Michael Stockenhuber

List of Publications by Year
in descending order

125 papers	3,048 citations	147801 31 h-index	197818 49 g-index
130 all docs	130 docs citations	130 times ranked	2858 citing authors

#	Article	IF	Citations
1	The role of Ni sites located in mesopores in the selectivity of anisole hydrodeoxygenation. Catalysis Science and Technology, 2022, 12, 2184-2196.	4.1	10
2	Modeling and Experimental Study on the Thermal Decomposition of Perfluorooctanesulfonic Acid (PFOS) in an Î±-Alumina Reactor. Industrial & Engineering Chemistry Research, 2022, 61, 5453-5463.	3.7	7
3	Insights into chemical stability of Mg-silicates and silica in aqueous systems using 25Mg and 29Si solid-state MAS NMR spectroscopy: Applications for CO2 capture and utilisation. Chemical Engineering Journal, 2021, 420, 127656.	12.7	15
4	Role of metal support during ru-catalysed hydrodeoxygenation of biocrude oil. Applied Catalysis B: Environmental, 2021, 281, 119470.	20.2	54
5	Hydrodeoxygenation of guiacol over ion-exchanged ruthenium ZSM-5 and BEA zeolites. Journal of Catalysis, 2021, 396, 157-165.	6.2	33
6	A promoter effect on hydrodeoxygenation reactions of oleic acid by zeolite beta catalysts. Journal of Analytical and Applied Pyrolysis, 2021, 155, 105044.	5.5	13
7	Application of concurrent grinding in direct aqueous carbonation of magnesium silicates. Journal of CO2 Utilization, 2021, 48, 101516.	6.8	9
8	Kinetics of Decomposition of PFOS Relevant to Thermal Desorption Remediation of Soils. Industrial & Engineering Chemistry Research, 2021, 60, 9080-9087.	3.7	11
9	In Situ XAFS Study of a Modified TS-1 Framework for Carbonyl Formation. Journal of Physical Chemistry C, 2021, 125, 16483-16488.	3.1	1
10	Methane oxidation by N2O over Fe-FER catalysts prepared by different methods: Nature of active iron species, stability of surface oxygen species and selectivity to products. Journal of Catalysis, 2021, 400, 10-19.	6.2	17
11	Novel hierarchical core-shell BEA@NanoZSM-5 zeolite for improved cracking performance for 1,3,5-triisopropylbenzene and n-hexadecane. Microporous and Mesoporous Materials, 2021, 328, 111399.	4.4	16
12	Hydrodeoxygenation of guaiacol over BEA supported bimetallic Ni-Fe catalysts with varied impregnation sequence. Journal of Catalysis, 2021, 404, 1-11.	6.2	23
13	Natural zeolite supported Ni catalysts for hydrodeoxygenation of anisole. Green Chemistry, 2021, 23, 4673-4684.	9.0	53
14	Hydrodeoxygenation of oleic acid for effective diesel-like hydrocarbon production using zeolite-based catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2021, 134, 1069.	1.7	1
15	Influence of Promoters (Fe, Mo, W) on the Structural and Catalytic Properties of Ni/BEA for Guaiacol Hydrodeoxygenation. ACS Sustainable Chemistry and Engineering, 2021, 9, 15673-15682.	6.7	13
16	Insights on the stability of cuprous chloride under high pressure: An equilibrium ab initio atomistic thermodynamics study. Journal of Physics and Chemistry of Solids, 2020, 136, 109158.	4.0	1
17	The stability of Pd/TS-1 and Pd/silicalite-1 for catalytic oxidation of methane â€“ understanding the role of titanium. Catalysis Science and Technology, 2020, 10, 1193-1204.	4.1	30
18	The role of acid and metal sites in hydrodeoxygenation of guaiacol over Ni/Beta catalysts. Catalysis Science and Technology, 2020, 10, 810-825.	4.1	69

