T Alexander Nijhuis

List of Publications by Year
in descending order

111 papers	6,367 citations	66315 42 h-index	71651 76 g-index
112 all docs	112 docs citations	112 times ranked	5632 citing authors

#	Article	IF	Citations
1	Gold nanoparticles with tailored size through ligand modification for catalytic applications. Chemical Communications, 2021, 57, 10775-10778.	2.2	17
2	Precisely Engineered Supported Gold Clusters as a Stable Catalyst for Propylene Epoxidation. Angewandte Chemie - International Edition, 2021, 60, 18185-18193.	7.2	41
3	Precisely Engineered Supported Gold Clusters as a Stable Catalyst for Propylene Epoxidation. Angewandte Chemie, 2021, 133, 18333-18341.	1.6	7
4	Electrochemical Membrane Reactor Modeling for Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2019, 7, 2091-2099.	3.2	9
5	Unravelling Electrochemical Lignin Depolymerization. ACS Sustainable Chemistry and Engineering, 2018, 6, 7565-7573.	3.2	29
6	Effect of hydrogen and propylene on the hydrogen peroxide decomposition over Pt, PtO and Au catalysts. Applied Catalysis A: General, 2017, 538, 131-138.	2.2	8
7	Chemical Kinetics of Catalyzed Reactions. , 2017, , 191-220.		0
8	Preparation and particle size effects of Ag/Î±-Al2O3 catalysts for ethylene epoxidation. Journal of Catalysis, 2017, 356, 65-74.	3.1	63
9	Direct synthesis of propylene oxide in a packed bed membrane reactor. Chemical Engineering Journal, 2017, 307, 9-14.	6.6	12
10	Kinetic study of propene oxide and water formation in hydro-epoxidation of propene on Au/Tiâ€“SiO2 catalyst. Journal of Catalysis, 2016, 338, 284-294.	3.1	35
11	Zeolite incorporation in chip-based microreactors. Microporous and Mesoporous Materials, 2016, 226, 424-432.	2.2	2
12	Direct synthesis of propylene oxide in the liquid phase under mild conditions. Applied Catalysis A: General, 2016, 524, 200-205.	2.2	12
13	Propylene epoxidation with hydrogen peroxide in acidic conditions. Chemical Engineering Science, 2016, 156, 36-43.	1.9	14
14	Effects of hydrogen and propylene presence on decomposition of hydrogen peroxide over palladium catalysts. Journal of Catalysis, 2016, 341, 72-81.	3.1	24
15	Silylation enhances the performance of Au/Tiâ€“SiO2 catalysts in direct epoxidation of propene using H2 and O2. Journal of Catalysis, 2016, 344, 434-444.	3.1	46
16	The application of palladium and zeolite incorporated chip-based microreactors. Applied Catalysis A: General, 2016, 515, 72-82.	2.2	17
17	Selective Propylene Oxidation to Acrolein by Gold Dispersed on MgCuCr₂O₄ Spinel. ACS Catalysis, 2015, 5, 1100-1111.	5.5	40
18	Direct Synthesis of Hydrogen Peroxide over Auâ€Pd Catalystâ€”The Effect of Coâ€Solvent Addition. ChemCatChem, 2015, 7, 1161-1176.	1.8	22

