

Angelika Brckner

List of Publications by Citations

Source: <https://exaly.com/author-pdf/9406050/angelika-bruckner-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

245
papers

11,061
citations

54
h-index

97
g-index

259
ext. papers

12,334
ext. citations

7.8
avg, IF

6.29
L-index

#	Paper	IF	Citations
245	Nanoscale Fe ₂ O ₃ -based catalysts for selective hydrogenation of nitroarenes to anilines. <i>Science</i> , 2013 , 342, 1073-6	33.3	704
244	Heterogenized cobalt oxide catalysts for nitroarene reduction by pyrolysis of molecularly defined complexes. <i>Nature Chemistry</i> , 2013 , 5, 537-43	17.6	513
243	Supported Gold Nanoparticles from Quantum Dot to Mesoscopic Size Scale: Effect of Electronic and Structural Properties on Catalytic Hydrogenation of Conjugated Functional Groups. <i>Journal of the American Chemical Society</i> , 2000 , 122, 11430-11439	16.4	350
242	On the nature of different iron sites and their catalytic role in Fe-ZSM-5 DeNO _x catalysts: new insights by a combined EPR and UV/VIS spectroscopic approach. <i>Journal of Catalysis</i> , 2004 , 227, 384-397	7.3	334
241	Selective oxidation of alcohols to esters using heterogeneous Co ₃ O ₄ -N@C catalysts under mild conditions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10776-82	16.4	286
240	Tuning catalytic activity between homogeneous and heterogeneous catalysis: improved activity and selectivity of free nano-Fe ₂ O ₃ in selective oxidations. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8866-8	16.4	284
239	Supported gold nanoparticles: in-depth catalyst characterization and application in hydrogenation and oxidation reactions. <i>Catalysis Today</i> , 2002 , 72, 63-78	5.3	278
238	Selective reduction of NO with Fe-ZSM-5 catalysts of low Fe content. I. Relations between active site structure and catalytic performance. <i>Journal of Catalysis</i> , 2005 , 231, 314-330	7.3	258
237	Evolution of isomorphously substituted iron zeolites during activation: comparison of Fe-beta and Fe-ZSM-5. <i>Journal of Catalysis</i> , 2005 , 232, 318-334	7.3	220
236	A new view on the relations between tungsten and vanadium in V ₂ O ₅ WO ₃ /TiO ₂ catalysts for the selective reduction of NO with NH ₃ . <i>Journal of Catalysis</i> , 2012 , 286, 237-247	7.3	216
235	Green and efficient synthesis of sulfonamides catalyzed by nano-Ru/Fe(3)O(4). <i>Journal of the American Chemical Society</i> , 2009 , 131, 1775-9	16.4	215
234	Structure and Catalytic Properties of VO _x /MCM Materials for the Partial Oxidation of Methane to Formaldehyde. <i>Journal of Catalysis</i> , 2000 , 191, 384-400	7.3	199
233	Reduction of N ₂ O with CO over FeMFI zeolites: influence of the preparation method on the iron species and catalytic behavior. <i>Journal of Catalysis</i> , 2004 , 223, 13-27	7.3	191
232	Water reduction with visible light: synergy between optical transitions and electron transfer in Au-TiO(2) catalysts visualized by in situ EPR spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 11420-4	16.4	185
231	Selective reduction of NO with Fe-ZSM-5 catalysts of low Fe content: Part II. Assessing the function of different Fe sites by spectroscopic in situ studies. <i>Journal of Catalysis</i> , 2006 , 239, 173-186	7.3	170
230	Solar Hydrogen Production by Plasmonic Au/TiO ₂ Catalysts: Impact of Synthesis Protocol and TiO ₂ Phase on Charge Transfer Efficiency and H ₂ Evolution Rates. <i>ACS Catalysis</i> , 2015 , 5, 2137-2148	13.1	166
229	The role of NO ₂ in the selective catalytic reduction of nitrogen oxides over Fe-ZSM-5 catalysts: Active sites for the conversion of NO and of NO/NO ₂ mixtures. <i>Journal of Catalysis</i> , 2008 , 259, 96-103	7.3	134

228	Convenient and mild epoxidation of alkenes using heterogeneous cobalt oxide catalysts. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4359-63	16.4	122
227	Biomimetic iron-catalyzed asymmetric epoxidation of aromatic alkenes by using hydrogen peroxide. <i>Chemistry - A European Journal</i> , 2008 , 14, 7687-98	4.8	119
226	Nickel as a co-catalyst for photocatalytic hydrogen evolution on graphitic-carbon nitride (sg-CN): what is the nature of the active species?. <i>Chemical Communications</i> , 2016 , 52, 104-7	5.8	118
225	Efficient VO _x /Ce _{1-x} Ti _x O ₂ Catalysts for Low-Temperature NH ₃ -SCR: Reaction Mechanism and Active Sites Assessed by in Situ/Operando Spectroscopy. <i>ACS Catalysis</i> , 2017 , 7, 1693-1705	13.1	118
224	Structural Properties of Ag/TiO ₂ Catalysts for Acrolein Hydrogenation. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 5709-5717	3.4	118
223	Highly selective transfer hydrogenation of functionalised nitroarenes using cobalt-based nanocatalysts. <i>Green Chemistry</i> , 2015 , 17, 898-902	10	109
222	The effect of calcination temperature on structure and photocatalytic properties of Au/Pd nanoparticles supported on TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2014 , 152-153, 202-211	21.8	104
221	Nano-iron oxide-catalyzed selective oxidations of alcohols and olefins with hydrogen peroxide. <i>Journal of Molecular Catalysis A</i> , 2008 , 292, 28-35		103
220	Fast Electron Transfer and OH Formation: Key Features for High Activity in Visible-Light-Driven Ozonation with C ₃ N ₄ Catalysts. <i>ACS Catalysis</i> , 2017 , 7, 6198-6206	13.1	101
219	Photocatalytic hydrogen generation from water with iron carbonyl phosphine complexes: improved water reduction catalysts and mechanistic insights. <i>Chemistry - A European Journal</i> , 2011 , 17, 6425-36	4.8	98
218	Looking on Heterogeneous Catalytic Systems from Different Perspectives: Multitechnique Approaches as a New Challenge for In Situ Studies. <i>Catalysis Reviews - Science and Engineering</i> , 2003 , 45, 97-150	12.6	97
217	Cobalt-based nanocatalysts for green oxidation and hydrogenation processes. <i>Nature Protocols</i> , 2015 , 10, 916-26	18.8	96
216	Palladium-Catalyzed Trifluoromethylation of (Hetero)Arenes with CF ₃ Br. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 2782-6	16.4	95
215	Selective catalytic monoreduction of phthalimides and imidazolidine-2,4-diones. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9180-4	16.4	94
214	Fundamental and combinatorial approaches in the search for and optimisation of catalytic materials for the oxidative dehydrogenation of propane to propene. <i>Catalysis Today</i> , 2001 , 67, 369-378	5.3	91
213	Synthesis of Single Atom Based Heterogeneous Platinum Catalysts: High Selectivity and Activity for Hydrosilylation Reactions. <i>ACS Central Science</i> , 2017 , 3, 580-585	16.8	90
212	Identifying active sites for fast NH ₃ -SCR of NO/NO ₂ mixtures over Fe-ZSM-5 by operando EPR and UV-vis spectroscopy. <i>Journal of Catalysis</i> , 2014 , 316, 103-111	7.3	88
211	Selective reduction of amides to amines by boronic acid catalyzed hydrosilylation. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 11577-80	16.4	86