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19	Effect of Manganese on the Selective Catalytic Hydrogenation of COx in the Presence of Light Hydrocarbons Over Ni/Al2O3: An Experimental and Computational Study. ACS Catalysis, 2020, 10, 1535-1547.	11.2	24
20	Structure of Silica Polymers and Reaction Mechanism for Formation of Silica-Rich Precipitated Phases in Direct Aqueous Carbon Mineralization. Industrial & Engineering Chemistry Research, 2020, 59, 6828-6839.	3.7	16
21	The Catalyzed Conversion of Methane to Valueâ€Added Products. Energy Technology, 2020, 8, 1900665.	3.8	13
22	Formation of Surface Oxygen Species and the Conversion of Methane to Value-Added Products with N₂O as Oxidant over Fe-Ferrierite Catalysts. ACS Catalysis, 2020, 10, 1406-1416.	11.2	22
23	Shape selectivity of zeolite catalysts for the hydrodeoxygenation of biocrude oil and its model compounds. Microporous and Mesoporous Materials, 2020, 309, 110561.	4.4	30
24	Study on Catalyst Deactivation During the Hydrodeoxygenation of Model Compounds. Topics in Catalysis, 2020, 63, 778-792.	2.8	16
25	Products and mechanism of thermal decomposition of chlorpyrifos under inert and oxidative conditions. Environmental Sciences: Processes and Impacts, 2020, 22, 2084-2094.	3.5	8
26	Application of a concurrent grinding technique for two-stage aqueous mineral carbonation. Journal of CO2 Utilization, 2020, 42, 101347.	6.8	12
27	Magnesium Leachability of Mg-Silicate Peridotites: The Effect on Magnesite Yield of a Mineral Carbonation Process. Minerals (Basel, Switzerland), 2020, 10, 1091.	2.0	6
28	Highly-dispersed Ni on BEA catalyst prepared by ion-exchange-deposition-precipitation for improved hydrodeoxygenation activity. Applied Catalysis B: Environmental, 2020, 267, 118690.	20.2	55
29	Mechanisms of thermal decomposition of cyclodiene pesticides, identification and possible mitigation of their toxic products. Proceedings of the Combustion Institute, 2019, 37, 1143-1150.	3.9	5
30	Comparison of Direct, Selective Oxidation of Methane by N₂O over Fe-ZSM-5, Fe-Beta, and Fe-FER Catalysts. Journal of Physical Chemistry C, 2019, 123, 27436-27447.	3.1	31
31	Introduction to the special section: Papers from the International Conference on Accelerated Carbonation for Environmental and Material Engineering. Environmental Progress and Sustainable Energy, 2019, 38, e13245.	2.3	0
32	Formation of magnesite and hydromagnesite from direct aqueous carbonation of thermally activated lizardite. Environmental Progress and Sustainable Energy, 2019, 38, e13244.	2.3	4
33	Direct aqueous carbonation of heat activated serpentine: Discovery of undesirable side reactions reducing process efficiency. Applied Energy, 2019, 242, 1369-1382.	10.1	29
34	Thermal oxidation of dieldrin and concomitant formation of toxic products including polychlorinated dibenzo-p-dioxin and dibenzofuran (PCDD/F). Chemosphere, 2019, 225, 209-216.	8.2	5
35	Dissolution of heat activated serpentine for CO2 sequestration: The effect of silica precipitation at different temperature and pH values. Journal of CO2 Utilization, 2019, 30, 123-129.	6.8	20
36	Mass transfer and kinetic study on BEA zeolite-catalysed oil hydroesterification. Renewable Energy, 2019, 135, 417-425.	8.9	12

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37	CO₂ Capture Modeling Using Heat-Activated Serpentinite Slurries. Energy & Fuels, 2019, 33, 1753-1766.	5.1	11
38	Mechanistic insights into the Knoevenagel condensation reaction over ZnO catalysts: Direct observation of surface intermediates using in situ FTIR. Journal of Catalysis, 2019, 369, 157-167.	6.2	28
