Oliver KrÃ¶cher

List of Publications by Year
in descending order

153 papers	7,850 citations	47006 47 h-index	56724 83 g-index
157 all docs	157 docs citations	157 times ranked	5653 citing authors

#	Article	IF	Citations
1	The State of the Art in Selective Catalytic Reduction of NO_xby Ammonia Using Metalâ€Exchanged Zeolite Catalysts. Catalysis Reviews - Science and Engineering, 2008, 50, 492-531.	12.9	758
2	Influence of NO2 on the selective catalytic reduction of NO with ammonia over Fe-ZSM5. Applied Catalysis B: Environmental, 2006, 67, 187-196.	20.2	282
3	Chemical deactivation of V2O5/WO3â€"TiO2 SCR catalysts by additives and impurities from fuels, lubrication oils and urea solution. Applied Catalysis B: Environmental, 2008, 77, 228-236.	20.2	243
4	Screening of doped MnO â€"CeO2 catalysts for low-temperature NO-SCR. Applied Catalysis B: Environmental, 2009, 88, 413-419.	20.2	237
5	The Significance of Lewis Acid Sites for the Selective Catalytic Reduction of Nitric Oxide on Vanadiumâ€Based Catalysts. Angewandte Chemie - International Edition, 2016, 55, 11989-11994.	13.8	228
6	Catalytic oxidation of nitrogen monoxide over Pt/SiO2. Applied Catalysis B: Environmental, 2004, 50, 73-82.	20.2	205
7	The determination of the activities of different iron species in Fe-ZSM-5 for SCR of NO by NH3. Applied Catalysis B: Environmental, 2010, 95, 348-357.	20.2	199
8	Stable complete methane oxidation over palladium based zeolite catalysts. Nature Communications, 2018, 9, 2545.	12.8	187
9	Time-resolved copper speciation during selective catalytic reduction of NO on Cu-SSZ-13. Nature Catalysis, 2018, 1, 221-227.	34.4	186
10	Chemical deactivation of V2O5/WO3â€"TiO2 SCR catalysts by additives and impurities from fuels, lubrication oils, and urea solution. Applied Catalysis B: Environmental, 2008, 77, 215-227.	20.2	184
11	Silica Hybrid Gel Catalysts Containing Group(VIII) Transition Metal Complexes: Preparation, Structural, and Catalytic Properties in the Synthesis ofN,N-Dimethylformamide and Methyl Formate from Supercritical Carbon Dioxide. Journal of Catalysis, 1998, 178, 284-298.	6.2	180
12	Investigation of the selective catalytic reduction of NO by NH3 on Fe-ZSM5 monolith catalysts. Applied Catalysis B: Environmental, 2006, 66, 208-216.	20.2	176
13	Flame-Made WO₃/CeO_{<i>x</i>}-TiO₂ Catalysts for Selective Catalytic Reduction of NO_{<i>x</i>} by NH₃. ACS Catalysis, 2015, 5, 5657-5672.	11.2	171
14	The role of BrÃ¸nsted acidity in the selective catalytic reduction of NO with ammonia over Fe-ZSM-5. Journal of Catalysis, 2009, 268, 297-306.	6.2	167
15	MnOx-CeO2 mixed oxides for the low-temperature oxidation of diesel soot. Applied Catalysis B: Environmental, 2006, 64, 72-78.	20.2	160
16	Catalytic synthesis of polyoxymethylene dimethyl ethers (OME): A review. Applied Catalysis B: Environmental, 2017, 217, 407-420.	20.2	148
17	Highly active ruthenium complexes with bidentate phosphine ligands for the solvent-free catalytic synthesis of N,N-dimethylformamide and methyl formate. Chemical Communications, 1997, , 453-454.	4.1	145
18	Characterization and catalytic investigation of Fe-ZSM5 for urea-SCR. Catalysis Today, 2007, 119, 137-144.	4.4	135