210	Engineering titania nanostructure to tune and improve its photocatalytic activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 3966-71	11.5	86
209	In situ electron paramagnetic resonance: a unique tool for analyzing structure-reactivity relationships in heterogeneous catalysis. <i>Chemical Society Reviews</i> , 2010 , 39, 4673-84	58.5	85
208	Structure-Activity Relationships in Bulk Polymeric and Sol-Gel-Derived Carbon Nitrides during Photocatalytic Hydrogen Production. <i>Chemistry of Materials</i> , 2014 , 26, 1727-1733	9.6	84
207	The role of Brønsted acidity in the SCR of NO over Fe-MFI catalysts. <i>Microporous and Mesoporous Materials</i> , 2008 , 111, 124-133	5.3	82
206	NOx adsorption on MnO ₂ /NaY composite: an in situ FTIR and EPR study. <i>Applied Catalysis B: Environmental</i> , 2001 , 32, 229-241	21.8	75
205	Donor-acceptor covalent organic frameworks for visible light induced free radical polymerization. <i>Chemical Science</i> , 2019 , 10, 8316-8322	9.4	72
204	Death and Rebirth: Photocatalytic Hydrogen Production by a Self-Organizing Copper/Iron System. <i>ACS Catalysis</i> , 2014 , 4, 1845-1849	13.1	71
203	Evidence of the vital role of the pore network on various catalytic conversions of N ₂ O over Fe-silicalite and Fe-SBA-15 with the same iron constitution. <i>Applied Catalysis B: Environmental</i> , 2006 , 62, 244-254	21.8	71
202	Ru-catalyzed oxidation of primary alcohols. <i>Journal of Molecular Catalysis A</i> , 2006 , 246, 85-99		70
201	Temperature-dependent N ₂ O decomposition over Fe-ZSM-5: Identification of sites with different activity. <i>Journal of Catalysis</i> , 2007 , 249, 67-78	7.3	67
200	Heterogeneous platinum-catalyzed C-H perfluoroalkylation of arenes and heteroarenes. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 4320-4	16.4	66
199	Cobalt Single-Atom Catalysts with High Stability for Selective Dehydrogenation of Formic Acid. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 15849-15854	16.4	65
198	Formation, Operation and Deactivation of Cr Catalysts in Ethylene Tetramerization Directly Assessed by Operando EPR and XAS. <i>ACS Catalysis</i> , 2013 , 3, 95-102	13.1	61
197	Monitoring Structure and Valence State of Chromium Sites during Catalyst Formation and Ethylene Oligomerization by in Situ EPR Spectroscopy. <i>Organometallics</i> , 2008 , 27, 3849-3856	3.8	60
196	Structural evolution of H ₄ PVMo ₁₁ O ₄₀ ·xH ₂ O during calcination and isobutane oxidation: New insights into vanadium sites by a comprehensive in situ approach. <i>Journal of Catalysis</i> , 2007 , 245, 369-380	7.3	58
195	The Structure of Active Sites in Me ₂ VO Catalysts (Me = Mg, Zn, Pb) and Its Influence on the Catalytic Performance in the Oxidative Dehydrogenation (ODH) of Propane. <i>Journal of Catalysis</i> , 2001 , 202, 45-58	7.3	57
194	Selective Alcohol Oxidation by a Copper TEMPO Catalyst: Mechanistic Insights by Simultaneously Coupled Operando EPR/UV-Vis/ATR-IR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11791-4	16.4	55
193	The dynamic nature of Cu sites in Cu-SSZ-13 and the origin of the seagull NO _x conversion profile during NH ₃ -SCR. <i>Reaction Chemistry and Engineering</i> , 2019 , 4, 1000-1018	4.9	54

192	Killing three birds with one stone--simultaneous operando EPR/UV-vis/Raman spectroscopy for monitoring catalytic reactions. <i>Chemical Communications</i> , 2005 , 1761-3	5.8	54
191	Insights into the mechanism of photocatalytic water reduction by DFT-supported in situ EPR/Raman spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 10246-50	16.4	53
190	Active sites for NO reduction over Fe-ZSM-5 catalysts. <i>Chemical Communications</i> , 2005 , 805-7	5.8	53
189	How Temperature Affects the Mechanism of CO Oxidation on Au/TiO ₂ : A Combined EPR and TAP Reactor Study of the Reactive Removal of TiO ₂ Surface Lattice Oxygen in Au/TiO ₂ by CO. <i>ACS Catalysis</i> , 2016 , 6, 5005-5011	13.1	53
188	E.p.r. study on the incorporation of Fe(III) ions in ZSM-5 zeolites in dependence on the preparation conditions. <i>Zeolites</i> , 1992 , 12, 380-385		52
187	Cyclic Group 15 Radical Cations. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 7426-30	16.4	51
186	V ₂ O ₅ -WO ₃ /TiO ₂ catalysts under thermal stress: Responses of structure and catalytic behavior in the selective catalytic reduction of NO by NH ₃ . <i>Applied Catalysis B: Environmental</i> , 2017 , 217, 365-377	21.8	48
185	The role of ozone and influence of band structure in WO photocatalysis and ozone integrated process for pharmaceutical wastewater treatment. <i>Journal of Hazardous Materials</i> , 2018 , 360, 481-489	12.8	48
184	Synthesis and application of carbonated fatty acid esters from carbon dioxide including a life cycle analysis. <i>ChemSusChem</i> , 2014 , 7, 1133-9	8.3	47
183	Simultaneous operando EPR/UV-vis/laser Raman spectroscopy [A powerful tool for monitoring transition metal oxide catalysts during reaction. <i>Catalysis Today</i> , 2006 , 113, 16-24	5.3	47
182	Heterostructured Copper-Ceria and Iron-Ceria Nanorods: Role of Morphology, Redox, and Acid Properties in Catalytic Diesel Soot Combustion. <i>Langmuir</i> , 2018 , 34, 2663-2673	4	46
181	Novel biomimetic iron-catalysts for environmentally benign epoxidations of olefins. <i>Tetrahedron Letters</i> , 2007 , 48, 6339-6342	2	45
180	Simultaneous combination of in situ-EPR/UV-VIS/on line GC: a novel setup for investigating transition metal oxide catalysts under working conditions. <i>Chemical Communications</i> , 2001 , 2122-3	5.8	44
179	Gallic Acid-Promoted SET Process for Cyclobutanone Oximes Activation and (Carbonylative-)Alkylation of Olefins. <i>ACS Catalysis</i> , 2018 , 8, 10926-10930	13.1	44
178	Selective Catalytic Reduction of NO by NH ₃ over Vanadium-Containing Zeolites. <i>Journal of Catalysis</i> , 1998 , 175, 48-61	7.3	43
177	The role of different Ni sites in supported nickel catalysts for butene dimerization under industry-like conditions. <i>Journal of Catalysis</i> , 2009 , 266, 120-128	7.3	42
176	The incorporation of iron ions in AlPO ₄ -5 molecular sieves after microwave synthesis studied by EPR and Mössbauer spectroscopy. <i>Microporous and Mesoporous Materials</i> , 1998 , 20, 207-215	5.3	41
175	In situ-electron spin resonance: a useful tool for the investigation of vanadium phosphate catalysts (VPO) under working conditions. <i>Catalysis Today</i> , 1996 , 32, 215-222	5.3	41