39	Development of Concurrent grinding for application in aqueous mineral carbonation. Journal of Cleaner Production, 2019, 212, 151-161.	9.3	30
40	Utilization of Glycerol and its Derivatives in a Nickelâ€Based SOFC. Energy Technology, 2019, 7, 80-85.	3.8	4
41	â€œACEMEâ€ Synthesis and characterization of reactive silica residues from two stage mineral carbonation Process. Environmental Progress and Sustainable Energy, 2019, 38, e13066.	2.3	18
42	ACEME: Direct Aqueous Mineral Carbonation of Dunite Rock. Environmental Progress and Sustainable Energy, 2019, 38, e13075.	2.3	15
43	The utilisation of feed and byproducts of mineral carbonation processes as pozzolanic cement replacements. Journal of Cleaner Production, 2018, 186, 499-513.	9.3	43
44	Catalytic coupling of CH₄ with CHF₃ for the synthesis of VDF over LaOF catalyst. , 2018, 8, 587-602.		7
45	Catalysis Society of Australia. ChemCatChem, 2018, 10, 1481-1482.	3.7	0
46	Editorial: The 9th International Conference on Environmental Catalysis (ICEC). Applied Catalysis B: Environmental, 2018, 223, 1.	20.2	1
47	Understanding Structureâ€"Function Relationships in Zeolite-Supported Pd Catalysts for Oxidation of Ventilation Air Methane. ACS Catalysis, 2018, 8, 5852-5863.	11.2	39
48	An experimental investigation on the effects of adding a transition metal to Ni/Al2O3 for catalytic hydrogenation of CO and CO2 in presence of light alkanes and alkenes. Catalysis Today, 2018, 307, 277-285.	4.4	11
49	Hydroesterification of bio-oils over HZSM-5, BETA and Y zeolites. Clean Technologies and Environmental Policy, 2018, 20, 727-738.	4.1	6
50	Study on mineral carbonation of heat activated lizardite at pilot and laboratory scale. Journal of CO2 Utilization, 2018, 26, 230-238.	6.8	34
51	On the Chemistry of Iron Oxide Supported on Î³-Alumina and Silica Catalysts. ACS Omega, 2018, 3, 5362-5374.	3.5	44
52	In-situ FTIR study on the mechanism of both steps of zeolite-catalysed hydroesterification reaction in the context of biodiesel manufacturing. Fuel, 2018, 232, 12-26.	6.4	41
53	Process for Chloroform Decomposition: Nonthermal Plasma Polymerization with Methane and Hydrogen. Industrial & Engineering Chemistry Research, 2018, 57, 9075-9082.	3.7	1
54	A proposed reaction mechanism for the selective oxidation of methane with nitrous oxide over Co-ZSM-5 catalyst forming synthesis gas (COÂ+ÂH2). International Journal of Hydrogen Energy, 2018, 43, 13133-13144.	7.1	4

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55	Reaction of nitrous oxide with methane to synthesis gas: A thermodynamic and catalytic study. Journal of Energy Chemistry, 2017, 26, 155-162.	12.9	4
56	Separation and analysis of high range extractable molecules formed during coal pyrolysis using coupled thin layer chromatography-imaging mass spectrometry (TLC-LDI-IMS). Fuel, 2017, 196, 269-279.	6.4	11
57	A low energy pathway to CuCl 2 : A theoretical investigation. Chemical Physics Letters, 2017, 672, 54-56.	2.6	0
58	A mechanistic study of the Knoevenagel condensation reaction: new insights into the influence of acid and base properties of mixed metal oxide catalysts on the catalytic activity. Physical Chemistry Chemical Physics, 2017, 19, 26630-26644.	2.8	34
59	Insights into the dissolution kinetics of thermally activated serpentine for CO2 sequestration. Chemical Engineering Journal, 2017, 330, 1174-1186.	12.7	42