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19	Hydrolysis and thermolysis of urea and its decomposition byproducts biuret, cyanuric acid and melamine over anatase TiO2. Applied Catalysis B: Environmental, 2012, 115-116, 129-137.	20.2	135
20	Characterization of Nb-Containing MnO_{<i>x</i>}â€"CeO₂ Catalyst for Low-Temperature Selective Catalytic Reduction of NO with NH₃. Journal of Physical Chemistry C, 2010, 114, 9791-9801.	3.1	119
21	Recent progress in syngas production via catalytic CO2 hydrogenation reaction. Applied Catalysis B: Environmental, 2021, 295, 120319.	20.2	110
22	Hydrothermal deactivation of Fe-ZSM-5 catalysts for the selective catalytic reduction of NO with NH3. Applied Catalysis B: Environmental, 2011, 101, 649-659.	20.2	103
23	Hydrolysis and oxidation of gaseous HCN over heterogeneous catalysts. Applied Catalysis B: Environmental, 2009, 92, 75-89.	20.2	100
24	VOx Surface Coverage Optimization of V2O5/WO3-TiO2 SCR Catalysts by Variation of the V Loading and by Aging. Catalysts, 2015, 5, 1704-1720.	3.5	82
25	Design of Stable Palladium-Based Zeolite Catalysts for Complete Methane Oxidation by Postsynthesis Zeolite Modification. ACS Catalysis, 2019, 9, 2303-2312.	11.2	82
26	Cuâ€"Al Spinel as a Highly Active and Stable Catalyst for the Reverse Water Gas Shift Reaction. ACS Catalysis, 2019, 9, 6243-6251.	11.2	76
27	Adsorption and Desorption of SO_{<i>x</i>}on Diesel Oxidation Catalysts. Industrial & Engineering Chemistry Research, 2009, 48, 9847-9857.	3.7	73
28	Relationship between structures and activities of supported metal vanadates for the selective catalytic reduction of NO by NH3. Applied Catalysis B: Environmental, 2017, 218, 731-742.	20.2	72
29	Solâ€"gel derived hybrid materials as heterogeneous catalysts for the synthesis of N,N-dimethylformamide from supercritical carbon dioxide. Chemical Communications, 1996, , 1497-1498.	4.1	67
30	DRIFTS studies on CO and NO adsorption and NO+CO reaction over Pd2+-substituted CeO2 and Ce0.75Sn0.25O2 catalysts. Journal of Catalysis, 2013, 303, 117-129.	6.2	67
31	Methane oxidation over a honeycomb Pd-only three-way catalyst under static and periodic operation. Applied Catalysis B: Environmental, 2018, 220, 67-77.	20.2	67
32	Adsorption and desorption of NO and NO2 on Cu-ZSM-5. Microporous and Mesoporous Materials, 2003, 58, 175-183.	4.4	66
33	Estimation of the fractions of different nuclear iron species in uniformly metal-exchanged Fe-ZSM-5 samples based on a Poisson distribution. Applied Catalysis A: General, 2010, 373, 168-175.	4.3	66
34	Catalytic urea hydrolysis in the selective catalytic reduction of NO_x: catalyst screening and kinetics on anatase TiO₂and ZrO₂. Catalysis Science and Technology, 2013, 3, 942-951.	4.1	64
35	Generation of NH₃ Selective Catalytic Reduction Active Catalysts from Decomposition of Supported FeVO₄. ACS Catalysis, 2015, 5, 4180-4188.	11.2	64
36	A Niobia-Ceria based multi-purpose catalyst for selective catalytic reduction of NOx, urea hydrolysis and soot oxidation in diesel exhaust. Applied Catalysis B: Environmental, 2011, 103, 79-84.	20.2	61

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37	Isocyanic acid hydrolysis over Fe-ZSM5 in urea-SCR. Catalysis Communications, 2006, 7, 600-603.	3.3	59