174	Dynamics of redox behavior of nano-sized VO _x species over Tiβi-MCM-41 from time-resolved in situ UV/Vis analysis. <i>Journal of Catalysis</i> , 2009 , 265, 8-18	7.3	40
173	Oxidation and selective reduction of NO over Fe-ZSM-5 [How related are these reactions?]. <i>Journal of Catalysis</i> , 2014 , 311, 199-211	7.3	38
172	Structure-reactivity relationships in VO _x /CexZr1-xO ₂ catalysts used for low-temperature NH ₃ -SCR of NO. <i>Applied Catalysis B: Environmental</i> , 2016 , 197, 159-167	21.8	38
171	Spin density distribution after electron transfer from triethylamine to an [Ir(ppy) ₂ (bpy)] ⁺ photosensitizer during photocatalytic water reduction. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 4789-96	3.6	37
170	Iron site modification upon alkaline treatment of Fe-ZSM-5 zeolites [Opportunities for improved N ₂ O decomposition activity. <i>Journal of Catalysis</i> , 2006 , 243, 212-216	7.3	37
169	Visible-Light Photocatalytic Ozonation Using Graphitic CN Catalysts: A Hydroxyl Radical Manufacturer for Wastewater Treatment. <i>Accounts of Chemical Research</i> , 2020 , 53, 1024-1033	24.3	36
168	Selective gas-phase oxidation of polycyclic aromatic hydrocarbons on vanadium oxide-based catalysts. <i>Applied Catalysis A: General</i> , 1997 , 157, 311-334	5.1	36
167	SCR and NO oxidation over Fe-ZSM-5 [The influence of the Fe content. <i>Catalysis Today</i> , 2015 , 258, 337-346]	3.3	35
166	Linking Simultaneous In Situ WAXS/SAXS/Raman with Raman/ATR/UV-Vis Spectroscopy: Comprehensive Insight into the Synthesis of Molybdate Catalyst Precursors. <i>Topics in Catalysis</i> , 2009 , 52, 1350-1359	2.3	35
165	Reaction Monitoring of Heterogeneously Catalyzed Hydrogenation of Imines by Coupled ATR-FTIR, UV/Vis, and Raman Spectroscopy. <i>ChemCatChem</i> , 2010 , 2, 273-280	5.2	35
164	A new approach to study the gas-phase oxidation of toluene: probing active sites in vanadia-based catalysts under working conditions. <i>Applied Catalysis A: General</i> , 2000 , 200, 287-297	5.1	35
163	Mechanism of the selective reduction of NO _x by methane over Co-ZSM-5. <i>Applied Catalysis B: Environmental</i> , 2018 , 230, 184-193	21.8	34
162	Monitoring transition metal ions (TMI) in oxide catalysts during (re)action: the power of operando EPR. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 4461-4472	3.6	34
161	Microwave synthesis of and MnAPO-5-stability of Mn ²⁺ ions on framework positions. <i>Microporous Materials</i> , 1996 , 7, 139-149		34
160	Impact of redox properties on dehydration of glycerol to acrolein over heteropolyacids assessed by operando-EPR spectroscopy. <i>Applied Catalysis A: General</i> , 2011 , 391, 102-109	5.1	33
159	Elucidating structure and function of active sites in VO _x /TiO ₂ catalysts during oxyhydrative scission of 1-butene by in situ and operando spectroscopy. <i>Applied Catalysis A: General</i> , 2004 , 269, 237-248	5.1	33
158	Investigation of vanadium phosphorus oxide catalysts (VPO) during toluene ammoxidation: new mechanistic insights by in situ EPR. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996 , 92, 4257-4263		33
157	Origins of high catalyst loading in copper(i)-catalysed Ullmann-Goldberg C-N coupling reactions. <i>Chemical Science</i> , 2017 , 8, 7203-7210	9.4	32