60	Mechanism and Rate of Thermal Decomposition of Hexachlorocyclopentadiene and Its Importance in PCDD/F Formation from the Combustion of Cyclodiene Pesticides. Journal of Physical Chemistry A, 2017, 121, 5871-5883.	2.5	8
61	Adsorption of 2â€•Chlorophenol on the Surface of Silicaâ€•and Aluminaâ€•Supported Iron Oxide: An FTIR and XPS Study. ChemCatChem, 2017, 9, 481-491.	3.7	17
62	Development of Combustion Technology for Methane Emitted from Coalâ€•Mine Ventilation Air Systems. Energy Technology, 2017, 5, 521-538.	3.8	32
63	Gas phase pyrolysis of endosulfan and formation of dioxin precursors of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F). Proceedings of the Combustion Institute, 2017, 36, 1119-1127.	3.9	5
64	Cobalt Species Active for Nitrous Oxide (N2O) Decomposition within a Temperature Range of 300â€“600Â°C. Australian Journal of Chemistry, 2017, 70, 1138.	0.9	3
65	Towards understanding the improved stability of palladium supported on TS-1 for catalytic combustion. Physical Chemistry Chemical Physics, 2016, 18, 10528-10537.	2.8	17
66	Experimental study on the precipitation of magnesite from thermally activated serpentine for CO2 sequestration. Chemical Engineering Journal, 2016, 303, 439-449.	12.7	47
67	Gas Phase Thermal Oxidation of Endosulfan and Formation of Polychlorinated Dibenzo-<i>p</i>-dioxins and Dibenzofurans. Environmental Science & Technology, 2016, 50, 10106-10113.	10.0	6
68	Reaction of dichloromethane under non-oxidative conditions in a dielectric barrier discharge reactor and characterisation of the resultant polymer. Chemical Engineering Journal, 2016, 290, 499-506.	12.7	4
69	Catalytic conversion of glycerol to polymers in the presence of ammonia. Chemical Engineering Journal, 2016, 291, 279-286.	12.7	7
70	The use of LDI-TOF imaging mass spectroscopy to study heated coal with a temperature gradient incorporating the plastic layer and semi-coke. Fuel, 2016, 165, 33-40.	6.4	17
71	Maceral separation from coal by the Reflux Classifier. Fuel Processing Technology, 2016, 143, 43-50.	7.2	28
72	Formation of PCDD/Fs in Oxidation of 2-Chlorophenol on Neat Silica Surface. Environmental Science & Technology, 2016, 50, 1412-1418.	10.0	39

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73	Zeolite-supported iron catalysts for allyl alcohol synthesis from glycerol. Applied Catalysis A: General, 2016, 509, 130-142.	4.3	38
74	Enhancing allyl alcohol selectivity in the catalytic conversion of glycerol; influence of product distribution on the subsequent epoxidation step. Asia-Pacific Journal of Chemical Engineering, 2015, 10, 598-606.	1.5	4
75	Influence of impurities on the epoxidation of allyl alcohol to glycidol with hydrogen peroxide over titanium silicate TS-1. Applied Catalysis A: General, 2015, 489, 241-246.	4.3	16
76	The effect of synthesis gas composition on the performance of Ni-based solid oxide fuel cells. Chemical Engineering Research and Design, 2015, 101, 22-26.	5.6	5
77	Accelerated hydrothermal ageing of Pd/Al₂O₃ for catalytic combustion of ventilation air methane. Catalysis Science and Technology, 2015, 5, 4008-4016.	4.1	6
78	A temperature programmed desorption study of the interaction of ethyl cyanoacetate and benzaldehyde on metal oxide surfaces. Catalysis Today, 2015, 245, 108-115.	4.4	13
79	The stability of Co3O4, Fe2O3, Au/Co3O4 and Au/Fe2O3 catalysts in the catalytic combustion of lean methane mixtures in the presence of water. Catalysis Today, 2015, 258, 276-283.	4.4	42