38	Combination of V₂O₅/WO₃â^'TiO₂, Feâ^'ZSM5, and Cuâ^'ZSM5 Catalysts for the Selective Catalytic Reduction of Nitric Oxide with Ammonia. Industrial & Engineering Chemistry Research, 2008, 47, 8588-8593.	3.7	59
39	A model gas study of ammonium formate, methanamide and guanidinium formate as alternative ammonia precursor compounds for the selective catalytic reduction of nitrogen oxides in diesel exhaust gas. Applied Catalysis B: Environmental, 2009, 88, 66-82.	20.2	59
40	Modulated Excitation Raman Spectroscopy of V₂O₅/TiO₂: Mechanistic Insights into the Selective Catalytic Reduction of NO with NH₃. ACS Catalysis, 2019, 9, 6814-6820.	11.2	56
41	Essential role of oxygen vacancies of Cu-Al and Co-Al spinel oxides in their catalytic activity for the reverse water gas shift reaction. Applied Catalysis B: Environmental, 2020, 266, 118669.	20.2	56
42	Structural Reversibility and Nickel Particle stability in Lanthanum Iron Nickel Perovskiteâ€Type Catalysts. ChemSusChem, 2017, 10, 2505-2517.	6.8	52
43	Detection of key transient Cu intermediates in SSZ-13 during NH₃-SCR deNO_x by modulation excitation IR spectroscopy. Chemical Science, 2020, 11, 447-455.	7.4	52
44	Adsorption and hydrolysis of isocyanic acid on TiO2. Applied Catalysis B: Environmental, 2006, 65, 55-61.	20.2	50
45	Basic investigation of the chemical deactivation of V2O5/WO3-TiO2 SCR catalysts by potassium, calcium, and phosphate. Topics in Catalysis, 2007, 42-43, 333-336.	2.8	50
46	Effect of Structural and Preparation Parameters on the Activity and Hydrothermal Stability of Metal-Exchanged ZSM-5 in the Selective Catalytic Reduction of NO by NH₃. Industrial & Engineering Chemistry Research, 2011, 50, 4308-4319.	3.7	50
47	Selectivity Control in Palladium-Catalyzed Alcohol Oxidation through Selective Blocking of Active Sites. Journal of Physical Chemistry C, 2016, 120, 14027-14033.	3.1	50
48	Evaporation of Urea at Atmospheric Pressure. Journal of Physical Chemistry A, 2011, 115, 2581-2589.	2.5	48
49	Storage of NO2 on BaO/TiO2 and the influence of NO. Applied Catalysis B: Environmental, 2003, 43, 389-395.	20.2	45
50	Subsecond and in Situ Chemical Speciation of Pt/Al₂O₃ during Oxidationâ€"Reduction Cycles Monitored by High-Energy Resolution Off-Resonant X-ray Spectroscopy. Journal of the American Chemical Society, 2013, 135, 19071-19074.	13.7	43
51	Catalytic Wall Reactor as a Tool for Isothermal Investigations in the Heterogeneously Catalyzed Oxidation of Propene to Acrolein. Industrial & Engineering Chemistry Research, 2002, 41, 1445-1453.	3.7	41
52	Comparative analysis on the performance of pressure and air-assisted urea injection for selective catalytic reduction of NOx. Fuel, 2015, 161, 269-277.	6.4	40
53	Selective Catalytic Reduction of NO with NH₃ on Cuâ^'SSZâ€13: Deciphering the Low and Highâ€temperature Rateâ€limiting Steps by Transient XAS Experiments. ChemCatChem, 2020, 12, 1429-1435.	3.7	39
54	Catalytic investigation of Fe-ZSM5 in the selective catalytic reduction of NOxwith NH3. Reaction Kinetics and Catalysis Letters, 2005, 86, 347-354.	0.6	38

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55	Chapter 9 Aspects of catalyst development for mobile urea-SCR systems â€” From Vanadia-Titania catalysts to metal-exchanged zeolites. Studies in Surface Science and Catalysis, 2007, 171, 261-289.	1.5	38
