Kai-Olaf Hinrichsen

List of Publications by Year
in descending order

147 papers	6,042 citations	76326 40 h-index	79698 73 g-index
156 all docs	156 docs citations	156 times ranked	5213 citing authors

#	Article	IF	Citations
1	The Ammonia-Synthesis Catalyst of the Next Generation: Barium-Promoted Oxide-Supported Ruthenium. Angewandte Chemie - International Edition, 2001, 40, 1061-1063.	13.8	271
2	Ruthenium catalysts for ammonia synthesis at high pressures: Preparation, characterization, and power-law kinetics. Applied Catalysis A: General, 1997, 151, 443-460.	4.3	263
3	Title is missing!. Catalysis Letters, 2001, 71, 37-44.	2.6	246
4	On the Role of Oxygen Defects in the Catalytic Performance of Zinc Oxide. Angewandte Chemie - International Edition, 2006, 45, 2965-2969.	13.8	235
5	On the kinetics of the methanation of carbon dioxide on coprecipitated NiAl(O). Applied Catalysis B: Environmental, 2016, 181, 504-516.	20.2	218
6	Kinetics of deactivation on Cu/ZnO/Al2O3 methanol synthesis catalysts. Applied Catalysis A: General, 2015, 502, 262-270.	4.3	202
7	Active Sites on Oxide Surfaces: ZnO-Catalyzed Synthesis of Methanol from CO and H2. Angewandte Chemie - International Edition, 2005, 44, 2790-2794.	13.8	192
8	Deactivation of Supported Copper Catalysts for Methanol Synthesis. Catalysis Letters, 2003, 86, 77-80.	2.6	180
9	Upscaling and continuous operation of electrochemical CO2 to CO conversion in aqueous solutions on silver gas diffusion electrodes. Journal of CO2 Utilization, 2018, 24, 454-462.	6.8	153
10	A fixed-bed reactor modeling study on the methanation of CO2. Chemical Engineering Research and Design, 2014, 92, 702-712.	5.6	151
11	The Kinetics of Ammonia Synthesis over Ru-Based Catalysts. Journal of Catalysis, 1997, 165, 33-44.	6.2	150
12	The influence of strongly reducing conditions on strong metalâ€“support interactions in Cu/ZnO catalysts used for methanol synthesis. Physical Chemistry Chemical Physics, 2006, 8, 1525.	2.8	130
13	Numerical simulation of species transfer across fluid interfaces in free-surface flows using OpenFOAM. Chemical Engineering Science, 2012, 78, 111-127.	3.8	123
14	New Synthetic Routes to More Active Cu/ZnO Catalysts Used for Methanol Synthesis. Catalysis Letters, 2004, 92, 49-52.	2.6	120
15	Counting of Oxygen Defects versus Metal Surface Sites in Methanol Synthesis Catalysts by Different Probe Molecules. Angewandte Chemie - International Edition, 2014, 53, 7043-7047.	13.8	119
16	Temperature-programmed reduction and oxidation experiments with V2O5/TiO2 catalysts. Physical Chemistry Chemical Physics, 2001, 3, 4633-4638.	2.8	115
17	The Kinetics of Ammonia Synthesis over Ruthenium-Based Catalysts: The Role of Barium and Cesium. Journal of Catalysis, 2002, 205, 205-212.	6.2	113
18	The microkinetics of ammonia synthesis catalyzed by cesium-promoted supported ruthenium. Chemical Engineering Science, 1996, 51, 1683-1690.	3.8	102

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19	Methanol synthesis over ZnO: A structure-sensitive reaction?. Physical Chemistry Chemical Physics, 2003, 5, 4736-4742.	2.8	101
20	On the Nature of the Active State of Supported Ruthenium Catalysts Used for the Oxidation of Carbon Monoxide:Â Steady-State and Transient Kinetics Combined with in Situ Infrared Spectroscopyâ€. Journal of Physical Chemistry B, 2004, 108, 14634-14642.	2.6	97
21	On the deactivation of Ni-Al catalysts in CO2 methanation. Applied Catalysis A: General, 2019, 570, 376-386.	4.3	86