80	Partial oxidation of methane with nitrous oxide forms synthesis gas over cobalt exchanged ZSM-5. Catalysis Communications, 2014, 53, 42-46.	3.3	17
81	The effect of catalyst modification on the conversion of glycerol to allyl alcohol. Applied Catalysis B: Environmental, 2014, 152-153, 117-128.	20.2	7
82	Oxidative Coupling and Hydroxylation of Phenol over Transition Metal and Acidic Zeolites: Insights into Catalyst Function. Catalysis Letters, 2014, 144, 9-15.	2.6	12
83	Evidence of the Formation of Surface Palladium Carbide during the Catalytic Combustion of Lean Methane/Air Mixtures. Energy Technology, 2014, 2, 243-249.	3.8	12
84	Water formation via HCl oxidation on Cu(100). Applied Surface Science, 2014, 299, 156-161.	6.1	5
85	Catalytic combustion of ventilation air methane (VAM) â€“ long term catalyst stability in the presence of water vapour and mine dust. Catalysis Science and Technology, 2014, 4, 1793-1802.	4.1	21
86	Catalytic conversion of glycerol to allyl alcohol; effect of a sacrificial reductant on the product yield. Catalysis Science and Technology, 2014, 4, 3090-3098.	4.1	22
87	Reaction of carbon tetrachloride with methane in a non-equilibrium plasma at atmospheric pressure, and characterisation of the polymer thus formed. Journal of Hazardous Materials, 2014, 280, 38-45.	12.4	3
88	HCl Adsorption on Copper-Modified ZSM-5: FTIR and DFT Study. Journal of Physical Chemistry C, 2013, , 130912084723007.	3.1	7
89	A Melamineâ€Modified Î²â€Zeolite with Enhanced CO₂ Capture Properties. Energy Technology, 2013, 1, 345-349.	3.8	18
90	A designed organicâ€“zeolite hybrid acidâ€“base catalyst. Journal of Catalysis, 2012, 285, 10-18.	6.2	16

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91	Nitridation of MoO3/HZSM-5 and Fe-MoO3/HZSM-5. Topics in Catalysis, 2009, 52, 1559-1565.	2.8	5
92	A glimpse of the inner workings of the templated site. Chemical Communications, 2009, , 165-167.	4.1	7
93	In situ XAS and IR studies on Cu:SAPO-5 and Cu:SAPO-11: the contributory role of monomeric linear copper(i) species in the selective catalytic reduction of NOx by propene. Physical Chemistry Chemical Physics, 2009, 11, 5476.	2.8	30
94	A soft X-ray EXAFS study of the variation of the local aluminium structure on adsorption of bases in various zeolite types. Studies in Surface Science and Catalysis, 2007, 170, 756-761.	1.5	3
95	An Al K-edge EXAFS study of MoO3/H-ZSM-5 catalyst precursors. Microporous and Mesoporous Materials, 2007, 104, 97-102.	4.4	5
96	On the mechanism of aromatic acylation over zeolites. Microporous and Mesoporous Materials, 2007, 104, 217-224.	4.4	28
97	Selective oxidation of benzene to phenol over FeAlPO catalysts using nitrous oxide as oxidant. Chemical Communications, 2006, , 4955.	4.1	36
98	The influence of silicon on the catalytic properties of CuSAPO-5 towards the selective reduction of NOx in the presence of propene. Microporous and Mesoporous Materials, 2005, 84, 261-274.	4.4	13
99	Probing possible structure sensitivity in the exchange of isotopic oxygen with the surface of MgO. Journal of Catalysis, 2005, 234, 14-23.	6.2	16
100	Selective catalytic reduction of NOx over microporous CuAPO-5: structural characterisation by XAS and XRD. Journal of Materials Chemistry, 2005, 15, 204.	6.7	24
101	A comparative study of literature methods of introducing acidity into MCM-41. Studies in Surface Science and Catalysis, 2004, 154, 446-452.	1.5	1
102	Adsorption studies of acylation reagents and products on zeolite beta catalysts. Studies in Surface Science and Catalysis, 2004, , 2724-2730.	1.5	9