56	Sulfur Poisoning Recovery on a Solid Oxide Fuel Cell Anode Material through Reversible Segregation of Nickel. Chemistry of Materials, 2019, 31, 748-758.	6.7	36
57	Silica hybrid gel catalysts containing ruthenium complexes: influence of reaction parameters on the catalytic behaviour in the synthesis of N,N-dimethylformamide from carbon dioxide. Journal of Molecular Catalysis A, 1999, 140, 185-193.	4.8	35
58	Deactivation Aspects of Methane Oxidation Catalysts Based on Palladium and ZSM-5. Topics in Catalysis, 2017, 60, 123-130.	2.8	34
59	Stable Palladium Oxide Clusters Encapsulated in Silicalite-1 for Complete Methane Oxidation. ACS Catalysis, 2021, 11, 7371-7382.	11.2	34
60	Deactivation and Regeneration of Sulfonated Carbon Catalysts in Hydrothermal Reaction Environments. ChemSusChem, 2018, 11, 2189-2201.	6.8	33
61	Influence of NO2 on the hydrolysis of isocyanic acid over TiO2. Applied Catalysis B: Environmental, 2006, 65, 169-174.	20.2	32
62	Investigation of HNCO adsorption and hydrolysis on Fe-ZSM5. Catalysis Letters, 2007, 115, 33-39.	2.6	32
63	Modelling Catalyst Surfaces Using DFT Cluster Calculations. International Journal of Molecular Sciences, 2009, 10, 4310-4329.	4.1	30
64	Adsorption and catalytic thermolysis of gaseous urea on anatase TiO2 studied by HPLC analysis, DRIFT spectroscopy and DFT calculations. Applied Catalysis B: Environmental, 2013, 134-135, 316-323.	20.2	30
65	An ammonia and isocyanic acid measuring method for soot containing exhaust gases. Analytica Chimica Acta, 2005, 537, 393-400.	5.4	29
66	DFT calculations, DRIFT spectroscopy and kinetic studies on the hydrolysis of isocyanic acid on the TiO2-anatase (101) surface. Journal of Molecular Catalysis A, 2008, 280, 68-80.	4.8	28
67	Prominent role of mesopore surface area and external acid sites for the synthesis of polyoxymethylene dimethyl ethers (OME) on a hierarchical H-ZSM-5 zeolite. Catalysis Science and Technology, 2019, 9, 366-376.	4.1	28
68	Manganese based materials for diesel exhaust SO2 traps. Applied Catalysis B: Environmental, 2006, 67, 160-167.	20.2	27
69	Silica xerogels containing bidentate phosphine ruthenium complexes: textural properties and catalytic behaviour in the synthesis of N,N-dimethylformamide from carbon dioxide. Microporous and Mesoporous Materials, 2000, 35-36, 181-193.	4.4	25
70	Laboratory test reactor for the investigation of liquid reducing agents in the selective catalytic reduction of NOx. Review of Scientific Instruments, 2011, 82, 084101.	1.3	25
71	Thermal activation and aging of a V2O5/WO3-TiO2 catalyst for the selective catalytic reduction of NO with NH3. Applied Catalysis A: General, 2019, 573, 64-72.	4.3	25
72	Selective Catalytic Reduction of NO_{<i>x</i>} with Ammonia over Soot. ACS Catalysis, 2012, 2, 1507-1518.	11.2	24

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73	Engineering the ZrO₂â€“Pd Interface for Selective CO₂Hydrogenation by Overcoating an Atomically Dispersed Pd Precatalyst. ACS Catalysis, 2020, 10, 12058-12070.	11.2	24
74	Flexible application of biogas upgrading membranes for hydrogen recycle in power-to-methane processes. Chemical Engineering Science, 2021, 229, 116012.	3.8	24
75	Structure and performance of zeolite supported Pd for complete methane oxidation. Catalysis Today, 2021, 382, 3-12.	4.4	24
