, 59, 221-236.	1.9	14
7	A one-dimensional combined multifluid-population balance model for the simulation of batch bubble columns. Chemical Engineering Research and Design, 2021, 170, 270-289.	5.6	1
8	Application of a new method for simultaneous phase and baseline correction of NMR signals (SINC). Magnetic Resonance in Chemistry, 2020, 58, 260-270.	1.9	3
9	Short-cut method for assessing solvents for gas cleaning by reactive absorption. Chemical Engineering Research and Design, 2020, 153, 757-767.	5.6	5
10	Bayesian approach for automated quantitative analysis of benchtop NMR data. Journal of Magnetic Resonance, 2020, 319, 106814.	2.1	15
11	Taking compact NMR to monitoring real reactions in largeâ€scale chemical industriesâ€”General considerations and learnings from a labâ€scale test case. Magnetic Resonance in Chemistry, 2020, 58, 1213-1221.	1.9	5
12	Spectroscopic investigations of solutions of lithium bis(fluorosulfonyl) imide (LiFSI) in valeronitrile. Polyhedron, 2020, 183, 114458.	2.2	2
13	Online process monitoring of a batch distillation by medium field NMR spectroscopy. Chemical Engineering Science, 2020, 219, 115561.	3.8	13
14	Prediction of flow effects in quantitative NMR measurements. Journal of Magnetic Resonance, 2020, 312, 106683.	2.1	8
15	Triacetoneamine-derivates (EvAs) for CO2-absorption from process gases. International Journal of Greenhouse Gas Control, 2020, 95, 102932.	4.6	3
16	Selfâ€Diffusion Coefficients in Solutions of Lithium Bis(fluorosulfonyl)imide with Dimethyl Carbonate and Ethylene Carbonate. Chemie-Ingenieur-Technik, 2019, 91, 1633-1639.	0.8	9
17	Reaction Monitoring by Benchtop NMR Spectroscopy Using a Novel Stationary Flow Reactor Setup. Industrial & Engineering Chemistry Research, 2019, 58, 18125-18133.	3.7	26
18	NMR spectroscopic method for studying homogenous liquid phase reaction kinetics in systems used in reactive gas absorption and application to monoethanolamineâ€“waterâ€“carbon dioxide. Chemical Engineering Journal, 2019, 374, 1127-1137.	12.7	4

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19	Physicochemical Properties of the System N,N-Dimethyl-dipropylene-diamino-triacetonediamine (EvA34), Water, and Carbon Dioxide for Reactive Absorption. Journal of Chemical & Engineering Data, 2019, 64, 2368-2379.	1.9	3
20	NMR Spectroscopic Study of Chemical Reactions in Mixtures Containing Oleic Acid, Formic Acid, and Formoxystearic Acid. Industrial & Engineering Chemistry Research, 2019, 58, 5622-5630.	3.7	4
21	Monoalkylcarbonate formation in the system monoethanolamineâ€“waterâ€“carbon dioxide. Fluid Phase Equilibria, 2019, 486, 98-105.	2.5	13
22	Physico-Chemical Properties of LiFSI Solutions I. LiFSI with Valeronitrile, Dichloromethane, 1,2-Dichloroethane, and 1,2-Dichlorobenzene. Journal of Chemical & Engineering Data, 2019, 64, 868-877.	1.9	4
23	Physicochemical Properties of LiFSI Solutions II: LiFSI with Water, MTBE, and Anisole. Journal of Chemical & Engineering Data, 2019, 64, 878-883.	1.9	1
24	Associating lattice cluster theory and application to modeling oleic acid + formic acid + formoxystearic acid. AICHE Journal, 2019, 65, 783-791.	3.6	1
25	Multi-objective optimization for an automated and simultaneous phase and baseline correction of NMR spectral data. Journal of Magnetic Resonance, 2018, 289, 132-141.	2.1	16
26	Application of quantitative inline NMR spectroscopy for investigation of a fixed-bed chromatographic reactor process. Chemical Engineering Journal, 2018, 336, 518-530.	12.7	8
27	The Influence of Cooling Nozzle Positions on the Transient Temperature Field during Cryogenic Turning of Metastable Austenitic Steel AISI 347. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800447.	0.2	2
28	Deformation induced hardening when cryogenic turning,. CIRP Journal of Manufacturing Science and Technology, 2018, 23, 6-19.	4.5	22
29	Physico-chemical properties of solutions of lithium bis(fluorosulfonyl)imide (LiFSI) in dimethyl carbonate, ethylene carbonate, and propylene carbonate. Journal of Power Sources, 2018, 394, 148-159.	7.8	22
30	Electrical conductivity of solutions of lithium bis(fluorosulfonyl)imide in mixed organic solvents and multi-objective solvent optimization for lithium-ion batteries. Journal of Power Sources, 2018, 398, 215-223.	7.8	8
31	In situ measurement of liquid-liquid equilibria by medium field nuclear magnetic resonance. Fluid Phase Equilibria, 2017, 438, 44-52.	2.5	8
32	Technische Chemie 2016. Nachrichten Aus Der Chemie, 2017, 65, 367-374.	0.0	3
33	Molecular simulation study of the CO 2 -N 2 O analogy. Fluid Phase Equilibria, 2017, 442, 44-52.	2.5	9
34	An experimental validation of a Bayesian model for quantification in NMR spectroscopy. Journal of Magnetic Resonance, 2017, 285, 86-100.	2.1	22
35	Efficient Approach for Calculating Pareto Boundaries under Uncertainties in Chemical Process Design. Industrial & Engineering Chemistry Research, 2017, 56, 12672-12681.	3.7	25
36	Studying Fast Reaction Kinetics with Online NMR Spectroscopy. Chemie-Ingenieur-Technik, 2017, 89, 369-378.	0.8	13