22	Continuous Coprecipitation of Catalysts in a Micromixer: Nanostructured Cu/ZnO Composite for the Synthesis of Methanol. Angewandte Chemie - International Edition, 2003, 42, 3815-3817.	13.8	84
23	CO2 methanation over Fe- and Mn-promoted co-precipitated Ni-Al catalysts: Synthesis, characterization and catalysis study. Applied Catalysis A: General, 2018, 558, 44-54.	4.3	80
24	Effect of Potassium on the Kinetics of Ammonia Synthesis and Decomposition over Fused Iron Catalyst at Atmospheric Pressure. Journal of Catalysis, 1997, 169, 407-414.	6.2	74
25	The temperature-programmed desorption of hydrogen from copper surfaces. Catalysis Letters, 1999, 59, 137-141.	2.6	73
26	The interaction of hydrogen with alumina-supported copper catalysts: aÂtemperature-programmed adsorption/temperature-programmed desorption/isotopic exchange reaction study. Journal of Catalysis, 2003, 215, 188-198.	6.2	70
27	Dynamical Changes in Cu/ZnO/Al2O3 Catalysts. Catalysis Letters, 2002, 82, 117-122.	2.6	68
28	Study on CFDâ€“PBM turbulence closures based on kâ€“Îµ and Reynolds stress models for heterogeneous bubble column flows. Computers and Fluids, 2014, 105, 91-100.	2.5	61
29	Ruthenium as catalyst for ammonia synthesis. Studies in Surface Science and Catalysis, 1996, 101, 317-326.	1.5	60
30	MOCVD-Loading of Mesoporous Siliceous Matrices with Cu/ZnO: Supported Catalysts for Methanol Synthesis. Angewandte Chemie - International Edition, 2004, 43, 2839-2842.	13.8	60
31	Kinetic simulation of ammonia synthesis catalyzed by ruthenium. Catalysis Today, 1999, 53, 177-188.	4.4	58
32	Advantages of CO over CO2 as reactant for electrochemical reduction to ethylene, ethanol and n-propanol on gas diffusion electrodes at high current densities. Electrochimica Acta, 2019, 307, 164-175.	5.2	58
33	Micromixing Efficiency of a Spinning Disk Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 11643-11652.	3.7	57
34	Detailed kinetic modeling of methanol synthesis over a ternary copper catalyst. Chemical Engineering Journal, 2012, 203, 480-491.	12.7	53
35	The temperature-programmed desorption of N2 from a Ru/MgO catalyst used for ammonia synthesis. Catalysis Letters, 1996, 36, 229-235.	2.6	50
36	Numerical simulation of viscoelastic two-phase flows using openFOAMÂ®. Chemical Engineering Science, 2011, 66, 5487-5496.	3.8	50

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37	Numerical simulation of the viscoelastic flow in a three-dimensional lid-driven cavity using the log-conformation reformulation in OpenFOAMÂ®. Journal of Non-Newtonian Fluid Mechanics, 2014, 212, 47-62.	2.4	49
38	Comparison of differently synthesized Ni(Al)MCM-48 catalysts in the ethene to propene reaction. Microporous and Mesoporous Materials, 2012, 164, 164-171.	4.4	45
39	CFD Simulation of Hydrodynamics and Methanation Reactions in a Fluidized-Bed Reactor for the Production of Synthetic Natural Gas. Industrial & Engineering Chemistry Research, 2014, 53, 9348-9356.	3.7	44
40	Characterization of nickel catalysts with transient methods. Applied Catalysis A: General, 2018, 549, 93-101.	4.3	41
41	A simulation-enhanced value stream mapping approach for optimisation of complex production environments. International Journal of Production Research, 2014, 52, 6146-6160.	7.5	39
42	On the kinetics of the co-methanation of CO and CO2 on a co-precipitated Ni-Al catalyst. Applied Catalysis B: Environmental, 2021, 282, 119408.	20.2	38
43	The Interaction of Hydrogen with Ru/MgO Catalysts. Journal of Catalysis, 2002, 209, 501-514.	6.2	36