76	Operando Attenuated Total Reflectance FTIR Spectroscopy: Studies on the Different Selectivity Observed in Benzyl Alcohol Oxidation. ChemCatChem, 2015, 7, 2534-2541.	3.7	23
77	The Significance of Lewis Acid Sites for the Selective Catalytic Reduction of Nitric Oxide on Vanadiumâ€Based Catalysts. Angewandte Chemie, 2016, 128, 12168-12173.	2.0	22
78	Selective Catalytic Reduction of NOx. Catalysts, 2018, 8, 459.	3.5	22
79	Understanding the anomalous behavior of Vegard's law in Ce_{1âˆ’x}M_xO₂ (M = Sn and Ti; 0 < x â‰ 0.5) solid solutions. Physical Chemistry Chemical Physics, 2016, 18, 13974-13983.	2.8	21
80	Increasing the Sensitivity to Short-Lived Species in a Modulated Excitation Experiment. Analytical Chemistry, 2017, 89, 5801-5809.	6.5	21
81	Effect of SiO2 on co-impregnated V2O5/WO3/TiO2 catalysts for the selective catalytic reduction of NO with NH3. Catalysis Today, 2019, 320, 123-132.	4.4	21
82	HCN production from formaldehyde during the selective catalytic reduction of NOx with NH3 over V2O5/WO3-TiO2. Applied Catalysis B: Environmental, 2021, 281, 119462.	20.2	21
83	DFT modeling of the hydrolysis of isocyanic acid over the TiO2 anatase (101) surface: Adsorption of HNCO species. Surface Science, 2006, 600, 5158-5167.	1.9	20
84	Influence of Potassium Doping on the Activity and the Sulfur Poisoning Resistance of Soot Oxidation Catalysts. Catalysis Letters, 2006, 109, 49-53.	2.6	20
85	Nature of Synergy between BrÃ¸nsted and Lewis Acid Sites in Snâ€“Beta Zeolites for Polyoxymethylene Dimethyl Ethers Synthesis. ChemSusChem, 2019, 12, 4421-4431.	6.8	20
86	Water Inhibition of Oxymethylene Dimethyl Ether Synthesis over Zeolite H-Beta: A Combined Kinetic and <i>in Situ</i> ATR-IR Study. ACS Catalysis, 2020, 10, 8106-8119.	11.2	20
87	Decomposition of Urea in the SCR Process: Combination of DFT Calculations and Experimental Results on the Catalytic Hydrolysis of Isocyanic Acid on TiO2 and Al2O3. Topics in Catalysis, 2009, 52, 1740-1745.	2.8	19
88	Effect of Short Reducing Pulses on the Dynamic Structure, Activity, and Stability of Pd/Al₂O₃ for Wet Lean Methane Oxidation. ACS Catalysis, 2021, 11, 4870-4879.	11.2	19
89	Materials for thermohydrolysis of urea in a fluidized bed. Chemical Engineering Journal, 2009, 152, 167-176.	12.7	17
90	High energy X-ray diffraction and IR spectroscopy of Pt/Al2O3 during CO oxidation in a novel catalytic reactor cell. Journal of Lithic Studies, 2017, 3, 71-78.	0.5	17

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91	Increasing the activity of the Cu/CuAl₂O₄/Al₂O₃ catalyst for the RWGS through preserving the Cu²⁺ ions. Chemical Communications, 2021, 57, 1153-1156.	4.1	17
92	Synthesis and absolute stereostructure of dinaphth[2,1- c: 1â€²,2â€²-e]oxepin-3-(5H)-one. Tetrahedron, 1994, 50, 2831-2840.	1.9	15
93	DFT study of structural and vibrational properties of guanidinium derivatives. Computational and Theoretical Chemistry, 2009, 907, 16-21.	1.5	15
94	Development of a 3rd Generation SCR NH₃-Direct Dosing System for Highly Efficient DeNOx. SAE International Journal of Engines, 0, 5, 938-946.	0.4	15
95	CO Methanation for Synthetic Natural Gas Production. Chimia, 2015, 69, 608.	0.6	15
96	Promotion of Ammonium Formate and Formic Acid Decomposition over Au/TiO2 by Support Basicity under SCR-Relevant Conditions. ACS Catalysis, 2015, 5, 4772-4782.	11.2	15
