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	Preparation, Characterization, and Performance of Feâ^'ZSM-5 Catalysts. Journal of Physical Chemistry B, 1999, 103, 5963-5976.	2.6	271
2	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
3	Preparation of Barium Titanates from Oxalates. Journal of the American Ceramic Society, 1993, 76, 1185-1190.	3.8	132
4	Unusual structure and stability of iron-oxygen nano- clusters in Fe-ZSM-5 catalysts. Catalysis Letters, 1997, 45, 15-19.	2.6	79
5	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
6	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
7	Preparation, Characterization, and Unusual Reactivity of Fe-MCM-41â€. Journal of Physical Chemistry B, 2000, 104, 3370-3374.	2.6	64
8	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
9	Role of metal support during ru-catalysed hydrodeoxygenation of biocrude oil. Applied Catalysis B: Environmental, 2021, 281, 119470.	20.2	54
10	Natural zeolite supported Ni catalysts for hydrodeoxygenation of anisole. Green Chemistry, 2021, 23, 4673-4684.	9.0	53
11	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
12	Experimental study on the precipitation of magnesite from thermally activated serpentine for CO2 sequestration. Chemical Engineering Journal, 2016, 303, 439-449.	12.7	47
13	A temperature programmed desorption study of the interaction of acetic anhydride with zeolite beta (BEA). Catalysis Today, 2003, 81, 653-658.	4.4	45
14	Sorption of light alkanes on H-ZSM5 and H-mordenite. Studies in Surface Science and Catalysis, 1995, , 495-500.	1.5	44
15	On the Chemistry of Iron Oxide Supported on Î³-Alumina and Silica Catalysts. ACS Omega, 2018, 3, 5362-5374.	3.5	44
16	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
17	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
18	Insights into the dissolution kinetics of thermally activated serpentine for CO2 sequestration. Chemical Engineering Journal, 2017, 330, 1174-1186.	12.7	42

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19	Transition metal containing mesoporous silicas â€“ redox properties, structure and catalytic activity. Microporous and Mesoporous Materials, 2001, 44-45, 367-375.	4.4	41
20	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
21	Formation of PCDD/Fs in Oxidation of 2-Chlorophenol on Neat Silica Surface. Environmental Science & Technology, 2016, 50, 1412-1418.	10.0	39
22	Understanding Structureâ€“Function Relationships in Zeolite-Supported Pd Catalysts for Oxidation of Ventilation Air Methane. ACS Catalysis, 2018, 8, 5852-5863.	11.2	39
23	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
24	Zeolite-supported iron catalysts for allyl alcohol synthesis from glycerol. Applied Catalysis A: General, 2016, 509, 130-142.	4.3	38
25	Hydrogen/Deuterium Exchange duringn-Butane Conversion on H-ZSM-5. Journal of Catalysis, 1996, 160, 183-189.	6.2	37
26	Selective oxidation of benzene to phenol over FeAlPO catalysts using nitrous oxide as oxidant. Chemical Communications, 2006, , 4955.	4.1	36
27	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
28	Study on mineral carbonation of heat activated lizardite at pilot and laboratory scale. Journal of CO2 Utilization, 2018, 26, 230-238.	6.8	34
29	Characterization and removal of extra lattice species in faujasites. Microporous Materials, 1995, 3, 457-465.	1.6	33
30	The local structure of aluminium sites in zeolites. Physical Chemistry Chemical Physics, 2004, 6, 5435.	2.8	33
31	Hydrodeoxygenation of guiacol over ion-exchanged ruthenium ZSM-5 and BEA zeolites. Journal of Catalysis, 2021, 396, 157-165.	6.2	33
32	Development of Combustion Technology for Methane Emitted from Coalâ€Mine Ventilation Air Systems. Energy Technology, 2017, 5, 521-538.	3.8	32
33	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
34	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
35	Development of Concurrent grinding for application in aqueous mineral carbonation. Journal of Cleaner Production, 2019, 212, 151-161.	9.3	30
36	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

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37	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
38	Direct aqueous carbonation of heat activated serpentine: Discovery of undesirable side reactions reducing process efficiency. Applied Energy, 2019, 242, 1369-1382.	10.1	29
39	On the mechanism of aromatic acylation over zeolites. Microporous and Mesoporous Materials, 2007, 104, 217-224.	4.4	28
40	Maceral separation from coal by the Reflux Classifier. Fuel Processing Technology, 2016, 143, 43-50.	7.2	28
41	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
42	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
43	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
44	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
45	Hydrodeoxygenation of guaiacol over BEA supported bimetallic Ni-Fe catalysts with varied impregnation sequence. Journal of Catalysis, 2021, 404, 1-11.	6.2	23
46	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
47	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
48	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
49	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
50	A Melamineâ€Modified Î²â€Zeolite with Enhanced CO₂ Capture Properties. Energy Technology, 2013, 1, 345-349.	3.8	18
51	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
52	Partial oxidation of methane with nitrous oxide forms synthesis gas over cobalt exchanged ZSM-5. Catalysis Communications, 2014, 53, 42-46.	3.3	17
53	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
54	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