44	Mechanistic Studies on the Oxidative Dehydrogenation of Methanol over Polycrystalline Silver Using the Temporal-Analysis-of-Products Approach. Journal of Catalysis, 2002, 210, 53-66.	6.2	36
45	Continuous precipitation of Cu/ZnO/Al2O3 catalysts for methanol synthesis in microstructured reactors with alternative precipitating agents. Applied Catalysis A: General, 2013, 450, 1-12.	4.3	36
46	On the interaction of CO2 with Ni-Al catalysts. Applied Catalysis A: General, 2019, 580, 71-80.	4.3	36
47	The Temperature-Programmed Desorption of Oxygen from an Alumina-Supported Silver Catalyst. Catalysis Letters, 2002, 79, 49-54.	2.6	34
48	Kinetic Modeling of Catalytic Olefin Cracking and Methanol-to-Olefins (MTO) over Zeolites: A Review. Catalysts, 2018, 8, 626.	3.5	33
49	Gasâ€“Liquid mass transfer in a rotorâ€“stator spinning disc reactor: Experimental study and correlation. Chemical Engineering and Processing: Process Intensification, 2016, 104, 181-189.	3.6	31
50	Experimental and numerical analysis of void structure in random packed beds of spheres. Powder Technology, 2021, 380, 613-628.	4.2	31
51	CFD modeling of bubbling fluidized beds using OpenFOAMÂ®: Model validation and comparison of TVD differencing schemes. Computers and Chemical Engineering, 2014, 69, 75-88.	3.8	29
52	Single-Event Kinetic Model for 1-Pentene Cracking on ZSM-5. Industrial & Engineering Chemistry Research, 2015, 54, 11792-11803.	3.7	29
53	Rapid Kinetic Measurements in Ammonia and Methanol Syntheses. Industrial & Engineering Chemistry Research, 2001, 40, 2793-2800.	3.7	27
54	Development of a methodology for numerical simulation of non-isothermal viscoelastic fluid flows with application to axisymmetric 4:1 contraction flows. Chemical Engineering Journal, 2012, 207-208, 772-784.	12.7	27

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55	Sulfur poisoning of co-precipitated Niâ€“Al catalysts for the methanation of CO2. Journal of CO2 Utilization, 2019, 32, 80-91.	6.8	27
56	Review on the structure of random packedâ€beds. Canadian Journal of Chemical Engineering, 2021, 99, .	1.7	27
57	CO2 methanation on transition-metal-promoted Ni-Al catalysts: Sulfur poisoning and the role of CO2 adsorption capacity for catalyst activity. Journal of CO2 Utilization, 2020, 36, 276-287.	6.8	26
58	Additive Manufacturing of Al₂O₃â€Based Carriers for Heterogeneous Catalysis. Chemie-Ingenieur-Technik, 2018, 90, 703-707.	0.8	22
59	Single-event kinetic model for methanol-to-olefins (MTO) over ZSM-5: Fundamental kinetics for the olefin co-feed reactivity. Chemical Engineering Journal, 2020, 402, 126023.	12.7	22
60	Simultaneous activity and stability increase of co-precipitated Niâ€“Al CO₂ methanation catalysts by synergistic effects of Fe and Mn promoters. Catalysis Science and Technology, 2018, 8, 5920-5932.	4.1	21
61	Numerical Simulation of Dispersed Gas/Liquid Flows in Bubble Columns at High Phase Fractions using OpenFOAM^{Â®}. Part II â€“ Numerical Simulations and Results. Chemical Engineering and Technology, 2011, 34, 1321-1327.	1.5	20
62	Microkinetic analysis of temperature-programmed experiments in a microreactor flow system. Studies in Surface Science and Catalysis, 1997, 109, 389-400.	1.5	19
63	Optimal process for catalytic cracking of higher olefins on ZSM-5. Chemical Engineering Journal, 2018, 348, 84-94.	12.7	19
64	Intrinsic kinetic model for oxidative dehydrogenation of ethane over MoVTeNb mixed metal oxides: A mechanistic approach. Chemical Engineering Journal, 2020, 383, 123195.	12.7	19
65	Photo-DSC method for liquid samples used in vat photopolymerization. Analytica Chimica Acta, 2021, 1153, 338268.	5.4	19