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19	Direct synthesis of hydrogen peroxide using concentrated H2 and O2 mixtures in a wall-coated microchannel â€“ kinetic study. Applied Catalysis A: General, 2015, 505, 249-259.	2.2	19
20	A self-redox pure-phase M1 MoVNbTeO /CeO2 nanocomposite as a highly active catalyst for oxidative dehydrogenation of ethane. Journal of Catalysis, 2015, 329, 471-478.	3.1	40
21	Catalyst Coating on Prefabricated Capillary Microchannels for the Direct Synthesis of Hydrogen Peroxide. Industrial & Engineering Chemistry Research, 2015, 54, 2919-2929.	1.8	13
22	Performance of phase-pure M1 MoVNbTeO catalysts by hydrothermal synthesis with different post-treatments for the oxidative dehydrogenation of ethane. Applied Catalysis A: General, 2015, 498, 99-106.	2.2	49
23	Design and optimization of a catalytic membrane reactor for the direct synthesis of propylene oxide. Chemical Engineering Science, 2015, 138, 465-472.	1.9	15
24	Kinetic study of the selective oxidation of propene with O2 over Auâ€“Ti catalysts in the presence of water. Journal of Catalysis, 2015, 330, 396-405.	3.1	29
25	TS-1 coated microreactor for selective oxidations. Applied Catalysis A: General, 2015, 490, 139-145.	2.2	17
26	Direct synthesis of hydrogen peroxide in a wall-coated microchannel reactor over Auâ€“Pd catalyst: A performance study. Catalysis Today, 2015, 248, 160-168.	2.2	34
27	Continuous hydrogen stripping during aqueous phase reforming of sorbitol in a washcoated microchannel reactor with a Ptâ€“Ru bimetallic catalyst. International Journal of Hydrogen Energy, 2014, 39, 18069-18076.	3.8	34
28	Carbonâ€Coated Ceramic Membrane Reactor for the Production of Hydrogen by Aqueousâ€Phase Reforming of Sorbitol. ChemSusChem, 2014, 7, 2007-2015.	3.6	24
29	Residence time distribution and reaction rate in the horizontal rotating foam stirrer reactor. Chemical Engineering Science, 2014, 117, 8-17.	1.9	6
30	Direct Synthesis of Propene Oxide from Propene, Hydrogen and Oxygen in a Catalytic Membrane Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 16275-16284.	1.8	9
31	Direct synthesis of hydrogen peroxide over Auâ€“Pd catalyst in a wall-coated microchannel. Journal of Catalysis, 2014, 309, 325-332.	3.1	48
32	Selective Production of Methane from Aqueous Biocarbohydrate Streams over a Mixture of Platinum and Ruthenium Catalysts. ChemSusChem, 2014, 7, 627-630.	3.6	10
33	Gas holdup of rotating foam reactors measured by Î³â€tomographyâ€”effect of solid foam pore size and liquid viscosity. AICHE Journal, 2013, 59, 146-154.	1.8	17
34	Rotating reactors â€“ A review. Chemical Engineering Research and Design, 2013, 91, 1923-1940.	2.7	99
35	Gas-Phase Epoxidation of Propene with Hydrogen Peroxide Vapor. Industrial & Engineering Chemistry Research, 2013, 52, 10126-10132.	1.8	17
36	How metallic is gold in the direct epoxidation of propene: an FTIR study. Catalysis Science and Technology, 2013, 3, 3042.	2.1	28