97	Reversible Segregation of Ni in LaFe 0.8 Ni 0.2 O 3Â± Î´ During Coke Removal. ChemCatChem, 2018, 10, 4456-4464.	3.7	15
98	Ruthenium on phosphorous-modified alumina as an effective and stable catalyst for catalytic transfer hydrogenation of furfural. RSC Advances, 2020, 10, 11507-11516.	3.6	15
99	Transient simulation of NO_xreduction over a Fe-Zeolite catalyst in an NH₃-SCR system and study of the performance under different operating conditions. SAE International Journal of Fuels and Lubricants, 0, 5, 370-379.	0.2	14
100	Effect of ammonia on the decomposition of ammonium formate over Au/TiO 2 under oxidizing conditions relevant to SCR: Enhancement of formic acid decomposition rate and CO 2 production. Applied Catalysis A: General, 2014, 486, 219-229.	4.3	14
101	Selective synthesis of dimethyl ether on eco-friendly K10 montmorillonite clay. Applied Catalysis A: General, 2018, 560, 165-170.	4.3	14
102	Redox Dynamics of Active VO<i>_x</i> Sites Promoted by TiO<i>_x</i> during Oxidative Dehydrogenation of Ethanol Detected by <i>Operando</i> Quick XAS. Jacs Au, 2022, 2, 762-776.	7.9	14
103	Quantification of Gaseous Urea by FT-IR Spectroscopy and Its Application in Catalytic Urea Thermolysis. Topics in Catalysis, 2013, 56, 130-133.	2.8	13
104	Design of a Reactor Cell for Modulated Excitation Raman and DiffuseÂReflectance Studies of Selective Catalytic Reduction Catalysts. Emission Control Science and Technology, 2019, 5, 307-316.	1.5	13
105	Increased nickel exsolution from LaFe0.8Ni0.2O3 perovskite-derived CO2 methanation catalysts through strontium doping. Applied Catalysis A: General, 2020, 590, 117328.	4.3	13
106	One-pot synthesis of highly dispersed mesoporous Cu/ZrO2 catalysts for NH3-SCR. Catalysis Today, 2022, 384-386, 113-121.	4.4	13
107	Guanidinium Formate Decomposition on the (101) TiO₂-Anatase Surface: Combined Minimum Energy Reaction Pathway Calculations and Temperature-Programmed Decomposition Experiments. Journal of Physical Chemistry C, 2011, 115, 1195-1203.	3.1	12
108	Acidic Zirconia Mixed Oxides for NH₃-SCR Catalysts for PC and HD Applications. , 0, , .		12

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109	WOâ‚ƒ/CeOâ‚‚/TiOâ‚‚ Catalysts for Selective Catalytic Reduction of NOx by NHâ‚ƒ: Effect of the Synthesis Method. Chimia, 2015, 69, 220.	0.6	12
110	An operando emission spectroscopy study of Pt/Al₂O₃ and Pt/CeO₂/Al₂O₃. Physical Chemistry Chemical Physics, 2016, 18, 29268-29277.	2.8	12
111	Reaction pathways of methane abatement in Pd-Rh three-way catalyst in heavy duty applications: A combined approach based on exhaust analysis, model gas reactor and DRIFTS measurements. Chemical Engineering Journal, 2021, 422, 129932.	12.7	12
112	Techno-economic assessment of bioethanol production from lignocellulose by consortium-based consolidated bioprocessing at industrial scale. New Biotechnology, 2021, 65, 53-60.	4.4	12
113	<i>In situ</i> spectroscopic studies of the effect of water on the redox cycle of Cu ions in Cu-SSZ-13 during selective catalytic reduction of NO_{<i>x</i>}. Chemical Communications, 2022, 58, 6610-6613.	4.1	12
114	Determination of Effective Diffusion Coefficients through the Walls of Coated Diesel Particulate Filters. Industrial & Engineering Chemistry Research, 2009, 48, 10746-10750.	3.7	11