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37	Simulation and Multiâ€criteria Optimization under Uncertain Model Parameters of a Cumene Process. Chemie-Ingenieur-Technik, 2017, 89, 665-674.	0.8	16
38	Optimal Design of Laboratory and Pilotâ€Plant Experiments Using Multiobjective Optimization. Chemie-Ingenieur-Technik, 2017, 89, 645-654.	0.8	11
39	Reactive Distillation in a Dividingâ€Wall Column: Model Development, Simulation, and Error Analysis. Chemie-Ingenieur-Technik, 2017, 89, 1315-1324.	0.8	7
40	Monoalkylcarbonate Formation in Methyldiethanolamineâ€“H₂Oâ€“CO₂. Industrial & Engineering Chemistry Research, 2017, 56, 9006-9015.	3.7	19
41	Application of a new micro-reactor 1 H NMR probe head for quantitative analysis of fast esterification reactions. Chemical Engineering Journal, 2016, 306, 413-421.	12.7	21
42	Thermodynamic Study of a Complex System for Carbon Capture: Butyltriacetonediamine + Water + Carbon Dioxide. Journal of Chemical & Engineering Data, 2016, 61, 3814-3826.	1.9	7
43	NMR-spektroskopische Bestimmung der Konzentration von molekularem CO2in wÃssrigen AminlÃ¶sungen und Auswirkungen auf die Modellierung von Reaktivabsorptionsprozessen. Chemie-Ingenieur-Technik, 2016, 88, 1282-1283.	0.8	0
44	Liquid-liquid equilibrium in binary and ternary mixtures containing formaldehyde, water, methanol, methylal, and poly(oxymethylene) dimethyl ethers. Fluid Phase Equilibria, 2016, 425, 127-135.	2.5	31
45	Modeling, simulation and analysis of a process for the production of crotonaldehyde. Chemical Engineering and Processing: Process Intensification, 2016, 101, 101-111.	3.6	6
46	INES â€“ An Interface Between Experiments and Simulation to Support the Development of Robust Process Designs. Chemie-Ingenieur-Technik, 2015, 87, 1810-1825.	0.8	26
47	¹Hâ€and ¹³Câ€NMR spectroscopic study of chemical equilibria in the system acetaldehyde + water. AICHE Journal, 2015, 61, 177-187.	3.6	20
48	Decision Support by Multicriteria Optimization in Process Development: An Integrated Approach for Robust Planning and Design of Plant Experiments. Computer Aided Chemical Engineering, 2015, 37, 2063-2068.	0.5	6
49	Quantitative mapping of chemical compositions with MRI using compressed sensing. Journal of Magnetic Resonance, 2015, 261, 27-37.	2.1	8
50	INES â€“ Interface between Experiments and Simulation. Computer Aided Chemical Engineering, 2014, , 1159-1164.	0.5	4
51	Fully Automated Weighing of Liquid Substances with a Laboratory Robot. Chemical Engineering and Technology, 2014, 37, 168-172.	1.5	6
52	Thermostatted micro-reactor NMR probe head for monitoring fast reactions. Journal of Magnetic Resonance, 2014, 242, 155-161.	2.1	31
53	Online ¹H NMR Spectroscopic Study of the Reaction Kinetics in Mixtures of Acetaldehyde and Water Using a New Microreactor Probe Head. Industrial & Engineering Chemistry Research, 2014, 53, 17589-17596.	3.7	21
54	Predicting supersaturation by rate-based simulations of reactive absorption. Chemical Engineering Science, 2014, 118, 41-49.	3.8	9

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55	NMR Spectroscopic Study of the Aldoxane Formation in Aqueous Acetaldehyde Solutions. Industrial & Engineering Chemistry Research, 2014, 53, 8395-8403.	3.7	8
56	Morphological analysis for the development of reliable models for heterogeneously catalysed reactive distillation. Chemical Engineering Science, 2013, 91, 134-145.	3.8	8
57	A novel type of equipment for reactive distillation: Model development, simulation, sensitivity and error analysis. AICHE Journal, 2013, 59, 1533-1543.	3.6	12
58	Reaction Kinetics for Reactive Distillation Using Different Laboratory Reactors. Industrial & Engineering Chemistry Research, 2013, 52, 624-637.	3.7	12
59	CFD modeling of singleâ€phase flow in a packed bed with MRI validation. AICHE Journal, 2012, 58, 3904-3915.	3.6	43
60	Vollautomatisierte Einwaage flÃ¼ssiger Substanzen mittels Laborroboter. Chemie-Ingenieur-Technik, 2012, 84, 530-534.	0.8	1
61	Study of heterogeneously catalysed reactive distillation using the D+R trayâ€”A novel type of laboratory equipment. Chemical Engineering Research and Design, 2011, 89, 1271-1280.	5.6	16
62	New Equipment for Laboratory Studies of Heterogeneously Catalyzed Reactive Distillation. Chemical Engineering and Technology, 2009, 32, 1313-1317.	1.5	9