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37	Aqueous phase reforming in a microchannel reactor: the effect of mass transfer on hydrogen selectivity. Catalysis Science and Technology, 2013, 3, 2834.	2.1	41
38	Multilevel rotating foam biphasic reactor for combination of processes in biomass transformation. Chemical Engineering Journal, 2013, 231, 12-17.	6.6	14
39	Microreactors with integrated UV/Vis spectroscopic detection for online process analysis under segmented flow. Lab on A Chip, 2013, 13, 4855.	3.1	73
40	Biphasic single-reactor process for dehydration of xylose and hydrogenation of produced furfural. Applied Catalysis A: General, 2013, 451, 6-13.	2.2	102
41	Hydrodynamics and gasâ€“liquid mass transfer in a horizontal rotating foam stirrer reactor. Chemical Engineering Journal, 2013, 217, 10-21.	6.6	24
42	Glucose dehydration to 5-hydroxymethylfurfural over phosphate catalysts. Journal of Catalysis, 2013, 300, 37-46.	3.1	198
43	Enhancement of Catalyst Performance in the Direct Propene Epoxidation: A Study into Goldâ€“Titanium Synergy. ChemCatChem, 2013, 5, 467-478.	1.8	66
44	Glucose Dehydration to 5â€Hydroxymethylfurfural in a Biphasic System over Solid Acid Foams. ChemSusChem, 2013, 6, 1697-1707.	3.6	54
45	Hydrogen Production through Aqueousâ€Phase Reforming of Ethylene Glycol in a Washcoated Microchannel. ChemSusChem, 2013, 6, 1708-1716.	3.6	24
46	Numbered-up gasâ€“liquid micro/milli channels reactor with modular flow distributor. Chemical Engineering Journal, 2012, 207-208, 645-655.	6.6	100
47	Effect of foam stirrer design on the catalytic performance of rotating foam stirrer reactors. Chemical Engineering Journal, 2012, 207-208, 209-217.	6.6	15
48	Preparation of ZSM-5 zeolite coatings within capillary microchannels. Journal of Materials Chemistry, 2012, 22, 15976.	6.7	12
49	Integration of Microreactors with Spectroscopic Detection for Online Reaction Monitoring and Catalyst Characterization. Industrial & Engineering Chemistry Research, 2012, 51, 14583-14609.	1.8	121
50	Foam supported sulfonated polystyrene as a new acidic material for catalytic reactions. Chemical Engineering Journal, 2012, 207-208, 218-225.	6.6	42
51	Fructose Dehydration to 5â€Hydroxymethylfurfural over Solid Acid Catalysts in a Biphasic System. ChemSusChem, 2012, 5, 1812-1819.	3.6	134
52	Heterogeneous catalysis in a microchannel using a layer of carbon nanofibers on the channel wall. Chemical Engineering Journal, 2012, 179, 242-252.	6.6	25
53	Design criteria for a barrier-based gasâ€“liquid flow distributor for parallel microchannels. Chemical Engineering Journal, 2012, 181-182, 549-556.	6.6	60
54	Mass transfer modeling of a consecutive reaction in rotating foam stirrer reactors: Selective hydrogenation of a functionalized alkyne. Chemical Engineering Science, 2012, 73, 412-420.	1.9	25

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55	Switching off propene hydrogenation in the direct epoxidation of propene over goldâ€“titania catalysts. Journal of Catalysis, 2012, 285, 324-327.	3.1	21
56	The effect of solvent addition on fructose dehydration to 5-hydroxymethylfurfural in biphasic system over zeolites. Journal of Catalysis, 2012, 287, 68-75.	3.1	187
57	Zirconium Phosphate Coating on Aluminum Foams by Electrophoretic Deposition for Acidic Catalysis. ChemCatChem, 2012, 4, 129-133.	1.8	15
58	Kinetic study of propylene epoxidation with H2 and O2 over Au/Tiâ€“SiO2 in the explosive regime. Faraday Discussions, 2011, 152, 321.	1.6	35
59	Monolithic Catalysts and Reactors. Advances in Catalysis, 2011, 54, 249-327.	0.1	46
60	Rotating Foam Stirrer Reactor: Effect of Catalyst Coating Characteristics on Reactor Performance. Industrial & Engineering Chemistry Research, 2011, 50, 3184-3193.	1.8	45
61	Enhanced liquidâ€“solid mass transfer in microchannels by a layer of carbon nanofibers. Chemical Engineering Journal, 2011, 167, 671-680.	6.6	12
62	Liquidâ€“liquid slug flow: Hydrodynamics and pressure drop. Chemical Engineering Science, 2011, 66, 42-54.	1.9	165
63	Tomography measurements of gas holdup in rotating foam reactors with Newtonian, non-Newtonian and foaming liquids. Chemical Engineering Science, 2011, 66, 3317-3327.	1.9	28
64	Carbon nanofiber growth on carbon paper for proton exchange membrane fuel cells. Carbon, 2011, 49, 501-507.	5.4	26
65	The Direct Epoxidation of Propene in the Explosive Regime in a Microreactorâ€”A Study into the Reaction Kinetics. Industrial & Engineering Chemistry Research, 2010, 49, 10479-10485.	1.8	33
66	In situ UVâ€“Vis spectroscopy in gasâ€“liquidâ€“solid systems. Chemical Engineering Science, 2010, 65, 267-272.	1.9	11
67	Gasâ€“liquid mass transfer in rotating solid foam reactors. Chemical Engineering Science, 2010, 65, 472-479.	1.9	55
68	The role of support oxygen in the epoxidation of propene over goldâ€“titania catalysts investigated by isotopic transient kinetics. Journal of Catalysis, 2009, 265, 161-169.	3.1	34
69	Reaction kinetics of the esterification of myristic acid with isopropanol and n-propanol using p-toluene sulphonic acid as catalyst. Applied Catalysis A: General, 2009, 365, 141-147.	2.2	43
70	The Epoxidation of Propene over Gold Nanoparticle Catalysts. , 2008, , 339-354.		6
71	Propene epoxidation over Au/Ti-SBA-15 catalysts. Journal of Catalysis, 2007, 248, 235-248.	3.1	147
72	Real-Time Control of a Catalytic Solid in a Fixed-Bed Reactor Based on In Situ Spectroscopy. Angewandte Chemie - International Edition, 2007, 46, 5412-5416.	7.2	35