156	Catalytic performance of vanadyl pyrophosphate in the partial oxidation of toluene to benzaldehyde. <i>Catalysis Letters</i> , 1999 , 59, 61-65	2.8	32
155	Bimetallic PdAu@Oac/SiO ₂ catalysts for vinyl acetate monomer (VAM) synthesis: Insights into deactivation under industrial conditions. <i>Journal of Catalysis</i> , 2009 , 262, 314-323	7.3	31
154	Palladium-Catalyzed Trifluoromethylation of (Hetero)Arenes with CF ₃ Br. <i>Angewandte Chemie</i> , 2016 , 128, 2832-2836	3.6	31
153	Light to Hydrogen: Photocatalytic Hydrogen Generation from Water with Molecularly-Defined Iron Complexes. <i>Inorganics</i> , 2017 , 5, 14	2.9	30
152	Tracing Active Sites in Supported Ni Catalysts during Butene Oligomerization by Operando Spectroscopy under Pressure. <i>ACS Catalysis</i> , 2016 , 6, 8224-8228	13.1	30
151	Synthesis of Cp* ₂ Ti(OTf) and Its Reaction with Water. <i>European Journal of Inorganic Chemistry</i> , 2011 , 2011, 627-631	2.3	30
150	In situ investigation of active sites in zirconia-supported chromium oxide catalysts during the aromatization of n-octane. <i>Catalysis Letters</i> , 1999 , 60, 183-189	2.8	29
149	The crystal structure of VVOPO ₄ and its relationship to VOPO ₄ . <i>Solid State Sciences</i> , 2009 , 11, 1258-1264	3.4	28
148	On the nature and reactivity of active oxygen species formed from O ₂ and N ₂ O on VO _x /MCM-41 used for oxidative dehydrogenation of propane. <i>Journal of Catalysis</i> , 2010 , 274, 111-116	7.3	28
147	Redox interaction of ammonia with (VO) ₂ P ₂ O ₇ . <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995 , 91, 725-731		28
146	Vinylboron Self-Promoted Carbonylative Coupling with Cyclobutanone Oxime Esters. <i>Organic Letters</i> , 2019 , 21, 1766-1769	6.2	27
145	Photoassisted Ti-O activation in a decamethyltitanocene dihydroxido complex: insights into the elemental steps of water splitting. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6272-5	16.4	27
144	Advanced Charge Utilization from NaTaO ₃ Photocatalysts by Multilayer Reduced Graphene Oxide. <i>Chemistry of Materials</i> , 2014 , 26, 4705-4711	9.6	26
143	Highly dispersed VO _x species on mesoporous supports: Promising catalysts for the oxidative dehydrogenation (ODH) of propane. <i>Studies in Surface Science and Catalysis</i> , 2002 , 1141-1148	1.8	26
142	Investigation of zeolites by photoelectron and ion scattering spectroscopy Part IV XPS studies of vanadium-modified zeolites. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1998 , 94, 2033-2041		26
141	Selective Alcohol Oxidation by a Copper TEMPO Catalyst: Mechanistic Insights by Simultaneously Coupled Operando EPR/UV-Vis/ATR-IR Spectroscopy. <i>Angewandte Chemie</i> , 2015 , 127, 11957-11960	3.6	25
140	Solid acid catalysts for dehydration of glycerol to acrolein in gas phase. <i>Journal of Materials Science</i> , 2011 , 46, 7160-7168	4.3	25
139	In-situ electron spin resonance study of vanadium phosphate catalysts during the selective oxidation of n-butane to maleic anhydride. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1996 , 115, 179-186	5.1	25

- 138 From sunflower oil toward 1,19-diester: Mechanistic elucidation. *Journal of Catalysis*, **2013**, 297, 44-55 7.3 24
- 137 H₂ Generation with (Mixed) Plasmonic Cu/Au-TiO₂ Photocatalysts: Structure-Reactivity Relationships Assessed by in situ Spectroscopy. *ChemCatChem*, **2017**, 9, 1025-1031 5.2 23
- 136 Catalytic and Mechanistic Investigation of Polyaniline Supported PtO₂ Nanoparticles: A Combined in situ/operando EPR, DRIFTS, and EXAFS Study. *Journal of Physical Chemistry C*, **2008**, 112, 19555-19559 3.8 23
- 135 Synthesis and characterization of VAPSO-44 and VAPSO-5. *Journal of the Chemical Society, Faraday Transactions*, **1995**, 91, 1173-1178 23
- 134 Wasserreduktion mit sichtbarem Licht: In-situ-EPR-Spektroskopie zeigt die Synergie zwischen optischen Übergängen und Elektronentransfer in Au-TiO₂-Katalysatoren. *Angewandte Chemie*, **2013**, 125, 11631-11635 3.6 22
- 133 Structure of vanadium sites in VPO catalysts and their influence on the catalytic performance in selective O- and N-insertion reactions. *Journal of the Chemical Society, Faraday Transactions*, **1998**, 94, 2221-2225 22
- 132 Titanocene(III) complexes with 2-phosphinoaryloxide ligands for the catalytic dehydrogenation of dimethylamine borane. *Dalton Transactions*, **2015**, 44, 12103-11 4.3 21
- 131 Transition metal oxide/carbon composite catalysts for n-alkane aromatization: structure and catalytic properties. *Applied Catalysis A: General*, **2001**, 208, 381-392 5.1 21
- 130 Practical and General Manganese-Catalyzed Carbonylative Coupling of Alkyl Iodides with Amides. *ChemCatChem*, **2017**, 9, 915-919 5.2 20
- 129 The Role of NO₂ in the Fast NH₃-SCR of NO_x: A Combined In Situ FTIR and EPR Spectroscopic Study. *Topics in Catalysis*, **2017**, 60, 1641-1652 2.3 20
- 128 Deactivation of a commercial catalyst in the epoxidation of ethylene to ethylene oxide: Basis for accelerated testing. *Journal of Catalysis*, **2004**, 224, 187-196 7.3 20
- 127 Convenient and Mild Epoxidation of Alkenes Using Heterogeneous Cobalt Oxide Catalysts. *Angewandte Chemie*, **2014**, 126, 4448-4452 3.6 19
- 126 Einblicke in den Mechanismus der photokatalytischen Wasserreduktion durch DFT-gestützte In-situ-EPR/Raman-Spektroskopie. *Angewandte Chemie*, **2011**, 123, 10429-10433 3.6 19
- 125 Sustainable Co-Synthesis of Glycolic Acid, Formamides and Formates from 1,3-Dihydroxyacetone by a Cu/Al O Catalyst with a Single Active Sites. *Angewandte Chemie - International Edition*, **2019**, 58, 5251-5255 16.4 18
- 124 Practical Catalytic Cleavage of C(sp³)-C(sp²) Bonds in Amines. *Angewandte Chemie - International Edition*, **2019**, 58, 10693-10697 16.4 18
- 123 Metal vanadate catalysts for the ammoxidation of 2-methylpyrazine to 2-cyanopyrazine. *Applied Catalysis A: General*, **2012**, 443-444, 111-118 5.1 18
- 122 Key properties promoting high activity and stability of supported PdSb/TiO₂ catalysts in the acetoxylation of toluene to benzyl acetate. *Applied Catalysis A: General*, **2011**, 398, 104-112 5.1 18
- 121 Spin exchange in vanadium-containing catalysts studied by in situ-EPR: a sensitive monitor for disorder-related activity. *Topics in Catalysis*, **2006**, 38, 133-139 2.3 18