66	Semi-implicit stress formulation for viscoelastic models: Application to three-dimensional contraction flows. Journal of Non-Newtonian Fluid Mechanics, 2013, 199, 70-79.	2.4	18
67	Single-Event Kinetic Model for Cracking and Isomerization of 1-Hexene on ZSM-5. Industrial & Engineering Chemistry Research, 2014, 53, 19460-19470.	3.7	18
68	Development and validation of a model for the temperature distribution in the extrusion calibration stage. Applied Thermal Engineering, 2016, 100, 538-552.	6.0	18
69	Single-Event Kinetic Modeling of Olefin Cracking on ZSM-5: Proof of Feed Independence. Industrial & Engineering Chemistry Research, 2017, 56, 13096-13108.	3.7	18
70	Optimization of the product spectrum for 1-pentene cracking on ZSM-5 using single-event methodology. Part 2: Recycle reactor. Chemical Engineering Journal, 2017, 309, 873-885.	12.7	18
71	Analysis on Thermal Runaway Behavior of Prismatic Lithium-Ion Batteries with Autoclave Calorimetry. Journal of the Electrochemical Society, 2021, 168, 120515.	2.9	18
72	Numerical Simulation of Dispersed Gas/Liquid Flows in Bubble Columns at High Phase Fractions using OpenFOAM^{Â®}. Part I â€“ Modeling Basics. Chemical Engineering and Technology, 2011, 34, 1311-1320.	1.5	17

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73	A hybrid Eulerian-Eulerian-Lagrangian model for gas-solid simulations. Chemical Engineering Journal, 2019, 377, 119743.	12.7	17
74	Rational Catalyst Design of Methanol Synthesis Catalysts. Chemical Engineering and Technology, 2004, 27, 1146-1150.	1.5	16
75	Metallic Honeycombs as Catalyst Supports for Methanation of Carbon Dioxide. Chemical Engineering and Technology, 2015, 38, 1845-1852.	1.5	16
76	Optimization of the product spectrum for 1-pentene cracking on ZSM-5 using single-event methodology. Part 1: Two-zone reactor. Chemical Engineering Journal, 2017, 309, 886-897.	12.7	16
77	Experimental Study on the Influence of Filling Method and Particle Material on the Packedâ€Bed Porosity. Chemie-Ingenieur-Technik, 2017, 89, 454-458.	0.8	16
78	Influence of fire intensity, fire impingement area and internal pressure on the fire resistance of composite pressure vessels for the storage of hydrogen in automobile applications. Fire Safety Journal, 2019, 104, 1-7.	3.1	16
79	Singleâ€Phase Flow Residenceâ€Time Distributions in a Rotorâ€Stator Spinning Disc Reactor. Chemical Engineering and Technology, 2016, 39, 2435-2443.	1.5	15
80	Electrochemical Reduction of CO₂ in Waterâ€Based Electrolytes KHCO₃ and K₂SO₄ Using Boron Doped Diamond Electrodes. ChemistrySelect, 2018, 3, 3591-3595.	1.5	15
81	Enhanced activity of co-precipitated NiFeAlO in CO2 methanation by segregation and oxidation of Fe. Applied Catalysis A: General, 2020, 604, 117778.	4.3	15
82	Fixed-bed microreactor for transient kinetic experiments with strongly adsorbing gases under high vacuum conditions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 651-655.	2.1	14
83	The coverage-dependent adsorption of carbon monoxide on hydrogen-reduced copper catalysts: the combined application of microcalorimetry, temperature-programmed desorption and FTIR spectroscopy. Thermochimica Acta, 2005, 434, 132-139.	2.7	14
84	A Monte-Carlo-based sensitivity analysis of multicomponent diffusion in porous catalysts. Chemical Engineering Science, 2018, 185, 282-291.	3.8	14
85	Extended Model for Filtration in Gasoline Particulate Filters under Practical Driving Conditions. Environmental Science & Technology, 2020, 54, 9285-9294.	10.0	14