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73	The Production of Propene Oxide:Â Catalytic Processes and Recent Developments. Industrial & Engineering Chemistry Research, 2006, 45, 3447-3459.	1.8	456
74	Combining operando techniques in one spectroscopic-reaction cell: New opportunities for elucidating the active site and related reaction mechanism in catalysis. Catalysis Today, 2006, 113, 3-15.	2.2	189
75	Promotion effects in the oxidation of CO over zeolite-supported Pt nanoparticles. Studies in Surface Science and Catalysis, 2005, , 1239-1246.	1.5	3
76	Support effects in hydrogenation of cinnamaldehyde over carbon nanofiber-supported platinum catalysts: Kinetic modeling. Chemical Engineering Science, 2005, 60, 5682-5695.	1.9	105
77	Modeling of kinetics and deactivation in the direct epoxidation of propene over goldâ€“titania catalysts. Journal of Catalysis, 2005, 236, 153-163.	3.1	55
78	The Role of Gold in Gold-Titania Epoxidation Catalysts. Angewandte Chemie - International Edition, 2005, 44, 1115-1118.	7.2	138
79	The Role of Gold in Goldâ€“Titania Epoxidation Catalysts. Angewandte Chemie, 2005, 117, 1139-1142.	1.6	15
80	Promotion Effects in the Oxidation of CO over Zeolite-Supported Pt Nanoparticles.. ChemInform, 2005, 36, no.	0.1	0
81	The role of water in the epoxidation over goldâ€“titania catalysts. Chemical Communications, 2005, , 6002.	2.2	27
82	Promotion Effects in the Oxidation of CO over Zeolite-Supported Pt Nanoparticles. Journal of Physical Chemistry B, 2005, 109, 3822-3831.	1.2	74
83	UVâˆ'Vis Microspectroscopy:â€‰ Probing the Initial Stages of Supported Metal Oxide Catalyst Preparation. Journal of the American Chemical Society, 2005, 127, 5024-5025.	6.6	60
84	Atomic XAFS as a Tool to Probe the Electronic Properties of Supported Noble Metal Nanoclusters. Journal of the American Chemical Society, 2005, 127, 3272-3273.	6.6	39
85	Mechanistic Study into the Direct Epoxidation of Propene over Gold/Titania Catalysts. Journal of Physical Chemistry B, 2005, 109, 19309-19319.	1.2	113
86	Kinetics of solid acid catalysed etherification of symmetrical primary alcohols: zeolite BEA catalysed etherification of 1-octanol. Applied Catalysis A: General, 2004, 266, 109-116.	2.2	50
87	Determination of adsorption and diffusion parameters in zeolites through a structured approach. Chemical Engineering Science, 2004, 59, 2477-2487.	1.9	21
88	Towards real-time spectroscopic process control for the dehydrogenation of propane over supported chromium oxide catalysts. Chemical Engineering Science, 2004, 59, 5487-5492.	1.9	95
89	Performance of the monolithic stirrer reactor: applicability in multi-phase processes. Chemical Engineering Science, 2004, 59, 4975-4981.	1.9	40
90	Separation of kinetics and mass-transport effects for a fast reaction: the selective hydrogenation of functionalized alkynes. Catalysis Today, 2003, 79-80, 315-321.	2.2	42