120	Effect of support synthesis methods on structure and performance of VO _x /CeO ₂ catalysts in low-temperature NH ₃ -SCR of NO. <i>Catalysis Communications</i> , 2016 , 84, 171-174	3.2	17
119	Chapter 1: In situ electron paramagnetic resonance (EPR) as a unique tool for analysing structure and reaction behaviour of paramagnetic sites in model and real catalysts. <i>Catalysis</i> , 1-32	1.6	17
118	Electron Paramagnetic Resonance: A Powerful Tool for Monitoring Working Catalysts. <i>Advances in Catalysis</i> , 2007 , 51, 265-308	2.4	17
117	Alkaline treatment of iron-containing MFI zeolites. Influence on mesoporosity development and iron speciation. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 20369-78	3.4	17
116	Deactivation kinetics of Ag/Al ₂ O ₃ catalyst for ethylene epoxidation. <i>Journal of Catalysis</i> , 2004 , 226, 334-342	3.4	17
115	Permanent blockade of in situ-generated acid Brønsted sites of vanadyl pyrophosphate catalysts by pyridine during the partial oxidation of toluene. <i>Chemical Communications</i> , 1999 , 1169-1170	5.8	17
114	Simultaneously Tuning the Defects and Surface Properties of TaN Nanoparticles by Mg-Zr Codoping for Significantly Accelerated Photocatalytic H ₂ Evolution. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10059-10064	16.4	17
113	Ni-In Synergy in CO Hydrogenation to Methanol. <i>ACS Catalysis</i> , 2021 , 11, 11371-11384	13.1	17
112	Heterogeneous Platinum-Catalyzed C-H Perfluoroalkylation of Arenes and Heteroarenes. <i>Angewandte Chemie</i> , 2015 , 127, 4394-4398	3.6	16
111	In situ EPR study of chemical reactions in Q-band at higher temperatures: a challenge for elucidating structure-reactivity relationships in catalysis. <i>Journal of the American Chemical Society</i> , 2010 , 132, 9873-80	16.4	16
110	Levitated Droplets as Model System for Spray Drying of Complex Oxides: A Simultaneous in Situ X-ray Diffraction/Raman Study. <i>Chemistry of Materials</i> , 2011 , 23, 5425-5431	9.6	16
109	Synthesis and characterization of Fe ₂ O ₃ containing aluminas by thermal decomposition of modified ammonium dawsonite. <i>Journal of Materials Chemistry</i> , 2001 , 11, 2498-2503		16
108	Effects of Imidazole-Type Ligands in Cu/TEMPO-Mediated Aerobic Alcohol Oxidation. <i>Inorganic Chemistry</i> , 2017 , 56, 684-691	5.1	15
107	Highly selective visible light-induced Ti-O bond splitting in an ansa-titanocene dihydroxido complex. <i>Chemical Communications</i> , 2015 , 51, 3065-8	5.8	15
106	Tailoring the synthesis of supported Pd catalysts towards desired structure and size of metal particles. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 4833-42	3.6	15
105	Deactivation and oxidative regeneration of VTiSbSiO _x catalyst for ammoxidation of 3-picoline to nicotinonitrile. <i>Applied Catalysis A: General</i> , 2008 , 335, 196-203	5.1	15
104	Combining accelerated activity tests and catalyst characterization: a time-saving way to study the deactivation of vinylacetate catalysts. <i>Applied Catalysis A: General</i> , 2004 , 268, 67-76	5.1	15
103	Selective oxidation of p-substituted toluenes to the corresponding benzaldehydes over (VO) ₂ P ₂ O ₇ : an in situ FTIR and EPR study. <i>Journal of Molecular Catalysis A</i> , 2000 , 162, 391-399		15

102	Synergistic effect of VOx and MnOx surface species for improved performance of V2O5/Ce0.5Ti0.5MnxO2 catalysts in low-temperature NH3-SCR of NO. <i>Catalysis Science and Technology</i> , 2018 , 8, 6360-6374	5.5	15
101	Number of Reactive Charge Carriers: A Hidden Linker between Band Structure and Catalytic Performance in Photocatalysts. <i>ACS Catalysis</i> , 2019 , 9, 8852-8861	13.1	14
100	Hydrogen generation by water reduction with [Cp*(2) Ti(OTf)]: identifying elemental mechanistic steps by combined in situ FTIR and in situ EPR spectroscopy supported by DFT calculations. <i>Chemistry - A European Journal</i> , 2013 , 19, 13705-13	4.8	14
99	On the Nature of the Active Species in Cesium-Doped V2O5-Fe2O3 Catalysts. <i>Journal of Catalysis</i> , 1995 , 154, 11-23	7.3	14
98	Rutile: A superior support for highly selective and stable Pd-based catalysts in the gas-phase acetoxylation of toluene. <i>Journal of Catalysis</i> , 2013 , 297, 256-263	7.3	13
97	Impact of phosphorus and nitrogen on structure and catalytic performance of VZrPON oxynitrides in the ammoxidation of 3-picoline. <i>Journal of Catalysis</i> , 2011 , 277, 196-207	7.3	13
96	Spin exchange in solutions of TEMPOL in n-octanol and 1-methyl-3-octylimidazolium hexafluorophosphate in the temperature range from 300 to 500 K. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 2939-52	2.8	13
95	In situ electron paramagnetic resonance spectroscopy for catalysis. <i>Nature Reviews Methods Primers</i> , 2021 , 1,		13
94	A Model of a Closed Cycle of Water Splitting Using ansa-Titanocene(III/IV) Triflate Complexes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 16187-95	16.4	12
93	Glycerol as a Building Block for Prochiral Aminoketone, N-Formamide, and N-Methyl Amine Synthesis. <i>ChemSusChem</i> , 2016 , 9, 3133-3138	8.3	11
92	The nature of strong Brønsted acidity of Ni-SMM clay. <i>Applied Catalysis B: Environmental</i> , 2016 , 191, 62-75	21.8	11
91	Deactivation and regeneration studies of a PdSb/TiO2 catalyst used in the gas-phase acetoxylation of toluene. <i>Journal of Catalysis</i> , 2011 , 282, 103-111	7.3	11
90	Vanadium-Containing Oxynitrides: Effective Catalysts for the Ammoxidation of 3-Picoline. <i>ChemCatChem</i> , 2009 , 1, 485-491	5.2	11
89	Investigations of alkali doped Fe2O3-V2O5 catalysts by transmission and conversion electron Mössbauer spectroscopy 1998 , 111, 51-56		11
88	Structure-activity relationships in supported VOx catalysts for the oxyhydrative scission (OHS) of 1-butene and n-butane to acetic acid. <i>Catalysis Today</i> , 2005 , 99, 123-129	5.3	11
87	Effect of Formaldehyde in Selective Catalytic Reduction of NO by Ammonia (NH-SCR) on a Commercial VO-WO/TiO Catalyst under Model Conditions. <i>Environmental Science & Technology</i> , 2020 , 54, 11753-11761	10.3	11
86	Influence of MoS2 on Activity and Stability of Carbon Nitride in Photocatalytic Hydrogen Production. <i>Catalysts</i> , 2019 , 9, 695	4	10
85	The influence of substituent effects on spectroscopic properties examined on benzylidene aniline-type imines. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012 , 95, 18-24	4.4	10