103	Peroxydisulfate in MCM-48 silicas: powerful and clean materials for the removal of toxic gases. Journal of Materials Chemistry, 2004, 14, 1180.	6.7	6
104	The local structure of aluminium sites in zeolites. Physical Chemistry Chemical Physics, 2004, 6, 5435.	2.8	33
105	A soft X-ray exafs study of the local structure of tetrahedral aluminium in zeolites. Studies in Surface Science and Catalysis, 2004, , 1406-1410.	1.5	6
106	Synthesis, Structure, and Reactivity of Iron-Sulfur Species in Zeolites. Catalysis Letters, 2003, 85, 193-197.	2.6	5
107	A temperature programmed desorption study of the interaction of acetic anhydride with zeolite beta (BEA). Catalysis Today, 2003, 81, 653-658.	4.4	45
108	Ambient temperature carbon monoxide oxidation using copper manganese oxide catalysts: Effect of residual Na+ acting as catalyst poison. Catalysis Communications, 2003, 4, 17-20.	3.3	67

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109	Synthesis, structure, and reactivity of iron-sulfur species in zeolite ZSM-5. Studies in Surface Science and Catalysis, 2002, 142, 511-516.	1.5	0
110	Titanium Oxide Species in Molecular Sieves:Â Materials for the Optical Sensing of Reductive Gas Atmospheres. Chemistry of Materials, 2002, 14, 2458-2466.	6.7	38
111	An X-ray absorption study on copper-containing AlPO4-5 for selective catalytic reduction of NOX by propene. Journal of Materials Chemistry, 2001, 11, 1441-1446.	6.7	8
112	Transition metal containing mesoporous silicas â€“ redox properties, structure and catalytic activity. Microporous and Mesoporous Materials, 2001, 44-45, 367-375.	4.4	41
113	The Room Temperature, Stoichiometric Conversion of N2O to Adsorbed NO by Fe-MCM-41 and Fe-ZSM-5. Journal of Catalysis, 2000, 196, 126-133.	6.2	49
114	Preparation, Characterization, and Unusual Reactivity of Fe-MCM-41â€. Journal of Physical Chemistry B, 2000, 104, 3370-3374.	2.6	64
115	An Hermite expansion method for EXAFS data treatment and its application to Fe K-edge spectra. Physical Chemistry Chemical Physics, 2000, 2, 5743-5749.	2.8	15
116	Preparation, Characterization, and Performance of Feâˆ'ZSM-5 Catalysts. Journal of Physical Chemistry B, 1999, 103, 5963-5976.	2.6	271
117	Modelling aromatics in siliceous zeolites: a new forcefield from thermochemical studies. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3759-3768.	1.7	25
118	Activity of carbonaceous deposits in the selective reduction of nitrogen oxides. Chemical Communications, 1997, , 185-186.	4.1	16
119	BrÃ¸nsted Acid Site and Pore Controlled Siting of Alkane Sorption in Acidic Molecular Sieves. Journal of Physical Chemistry B, 1997, 101, 5414-5419.	2.6	242
120	Unusual structure and stability of iron-oxygen nano- clusters in Fe-ZSM-5 catalysts. Catalysis Letters, 1997, 45, 15-19.	2.6	79
121	Hydrogen/Deuterium Exchange duringn-Butane Conversion on H-ZSM-5. Journal of Catalysis, 1996, 160, 183-189.	6.2	37
122	Characterization and removal of extra lattice species in faujasites. Microporous Materials, 1995, 3, 457-465.	1.6	33
123	Sorption of light alkanes on H-ZSM5 and H-mordenite. Studies in Surface Science and Catalysis, 1995, , 495-500.	1.5	44
124	2.6 Elementary Steps of Acid-Base Catalyzed Reactions in Molecular Sieves. Studies in Surface Science and Catalysis, 1994, 90, 147-156.	1.5	8
125	Preparation of Barium Titanates from Oxalates. Journal of the American Ceramic Society, 1993, 76, 1185-1190.	3.8	132