86	Characterisation and design of single pellet string reactors using numerical simulation. Chemical Engineering Journal, 2019, 373, 1397-1408.	12.7	13
87	Epoxidation of methyl oleate in a rotor-stator spinning disc reactor. Chemical Engineering and Processing: Process Intensification, 2019, 136, 152-162.	3.6	13
88	Evaluation of Effectiveness Factors for Multicomponent Diffusion Models Inside 3D Catalyst Shapes. Industrial & Engineering Chemistry Research, 2019, 58, 110-119.	3.7	13
89	Experimental characterization of random packed spheres, cylinders and rings, and their influence on pressure drop. Chemical Engineering Science, 2020, 222, 115644.	3.8	12
90	Continuousâ€Flow Synthesis and Functionalization of Magnetite: Intensified Process for Tailored Nanoparticles. Chemical Engineering and Technology, 2016, 39, 2051-2058.	1.5	11

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91	On Reaction Pathways and Intermediates During Catalytic Olefin Cracking over ZSM-5. Industrial & Engineering Chemistry Research, 2019, 58, 18107-18124.	3.7	11
92	Numerical Simulation of Tube Erosion in a Bubbling Fluidized Bed with a Dense Tube Bundle. Chemical Engineering and Technology, 2013, 36, 635-644.	1.5	10
93	Process Intensification on Synthesis of Nanoparticles in a Spinning Disc Reactor. Chemie-Ingenieur-Technik, 2013, 85, 540-549.	0.8	10
94	CFD simulation of single-phase heat transfer in a rotor-stator spinning disc reactor. Chemical Engineering and Processing: Process Intensification, 2018, 131, 150-160.	3.6	10
95	Targeted Feâ€Doping of Niâ^'Al Catalysts via the Surface Redox Reaction Technique for Unravelling its Promoter Effect in the CO‹sub›2‹/sub› Methanation Reaction. ChemCatChem, 2020, 12, 649-662.	3.7	10
96	Weiterentwicklung und Charakterisierung eines Spinningâ€Discâ€Reaktors nach dem Rotorâ€Statorâ€Prinzip. Chemie-Ingenieur-Technik, 2015, 87, 830-836.	0.8	9
97	2D flow fields in fixed-bed reactor design: a robust methodology for continuum models. Chemical Engineering Science, 2019, 208, 115137.	3.8	9
98	Modeling and simulation of conditionally volume averaged viscoelastic twoâ€phase flows. AICHE Journal, 2013, 59, 3914-3927.	3.6	8
99	On the Temperature Programmed Desorption of Hydrogen from Polycrystalline Copper. Catalysis Letters, 2014, 144, 2114-2120.	2.6	8
100	Comparison of a Pseudocontinuous, Heterogeneous 2D Conductive Monolith Reactor Model to a 3D Computational Fluid Dynamics Model. Industrial & Engineering Chemistry Research, 2014, 53, 11550-11556.	3.7	8
101	Entwicklung eines optisch zugÃnglichen Reaktors zur Thermographiemessung in einer KatalysatorschÃ¼ttung. Chemie-Ingenieur-Technik, 2016, 88, 1693-1702.	0.8	8
102	Contactless temperature measurements under static and dynamic reaction conditions in a single-pass fixed bed reactor for CO2 methanation. Journal of CO2 Utilization, 2018, 25, 158-169.	6.8	8
103	Social aspects of water consumption: risk of access to unimproved drinking water and to unimproved sanitation facilitiesâ€"an example from the automobile industry. International Journal of Life Cycle Assessment, 2018, 23, 940-956.	4.7	8
104	Cavity vat photopolymerisation for additive manufacturing of polymer-composite 3D objects. Communications Materials, 2021, 2, .	6.9	8
105	Mikrokinetische Modellierung der temperaturprogrammierten Stickstoffdesorption vom technischen Eisenkatalysator fÃ¼r die Ammoniak-Synthese. Chemie-Ingenieur-Technik, 1994, 66, 1375-1378.	0.8	7