115	Development of a TG-FTIR system for investigations with condensable and corrosive gases. Journal of Thermal Analysis and Calorimetry, 2011, 105, 545-552.	3.6	11
116	Active Sites, Deactivation and Stabilization of Fe-ZSM-5 for the Selective Catalytic Reduction (SCR) of NO with NH3. Chimia, 2012, 66, 687-693.	0.6	11
117	Pre-Turbo Scr - Influence of Pressure on NOx Reduction. MTZ Worldwide, 2014, 75, 46-51.	0.1	11
118	Structural Modification of Ni/Î³â€Al₂O₃ with Boron for Enhanced Carbon Resistance during CO Methanation. ChemCatChem, 2015, 7, 3261-3265.	3.7	11
119	Water-assisted oxygen activation during gold-catalyzed formic acid decomposition under SCR-relevant conditions. Journal of Catalysis, 2017, 349, 197-207.	6.2	11
120	Poisoning of Mn-Ce/AC catalysts for low-temperature NH3-SCR of NO by K+ and its counter-ions (Clâˆ’/NO3âˆ’/SO42âˆ’). Applied Catalysis A: General, 2022, 638, 118636.	4.3	11
121	Synthesis of N,N-dimethylformamide by heterogeneous catalytic hydrogenation of supercritical carbon dioxide. Process Technol, 1996, , 91-96.	0.1	10
122	Theoretical studies of HNCO adsorption at stabilized iron complexes in the ZSM-5 framework. Microporous and Mesoporous Materials, 2013, 169, 97-102.	4.4	10
123	Mitigation of Secondary Organic Aerosol Formation from Log Wood Burning Emissions by Catalytic Removal of Aromatic Hydrocarbons. Environmental Science & Technology, 2018, 52, 13381-13390.	10.0	10
124	Investigating active phase loss from supported ruthenium catalysts during supercritical water gasification. Catalysis Science and Technology, 2021, 11, 7431-7444.	4.1	10
125	The influence of H2SO4 on soot oxidation with NO2. Carbon, 2012, 50, 2100-2109.	10.3	9
126	Hydrothermally Stable WO3/ZrO2â€"Ce0.6Zr0.4O2 Catalyst for the Selective Catalytic Reduction of NO with NH3. Topics in Catalysis, 2013, 56, 23-28.	2.8	9

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127	Insights into the Nature of the Active Sites of Tinâ€Montmorillonite for the Synthesis of Polyoxymethylene Dimethyl Ethers (OME). ChemCatChem, 2019, 11, 3010-3021.	3.7	9
128	On the relevance of P poisoning in real-world DOC aging. Applied Catalysis B: Environmental, 2021, 291, 120062.	20.2	9
129	Understanding the impact of poison distribution on the performance of Diesel oxidation catalysts. Applied Catalysis B: Environmental, 2021, 299, 120684.	20.2	8
130	Operando diffuse reflectance infrared detection of cyanide intermediate species during the reaction of formaldehyde with ammonia over V2O5/WO3-TiO2. Applied Catalysis B: Environmental, 2021, 298, 120629.	20.2	8
131	Measurement of Vanadium Emissions from SCR Catalysts by ICP-OES: Method Development and First Results. Emission Control Science and Technology, 2015, 1, 292-297.	1.5	7
132	Reduction of PdO/Al₂O₃ in Liquid Cyclohexane Followed <i>In Situ</i> by ATR-IR, High-Energy XRD, and XAS. Journal of Physical Chemistry C, 2021, 125, 16473-16482.	3.1	7
133	Calibration of a model for selective catalytic reduction with ammonia, including NO oxidation, and simulation of NO_x reduction over an Feâ€"zeolite catalyst under highly transient conditions. International Journal of Engine Research, 2013, 14, 107-121.	2.3	6