84	Four-membered heterometallacyclic d ⁰ and d ¹ complexes of Group 4 metallocenes with amidato ligands. <i>Chemistry - A European Journal</i> , 2014 , 20, 7752-8	4.8	10
83	Coupled vanadyl centres in vanadium phosphorus oxide catalysts: Essential structural units for effective catalytic performance in the ammoxidation of methylaromatics. <i>Studies in Surface Science and Catalysis</i> , 1997 , 110, 919-928	1.8	10
82	Controlling the O-Vacancy Formation and Performance of Au/ZnO Catalysts in CO ₂ Reduction to Methanol by the ZnO Particle Size. <i>ACS Catalysis</i> , 2021 , 11, 9022-9033	13.1	10
81	Multivariate Analysis of Coupled Operando EPR/XANES/EXAFS/UV-Vis/ATR-IR Spectroscopy: A New Dimension for Mechanistic Studies of Catalytic Gas-Liquid Phase Reactions. <i>Chemistry - A European Journal</i> , 2020 , 26, 7395-7404	4.8	9
80	Ruthenium(III)/phosphine/pyridine complexes applied in the hydrogenation reactions of polar and apolar double bonds. <i>Journal of Molecular Structure</i> , 2016 , 1111, 84-89	3.4	9
79	Lichtinduzierte Ti-O-Aktivierung in einem Decamethyltitanocendihydroxido-Komplex [Einblicke in die Elementarschritte der Wasserspaltung. <i>Angewandte Chemie</i> , 2012 , 124, 6377-6380	3.6	9
78	Molecular Level Insights into the Structure of Active Sites of VAlO Mixed Oxides in Propane Ammoxidation. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 22926-22938	3.8	9
77	The structure of catalytically active vanadium sites in V ⁵⁺ oxides: an EPR study of asynthesized and tungsten promoted working catalysts. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999 , 158, 107-113	5.1	9
76	EPR studies of caesium-doped V ₂ O ₅ /Fe ₂ O ₃ catalysts: new evidence for active centres. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994 , 90, 3159-3165		9
75	Investigation of redox reactions proceeding during the hardening process of sulfide containing cement. <i>Cement and Concrete Research</i> , 1992 , 22, 1161-1169	10.3	9
74	Promoting Photocatalytic Hydrogen Evolution Activity of Graphitic Carbon Nitride with Hole-Transfer Agents. <i>ChemSusChem</i> , 2021 , 14, 306-312	8.3	9
73	Active Sites for Light Driven Proton Reduction in Y ₂ Ti ₂ O ₇ and CsTaWO ₆ Pyrochlore Catalysts Detected by In Situ EPR. <i>Topics in Catalysis</i> , 2015 , 58, 769-775	2.3	8
72	Highly strained heterometallacycles of Group 4 metallocenes with bis(diphenylphosphino)methanide ligands. <i>Chemistry - A European Journal</i> , 2013 , 19, 7568-74	4.8	8
71	Impact of Co-Components on the State of Pd and the Performance of Supported Pd/TiO ₂ Catalysts in the Gas-Phase Acetoxylation of Toluene. <i>ChemCatChem</i> , 2011 , 3, 1893-1901	5.2	8
70	Oxidation of alcohols using RuMnCe catalysts. <i>Applied Catalysis A: General</i> , 2009 , 366, 212-219	5.1	8
69	Ammoxidation of toluene on vanadyl polyphosphates-VO(PO ₃) ₂ , 2. Catalytic properties. <i>Reaction Kinetics and Catalysis Letters</i> , 1998 , 63, 245-251		8
68	Selective oxidation of toluene to benzaldehyde: Investigation of structure-reactivity relationships by in situ-methods. <i>Studies in Surface Science and Catalysis</i> , 2000 , 359-364	1.8	8
67	Impact of Al Activators on Structure and Catalytic Performance of Cr Catalysts in Homogeneous Ethylene Oligomerization [A Multitechnique in situ/operando Study. <i>ChemCatChem</i> , 2020 , 12, 1025-1035 ^{5.2}		8

66	Alcohol Synthesis from CO, H ₂ , and Olefins over Alkali-Promoted Au Catalysts-A Catalytic and In situ FTIR Spectroscopic Study. <i>ChemSusChem</i> , 2019 , 12, 651-660	8.3	8
65	Relations between Structure, Activity and Stability in C ₃ N ₄ Based Photocatalysts Used for Solar Hydrogen Production. <i>Catalysts</i> , 2018 , 8, 52	4	8
64	From the Precursor to the Active State: Monitoring Metamorphosis of Electrocatalysts During Water Oxidation by In Situ Spectroscopy. <i>ChemElectroChem</i> , 2017 , 4, 2117-2122	4.3	7
63	Active Sites of the Selective Catalytic Reduction of NO by NH ₃ over Fe-ZSM-5: Combining Reaction Kinetics with Postcatalytic Mössbauer Spectroscopy at Cryogenic Temperatures. <i>ACS Catalysis</i> , 2020 , 10, 3119-3130	13.1	7
62	New Insights into the Nature of Co-components and Their Impact on Pd Structure: X-ray Absorption Studies on Toluene Acetoxylation Catalysts. <i>Chemistry - A European Journal</i> , 2015 , 21, 15280-9	4.8	7
61	In-situ-EPR-Spektroskopie in der heterogenen Katalyse: Stiefkind oder Lichtblick?. <i>Chemie-Ingenieur-Technik</i> , 2014 , 86, 1871-1882	0.8	7
60	Tuning the electronic and spin complexity in organic-inorganic molecular hybrid compounds. <i>Chemistry - A European Journal</i> , 2012 , 18, 6433-6	4.8	7
59	Elucidating the Directing Effect of Lewis Acids on the Reaction Pathway in Formal [3+3] Cyclocondensation Reactions: A Comprehensive In Situ Spectroscopic Study. <i>ChemCatChem</i> , 2011 , 3, 1459-1468	5.2	7
58	Ammoxidation of methylaromatics over NH ₄ ⁺ -containing vanadium phosphate catalysts: New mechanistic insights. <i>Studies in Surface Science and Catalysis</i> , 1997 , 108, 377-384	1.8	7
57	Fe-zsm-5 catalysts for the selective reduction of no: Influence of preparation route on structure and catalytic activity. <i>Studies in Surface Science and Catalysis</i> , 2004 , 154, 2484-2492	1.8	7
56	Determining the Location of Co ²⁺ in Zeolites by UV-Vis Diffuse Reflection Spectroscopy: A Critical View. <i>Catalysts</i> , 2020 , 10, 123	4	7
55	Conversion of Valerolactone to Ethyl Valerate over Metal Promoted Ni/ZSM-5 Catalysts: Influence of Ni ⁰ /Ni ²⁺ Heterojunctions on Activity and Product Selectivity. <i>ChemCatChem</i> , 2020 , 12, 1341-1349	5.2	7
54	Influence of Sb on the Structure and Performance of Pd-Based Catalysts: An X-ray Spectroscopic Study. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 3854-3861	3.8	6
53	Cobalt Single-Atom Catalysts with High Stability for Selective Dehydrogenation of Formic Acid. <i>Angewandte Chemie</i> , 2020 , 132, 15983-15988	3.6	6
52	Control of Bridging Ligands in [(V ₂ O ₃) ₂ (RXO ₃) ₄ F] _n Cage Complexes: A Unique Way To Tune Their Chemical Properties. <i>Organometallics</i> , 2014 , 33, 4905-4910	3.8	6
51	The Impact of Reaction Pressure on the Catalytic Performance of the Pd/Sb/TiO ₂ Catalyst in the Acetoxylation of Toluene into Benzyl Acetate. <i>ChemCatChem</i> , 2013 , 5, 185-191	5.2	6
50	Identification of reaction intermediates in AlCl ₃ -mediated cyclocondensation reactions by simultaneous in situ ATR-FTIR and UV-Vis spectroscopy. <i>Tetrahedron</i> , 2013 , 69, 3338-3347	2.4	6
49	Flying droplets as model system for spray drying: An in situ synchrotron X-ray scattering study on complex oxides catalyst precursors. <i>Catalysis Today</i> , 2010 , 155, 326-330	5.3	6