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55	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
56	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
57	Activity of carbonaceous deposits in the selective reduction of nitrogen oxides. Chemical Communications, 1997, , 185-186.	4.1	16
58	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
59	A designed organicâ€“zeolite hybrid acidâ€“base catalyst. Journal of Catalysis, 2012, 285, 10-18.	6.2	16
60	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
61	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
62	Study on Catalyst Deactivation During the Hydrodeoxygenation of Model Compounds. Topics in Catalysis, 2020, 63, 778-792.	2.8	16
63	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
64	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
65	ACEME: Direct Aqueous Mineral Carbonation of Dunite Rock. Environmental Progress and Sustainable Energy, 2019, 38, e13075.	2.3	15
66	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
67	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
68	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
69	The Catalyzed Conversion of Methane to Valueâ€Added Products. Energy Technology, 2020, 8, 1900665.	3.8	13
70	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
71	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
72	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

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73	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
74	Mass transfer and kinetic study on BEA zeolite-catalysed oil hydroesterification. Renewable Energy, 2019, 135, 417-425.	8.9	12
75	Application of a concurrent grinding technique for two-stage aqueous mineral carbonation. Journal of CO2 Utilization, 2020, 42, 101347.	6.8	12
76	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
77	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
78	CO₂ Capture Modeling Using Heat-Activated Serpentinite Slurries. Energy & Fuels, 2019, 33, 1753-1766.	5.1	11
79	Kinetics of Decomposition of PFOS Relevant to Thermal Desorption Remediation of Soils. Industrial & Engineering Chemistry Research, 2021, 60, 9080-9087.	3.7	11
80	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
81	Adsorption studies of acylation reagents and products on zeolite beta catalysts. Studies in Surface Science and Catalysis, 2004, , 2724-2730.	1.5	9
82	Application of concurrent grinding in direct aqueous carbonation of magnesium silicates. Journal of CO2 Utilization, 2021, 48, 101516.	6.8	9
83	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
84	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
85	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
86	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
87	A glimpse of the inner workings of the templated site. Chemical Communications, 2009, , 165-167.	4.1	7
88	HCl Adsorption on Copper-Modified ZSM-5: FTIR and DFT Study. Journal of Physical Chemistry C, 2013, , 130912084723007.	3.1	7
89	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
90	Catalytic conversion of glycerol to polymers in the presence of ammonia. Chemical Engineering Journal, 2016, 291, 279-286.	12.7	7

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91	Catalytic coupling of CH₄ with CHF₃ for the synthesis of VDF over LaOF catalyst. , 2018, 8, 587-602.		7
92	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
93	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
94	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
95	Accelerated hydrothermal ageing of Pd/Al₂O₃ for catalytic combustion of ventilation air methane. Catalysis Science and Technology, 2015, 5, 4008-4016.	4.1	6
96	Gas Phase Thermal Oxidation of Endosulfan and Formation of Polychlorinated Dibenzo-p-dioxins and Dibenzofurans. Environmental Science & Technology, 2016, 50, 10106-10113.	10.0	6
97	Hydroesterification of bio-oils over HZSM-5, BETA and Y zeolites. Clean Technologies and Environmental Policy, 2018, 20, 727-738.	4.1	6
98	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
99	Synthesis, Structure, and Reactivity of Iron-Sulfur Species in Zeolites. Catalysis Letters, 2003, 85, 193-197.	2.6	5
100	An Al K-edge EXAFS study of MoO3/H-ZSM-5 catalyst precursors. Microporous and Mesoporous Materials, 2007, 104, 97-102.	4.4	5
101	Nitridation of MoO3/HZSM-5 and Fe-MoO3/HZSM-5. Topics in Catalysis, 2009, 52, 1559-1565.	2.8	5
102	Water formation via HCl oxidation on Cu(100). Applied Surface Science, 2014, 299, 156-161.	6.1	5
103	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
104	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
105	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
106	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
107	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
108	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

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109	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
110	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
111	Formation of magnesite and hydromagnesite from direct aqueous carbonation of thermally activated lizardite. Environmental Progress and Sustainable Energy, 2019, 38, e13244.	2.3	4
112	Utilization of Glycerol and its Derivatives in a Nickelâ€Based SOFC. Energy Technology, 2019, 7, 80-85.	3.8	4
113	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
114	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
115	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
116	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
117	Editorial: The 9th International Conference on Environmental Catalysis (ICEC). Applied Catalysis B: Environmental, 2018, 223, 1.	20.2	1
118	Process for Chloroform Decomposition: Nonthermal Plasma Polymerization with Methane and Hydrogen. Industrial & Engineering Chemistry Research, 2018, 57, 9075-9082.	3.7	1
119	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
120	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
121	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
122	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
123	A low energy pathway to CuCl 2 : A theoretical investigation. Chemical Physics Letters, 2017, 672, 54-56.	2.6	0
124	Catalysis Society of Australia. ChemCatChem, 2018, 10, 1481-1482.	3.7	0
125	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