134	Harnstoffhydrolyse fÃ¼r die selektive katalytische Reduktion von NOx: Vergleich der FlÃ¼ssig- und Gasphasenzersetzung. Chemie-Ingenieur-Technik, 2013, 85, 625-631.	0.8	6
135	Ammonia Storage and Release in SCR Systems for Mobile Applications. Fundamental and Applied Catalysis, 2014, , 485-506.	0.9	6
136	Ammonium formate decomposition over Au/TiO₂: a unique case of preferential selectivity against NH₃ oxidation. Chemical Communications, 2014, 50, 6998-7000.	4.1	6
137	Mechanochemistry-assisted hydrolysis of softwood over stable sulfonated carbon catalysts in a semi-batch process. RSC Advances, 2019, 9, 33525-33538.	3.6	6
138	Mechanistic implications of lanthanum-modification on gold-catalyzed formic acid decomposition under SCR-relevant conditions. Applied Catalysis B: Environmental, 2019, 244, 709-718.	20.2	6
139	Restructuring Ni/Al2O3 by addition of Ga to shift product selectivity in CO2 hydrogenation: The role of hydroxyl groups. Journal of CO2 Utilization, 2022, 57, 101881.	6.8	6
140	Interconversion between Lewis and BrÃ¸nstedâ€"Lowry acid sites on vanadia-based catalysts. Physical Chemistry Chemical Physics, 2022, 24, 4555-4561.	2.8	6
141	Liquid-Phase Catalytic Decomposition of Novel Ammonia Precursor Solutions for the Selective Catalytic Reduction of NOx. Topics in Catalysis, 2013, 56, 19-22.	2.8	4
142	Operando XAS study of the influence of CO and NO on methane oxidation by Pd/Al₂O₃. Journal of Physics: Conference Series, 2016, 712, 012051.	0.4	4
143	Investigation on the Role of Pd, Pt, Rh in Methane Abatement for Heavy Duty Applications. Catalysts, 2022, 12, 373.	3.5	4
144	Ammonia measurement with a pH electrode in the ammonia/urea-SCR process. Measurement Science and Technology, 2007, 18, 771-778.	2.6	3

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145	Diesel Soot Catalyzes the Selective Catalytic Reduction of NOx with NH3. Topics in Catalysis, 2013, 56, 440-445.	2.8	3
146	Segregation of Nickel/Iron Bimetallic Particles from Lanthanum Doped Strontium Titanates to Improve Sulfur Stability of Solid Oxide Fuel Cell Anodes. Catalysts, 2019, 9, 332.	3.5	3
147	In Situ Infrared Spectroscopy of NO_{<i>x</i>} Reduction Catalysts: A Laboratory Exercise for In-Person and Virtual Learning. Journal of Chemical Education, 2022, 99, 2649-2655.	2.3	3
148	Selective Catalytic Reduction of Nitrogen Oxide â€” Part 1: Formates as Ammonia Storage Compounds. MTZ Worldwide, 2012, 73, 60-66.	0.1	2
149	Impact of Catalyst Geometry on Diffusion and Selective Catalytic Reduction Kinetics under Elevated Pressures. Chemie-Ingenieur-Technik, 2018, 90, 795-802.	0.8	2
150	Effect of an Al2O3-based binder on the structure of extruded Fe-ZSM-5. Catalysis Today, 2022, 387, 207-215.	4.4	2
151	Experimental and modeling-based analysis of reaction pathways on catalysts for natural gas engines under periodic lean/rich oscillations. Chemical Engineering Journal, 2022, 430, 132848.	12.7	2
152	Grafting of Alkali Metals on Fumed Silica for the Catalytic Dehydrogenation of Methanol to Formaldehyde. ChemCatChem, 2021, 13, 3864-3877.	3.7	1
153	Numerical Modeling of Hydroperoxyl-Mediated Oxidative Dehydrogenation of Formic Acid under SCR-Relevant Conditions. Industrial & Engineering Chemistry Research, 2018, 57, 10206-10215.	3.7	0