48	Structure-activity relationships in VO _x /TiO ₂ catalysts for the oxyhydrative scission of 1-butene and n-butane to acetic acid as examined by in situ-spectroscopic methods and catalytic tests. <i>Catalysis Today</i> , 2006 , 112, 78-81	5.3	6
47	Zur Bildung von Difluorhalogenmethylarsanen durch Reaktion von Difluorcarben mit Arsenhalogeniden. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 1990 , 588, 26-32	1.3	6
46	Selective nickel-catalyzed fluoroalkylations of olefins. <i>Chemical Communications</i> , 2020 , 56, 15157-15160	5.8	6
45	Electronic metal-support interactions and their promotional effect on CO ₂ methanation on Ru/ZrO ₂ catalysts. <i>Journal of Catalysis</i> , 2021 , 400, 407-420	7.3	6
44	TiO ₂ -anatase-supported oxorhenate catalysts prepared by oxidative redispersion of metal ReO ₄ for methanol conversion to methylal: A multi-technique in situ/operando study. <i>Comptes Rendus Chimie</i> , 2014 , 17, 808-817	2.7	5
43	Scalable and selective deuteration of (hetero)arenes.. <i>Nature Chemistry</i> , 2022 ,	17.6	5
42	Rhodium-catalyzed carbonylative coupling of alkyl halides with thiols: a radical process faster than easier nucleophilic substitution. <i>Chemical Communications</i> , 2021 , 57, 1466-1469	5.8	5
41	Role of Surface Acidity in Formation and Performance of Active Ni Single Sites in Supported Catalysts for Butene Dimerization: A View inside by Operando EPR and In Situ FTIR Spectroscopy. <i>ACS Catalysis</i> , 2021 , 11, 3541-3552	13.1	5
40	Tiny Species with Big Impact: High Activity of Cu Single Atoms on CeO ₂ /TiO ₂ Deciphered by Operando Spectroscopy. <i>ACS Catalysis</i> , 2021 , 11, 10933-10949	13.1	5
39	Ternary VZrAlON Oxynitrides - Efficient Catalysts for the Ammoxidation of 3-Picoline. <i>ACS Catalysis</i> , 2014 , 4, 2687-2695	13.1	4
38	Synthesis of a functionalized chromane derivative via a TiCl ₄ -mediated cyclization reaction. <i>Monatshefte Für Chemie</i> , 2013 , 144, 421-428	1.4	4
37	Characterisation of the active phase in caesium-doped iron-vanadium-oxide catalysts for the selective oxidation of polyaromatics. <i>Catalysis Letters</i> , 1997 , 43, 107-115	2.8	4
36	Ammoxidation of toluene on vanadyl polyphosphates-VO(PO ₃) ₂ , 1. synthesis and characterization of the parent samples. <i>Reaction Kinetics and Catalysis Letters</i> , 1998 , 63, 225-233		4
35	Zentrenstruktur und Vergiftungswirkungen bei der selektiven katalytischen Reduktion von NO mit Ammoniak an Fe-ZSM-5-Katalysatoren. <i>Chemie-Ingenieur-Technik</i> , 2007 , 79, 871-877	0.8	4
34	The Effect of Iron and Vanadium in VO _y /Ce _{1-x} Fe _x O ₂ -Catalysts in Low-Temperature Selective Catalytic Reduction of NO _x by Ammonia. <i>ChemCatChem</i> , 2020 , 12, 2440-2451	5.2	4
33	Insight into the properties of MnO-CoO-CeO catalyst series for the selective catalytic reduction of NO by CH ₄ and NH ₃ . <i>Science of the Total Environment</i> , 2021 , 784, 147394	10.2	4
32	DeNO _x active iron sites in iron loaded ZSM-5 by a multitechnique analysis of a complex heterogeneous catalyst based on Mössbauer spectroscopy. <i>Hyperfine Interactions</i> , 2017 , 238, 1	0.8	3
31	Catalytic properties of nitrided V/Al/O-mixed oxides in the ammoxidation of propane and new efficient preparation method for the catalysts. <i>Catalysis Today</i> , 2012 , 192, 10-15	5.3	3