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91	Optimized palladium catalyst systems for the selective liquid-phase hydrogenation of functionalyzed alkynes. Applied Catalysis A: General, 2003, 238, 259-271.	2.2	71
92	BEA coating of structured supportsâ€"performance in acylation. Applied Catalysis A: General, 2003, 243, 237-250.	2.2	75
93	Modeling of monolithic and trickle-bed reactors for the hydrogenation of styrene. Chemical Engineering Science, 2003, 58, 1113-1124.	1.9	118
94	Water removal by reactive stripping for a solid-acid catalyzed esterification in a monolithic reactor. Chemical Engineering Science, 2002, 57, 1627-1632.	1.9	52
95	Modeling of fast pulse responses in the Multitrack: an advanced TAP reactor. Chemical Engineering Science, 2002, 57, 1835-1847.	1.9	26
96	Preparation of monolithic catalysts. Catalysis Reviews - Science and Engineering, 2001, 43, 345-380.	5.7	474
97	New non-traditional multiphase catalytic reactors based on monolithic structures. Catalysis Today, 2001, 66, 133-144.	2.2	166
98	Monolithic catalysts as more efficient three-phase reactors. Catalysis Today, 2001, 66, 157-165.	2.2	71
99	Esterification in a structured catalytic reactor with counter-current water removal. Catalysis Today, 2001, 66, 175-181.	2.2	37
100	Influence of water on fast hydrogenation reactions with monolithic and slurry catalysts. Catalysis Today, 2001, 69, 265-273.	2.2	14
101	Zeolite coated structures for the acylation of aromatics. Microporous and Mesoporous Materials, 2001, 48, 279-284.	2.2	66
102	Modelling sorption and diffusion in activated carbon: a novel low pressure pulse-response technique. Carbon, 2001, 39, 2113-2130.	5.4	14
103	Formal reply to letter to the editor â€˜Comments on the modeling of a fore void volume in a TAP reactorâ€™. Chemical Engineering Science, 2001, 56, 3927.	1.9	0
104	Monolithic catalysts as efficient three-phase reactors. Chemical Engineering Science, 2001, 56, 823-829.	1.9	155
105	The direct epoxidation of propene by molten salts. Applied Catalysis A: General, 2000, 196, 217-224.	2.2	25
106	Structured catalysts for the acylation of aromatics. Topics in Catalysis, 2000, 13, 275-280.	1.3	20
107	Measurement and modeling of the transient adsorption, desorption and diffusion processes in microporous materials. Chemical Engineering Science, 1999, 54, 4423-4436.	1.9	65
108	Direct Epoxidation of Propene Using Gold Dispersed on TS-1 and Other Titanium-Containing Supports. Industrial & Engineering Chemistry Research, 1999, 38, 884-891.	1.8	273

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109	Mathematical treatment of transient kinetic data: Combination of parameter estimation with solving the related partial differential equations. Applied Catalysis A: General, 1997, 151, 27-57.	2.2	63
110	New insight in the platinum-catalyzed CO oxidation kinetic mechanism by using an advanced TAP reactor system. Applied Catalysis A: General, 1997, 164, 237-249.	2.2	25
111	Bridging the gap between macroscopic and NMR diffusivities. Chemical Engineering Science, 1997, 52, 3401-3404.	1.9	55