106	Microkinetic modeling of CO TPD spectra using coverage dependent microcalorimetric heats of adsorption. Physical Chemistry Chemical Physics, 2006, 8, 1556-65.	2.8	7
107	CFD Analysis of the Frame Invariance of the Melt Temperature Rise in a Single-screw Extruder. International Polymer Processing, 2013, 28, 463-469.	0.5	7
108	Rotorâ€Stator Spinning Disc Reactor: Characterization of the Singleâ€Phase Statorâ€Side Heat Transfer. Chemical Engineering and Technology, 2017, 40, 2123-2133.	1.5	7

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109	Optimization of the synthesis of Ni catalysts via chemical vapor deposition by response surface methodology. Chemical Engineering Research and Design, 2018, 132, 303-312.	5.6	7
110	K⁺ Transport in Perfluorosulfonic Acid Membranes and Its Influence on Membrane Resistance in CO₂ Electrolysis. ChemElectroChem, 2022, 9, .	3.4	7
111	Modeling the Catalytic Performance of Coated Gasoline Particulate Filters under Various Operating Conditions. Industrial & Engineering Chemistry Research, 2021, 60, 16993-17005.	3.7	7
112	Photoâ€differential scanning calorimetry parameter study of photopolymers used in digital light synthesis. SPE Polymers, 2022, 3, 41-53.	3.3	7
113	Modeling of Temperature-Programmed Desorption (TPD) Flow Experiments from Cu/ZnO/Al2O3 Catalysts. Catalysis Letters, 2012, 142, 547-556.	2.6	6
114	Numerical Investigation of Pressure Drop inÂSingle Pellet String Reactors. Chemical Engineering and Technology, 2020, 43, 172-178.	1.5	6
115	Investigation of the temperature influence on the dual curing urethane-methacrylate resin Rigid Polyurethane 70 (RPU 70) in digital light synthesis (DLS). Additive Manufacturing, 2021, 37, 101677.	3.0	6
116	Development of a manufacturing process for Binder Jet 3D printed porous Al2O3 supports used in heterogeneous catalysis. Additive Manufacturing, 2022, 50, 102498.	3.0	6
117	The Ammonia-Synthesis Catalyst of the Next Generation: Barium-Promoted Oxide-Supported Ruthenium. Angewandte Chemie - International Edition, 2001, 40, 1061-1063.	13.8	6
118	Die Chemisorption von N2O und H2zur OberflÃchenbestimmungvon Kupfer-Katalysatoren. Chemie-Ingenieur-Technik, 2000, 72, 94-98.	0.8	5
119	On the interaction of carbon monoxide with ternary Cu/ZnO/Al2O3 catalysts: modeling of dynamic morphological changes and the influence on elementary step kinetics. Catalysis Science and Technology, 2012, 2, 2249.	4.1	5
120	Numerical Simulation of Multi-Scale Two-Phase Flows Using a Hybrid Interface-Resolving Two-Fluid Model (HIRES-TFM). Journal of Chemical Engineering of Japan, 2013, 46, 517-523.	0.6	5
121	Influence of Cylinder-to-Particle Diameter Ratio and Filling Speed on Bed Porosity of Random Packed Beds of Spheres. Computer Aided Chemical Engineering, 2018, 43, 97-102.	0.5	5
122	CFD-DEM study of geometry changes in an AnFMBR towards particle momentum. Chemical Engineering Journal, 2020, 379, 122336.	12.7	5
123	Morphological tuning of membrane processing by temporal proton-metal cation substitution in perfluorosulfonic acid membranes. Electrochimica Acta, 2020, 362, 137182.	5.2	5
124	A model-based analysis of washcoat distribution on zoned coated gasoline particulate filters. Chemical Engineering Journal, 2022, 441, 135615.	12.7	5
125	3D printed co-precipitated Ni-Al CO2 methanation catalysts by Binder Jetting: Fabrication, characterization and test in a single pellet string reactor. Applied Catalysis A: General, 2022, 643, 118760.	4.3	5
126	Kinetic Study of Heterogeneously Catalyzed Glucose Oxidation in a Stirred Cell. Chemie-Ingenieur-Technik, 2014, 86, 1948-1953.	0.8	4