30	Strong metal-support interaction as activity requirement of palladium-supported tin oxide sol-gel catalyst for water denitration. <i>International Journal of Environmental Science and Technology</i> , 2012 , 9, 235-246	3.3	3
29	Optimization of Reaction Conditions and Regeneration Procedure of the PdSb/TiO ₂ Catalyst for Acetoxylation of Toluene. <i>Topics in Catalysis</i> , 2011 , 54, 1197-1205	2.3	3
28	Preparation, structural properties and catalytic selectivity of sulfate-doped (VO) ₂ P ₂ O ₇ catalysts in the oxidation of n-butane. <i>Catalysis Letters</i> , 1997 , 46, 113-118	2.8	3
27	Ammonoxidation von Toluol an NH ₄ ⁺ -haltigen Vanadiumphosphat-Katalysatoren. <i>Chemie-Ingenieur-Technik</i> , 1997 , 69, 97-99	0.8	3
26	In-situ experimental and computational approach to investigate the nature of active site in low-temperature CO-PROX over CuO _x -CeO ₂ catalyst. <i>Applied Catalysis A: General</i> , 2021 , 624, 118305	5.1	3
25	Steering the selectivity in CO ₂ reduction on highly active Ru/TiO ₂ catalysts: Support particle size effects. <i>Journal of Catalysis</i> , 2021 , 401, 160-173	7.3	3
24	Sustainable Co-Synthesis of Glycolic Acid, Formamides and Formates from 1,3-Dihydroxyacetone by a Cu/Al ₂ O ₃ Catalyst with a Single Active Sites. <i>Angewandte Chemie</i> , 2019 , 131, 5305-5309	3.6	2
23	In-situ Electron Paramagnetic Resonance of Powder Catalysts 2013 , 293-314		2
22	Methacrylic acid by carboxylation of propene with CO ₂ over POM catalysts [Reality or wishful thinking?]. <i>Catalysis Communications</i> , 2014 , 48, 19-23	3.2	2
21	Impact of dopants on catalysts containing Ce _{1-x} M _x O ₂ -[(M = Fe, Sb or Bi) in NH ₃ -SCR of NO _x [A multiple spectroscopic approach. <i>Journal of Catalysis</i> , 2021 ,	7.3	2
20	Synergistic Nanostructured MnO _x /TiO ₂ Catalyst for Highly Selective Synthesis of Aromatic Imines. <i>ChemCatChem</i> , 2021 , 13, 1990-1997	5.2	2
19	Innenrücktitelbild: Sustainable Co-Synthesis of Glycolic Acid, Formamides and Formates from 1,3-Dihydroxyacetone by a Cu/Al ₂ O ₃ Catalyst with a Single Active Sites (Angew. Chem. 16/2019). <i>Angewandte Chemie</i> , 2019 , 131, 5517-5517	3.6	1
18	Search and Optimization of Multi-Metal-Oxide Catalysts for the Oxidative Dehydrogenation of Propane - A Combinatorial and Fundamental Approach -. <i>Studies in Surface Science and Catalysis</i> , 2001 , 55-65	1.8	1
17	Further studies of the active phase in Cs-doped Fe ₂ O ₃ oxide catalysts. <i>Chemical Communications</i> , 1996 , 239-240	5.8	1
16	Zur Kenntnis einer Hochtemperaturmodifikation des Bleidiphosphats, Pb ₂ P ₂ O ₇ . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 1990 , 584, 173-177	1.3	1
15	Supported Cu Single-Ion Catalyst for Total Carbon Utilization of C and C Biomass-Based Platform Molecules in the N-Formylation of Amines. <i>Chemistry - A European Journal</i> , 2021 , 27, 16889-16895	4.8	1
14	Dihydroxyacetone valorization with high atom efficiency via controlling radical oxidation pathways over natural mineral-inspired catalyst. <i>Nature Communications</i> , 2021 , 12, 6840	17.4	0
13	Avoiding Pitfalls in Comparison of Activity and Selectivity of Solid Catalysts for Electrochemical HMF Oxidation. <i>ChemistryOpen</i> , 2021 , 10, 600-606	2.3	0

- 12 Oligomerization of n-butenes over Ni/SiO₂/Al₂O₃: influence of support modification by steam-treating. *Catalysis Science and Technology*, **2021**, 11, 4732-4740 5.5 ○
- 11 A Versatile Ambient-to-High-Pressure Reaction Transmission Cell for in situ/operando Infrared Spectroscopic Investigations. *Chemistry Methods*, **2021**, 1, 308-314 ○
- 10 Impact of Al Activators on Structure and Catalytic Performance of Cr Catalysts in Homogeneous Ethylene Oligomerization – A Multitechnique in situ/operando Study. *ChemCatChem*, **2020**, 12, 964-964 5.2
- 9 Innenrücktitelbild: Selective Alcohol Oxidation by a Copper TEMPO Catalyst: Mechanistic Insights by Simultaneously Coupled Operando EPR/UV-Vis/ATR-IR Spectroscopy (Angew. Chem. 40/2015). *Angewandte Chemie*, **2015**, 127, 12043-12043 3.6
- 8 In Situ Non-Vibrational Characterization Techniques to Analyse Oxidation Catalysts and Mechanisms **2014**, 496-548
- 7 Innenrücktitelbild: Einblicke in den Mechanismus der photokatalytischen Wasserreduktion durch DFT-gestützte In-situ-EPR/Raman-Spektroskopie (Angew. Chem. 43/2011). *Angewandte Chemie*, **2011**, 123, 10438-10438 3.6
- 6 Inside Back Cover: Insights into the Mechanism of Photocatalytic Water Reduction by DFT-Supported In Situ EPR/Raman Spectroscopy (Angew. Chem. Int. Ed. 43/2011). *Angewandte Chemie - International Edition*, **2011**, 50, 10256-10256 16.4
- 5 Inline-Monitoring von Hydrierungsreaktionen mittels ATR/UV-vis/Ramanspektroskopie. *Chemie-Ingenieur-Technik*, **2010**, 82, 1332-1332 0.8
- 4 Fe-ZSM-5-Katalysatoren für die Stickoxidminderung: Struktur-Aktivitäts-Beziehungen und Optimierungsstrategien. *Chemie-Ingenieur-Technik*, **2005**, 77, 1212-1213 0.8
- 3 New Aspects of Solid State Transformation of Vanadium phosphates Used as Catalysts for Selective Oxidation or Ammoxidation reactions. *Phosphorus, Sulfur and Silicon and the Related Elements*, **1996**, 109, 55-58 1
- 2 Thermisch induzierte Bewegungsvorgänge in kristallinen Guanidiniumhexafluorometallaten, (C(NH₂)₃)₃MF₆ (M = Al, Ga, In) – eine in situ ESR-Untersuchung. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **1992**, 617, 155-160 1.3
- 1 A Versatile Ambient-to-High-Pressure Reaction Transmission Cell for in situ/operando Infrared Spectroscopic Investigations. *Chemistry Methods*, **2021**, 1, 307-307