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127	Implementation and evaluation of a three-level grid method for CFD-DEM simulations of dense gasâ€“solid flows. Chemical Engineering Journal Advances, 2020, 4, 100048.	5.2	4
128	Numerical shape development study in view of random packed beds â€“ The Yo-Yo shape. Chemical Engineering Journal, 2021, 404, 126468.	12.7	4
129	Influence of material properties on voidage of numerically generated random packed beds. Chemical Engineering Science, 2021, 233, 116406.	3.8	4
130	The Ammonia-Synthesis Catalyst of the Next Generation: Barium-Promoted Oxide-Supported Ruthenium. Angewandte Chemie - International Edition, 2001, 40, 1061-1063.	13.8	4
131	Numerical Simulation of Dispersed Gas/Liquid Flows in Bubble Columns at High Phase Fractions using OpenFOAM^{Â®} Part 1â€‰â€“â€‰Modeling Fundamentals. Chemie-Ingenieur-Technik, 2010, 82, 2129-2140.	0.8	3
132	The Influence of Interfacial Areas for Gas Absorption in the Presence of Solid Particles. Chemical Engineering and Technology, 2014, 37, 1468-1474.	1.5	3
133	Hydrodynamics of lime-based pellets in a Dual Fluidized Bed and the effect of temperature. Chemical Engineering Journal, 2015, 260, 532-540.	12.7	3
134	Scripting as an Approach to Automated CFD Simulation for Packed Bed Catalytic Reactor Modeling. Chemie-Ingenieur-Technik, 2018, 90, 685-689.	0.8	3
135	Experimental Validation of a Multidimensional Model for an Indirect Temperature Swing Adsorption Unit. Chemie-Ingenieur-Technik, 2020, 92, 711-719.	0.8	3
136	Stability evaluation of earthâ€abundant metalâ€based polyoxometalate electrocatalysts for oxygen evolution reaction towards industrial PEM electrolysis at high current densities. Electrochemical Science Advances, 2022, 2, e202100073.	2.8	3
137	Basischemikalie Methanol. Nachrichten Aus Der Chemie, 2006, 54, 1080-1084.	0.0	2
138	Numerische Simulation disperser Gas/FlÃ¼ssig-StrÃ¶mungen in BlasensÃulen bei hohen Gasgehalten mit OpenFOAMÂ®. Teil 2 - Numerische Simulation und Ergebnisse. Numerical Simulation of Dispersed Gas/Liquid Flows in Bubble Columns at High Phase Fractions using O. Chemie-Ingenieur-Technik, 2010, 82, 2141-2149.	0.8	2
139	Effects of Orifice Angle and Surface Roughness on the Bubbling-to-Jetting Regime Transition in a Bubble Column. Industrial & Engineering Chemistry Research, 2012, 51, 4445-4451.	3.7	2
140	Chemical Reaction Engineering. Chemical Engineering and Technology, 2016, 39, 1992-1992.	1.5	2
141	Numerical Simulation of Pellet Shrinkage within Random Packed Beds. Industrial & Engineering Chemistry Research, 2021, 60, 6863-6867.	3.7	2
142	Experimental Investigation on Thermal Runaway Propagation in Lithium-Ion Battery Cell Stack. , 2022, , .		2
143	Development of a new 3D OpenFOAMÂ® solver to model the cooling stage in profile extrusion. AIP Conference Proceedings, 2016, , .	0.4	1
144	The Quasi-Isothermal Temperature-Programmed Method for Rapid Kinetic Measurements. Chemie-Ingenieur-Technik, 2001, 73, 685-685.	0.8	0

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145	Interlaboratory Test for Detection of Cytotoxic Leachables arising from Single-Use Bags. Chemie-Ingenieur-Technik, 2013, 85, 396-396.	0.8	0
146	An improved conditionally volume averaged viscoelastic two-phase model for simulation of transient droplet deformations under simple shear. Chemical Engineering Science, 2015, 126, 32-41.	3.8	0
147	Modeling of Process Operation Principles for the Immobilized Enzyme Candida Antarctica under Activity Decay. Chemie-Ingenieur-Technik, 0, , .	0.8	0