Bert M Weckhuysen

List of Publications by Year
in descending order

792	58,178	993 114	2171 202
papers	citations	h-index	g-index

879	879	879	34563
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deactivation and regeneration of solid acid and base catalyst bodies used in cascade for bio-oil synthesis and upgrading. Journal of Catalysis, 2022, 405, 641-651.	3.1	3
2	Unravelling Channel Structureâ€“Diffusivity Relationships in Zeolite ZSMâ€5 at the Singleâ€Molecule Level. Angewandte Chemie, 2022, 134, .	1.6	5
3	Understanding the Effects of Binders in Gas Sorption and Acidity of Aluminium Fumarate Extrudates. Chemistry - A European Journal, 2022, 28, .	1.7	6
4	Nano-scale insights regarding coke formation in zeolite SSZ-13 subject to the methanol-to-hydrocarbons reaction. Catalysis Science and Technology, 2022, 12, 1220-1228.	2.1	13
5	Dual Fluorescence in Glutathione-Derived Carbon Dots Revisited. Journal of Physical Chemistry C, 2022, 126, 2720-2727.	1.5	11
6	The concept of active site in heterogeneous catalysis. Nature Reviews Chemistry, 2022, 6, 89-111.	13.8	218
7	Structureâ€Activity Relationships in Highly Active Platinumâ€Tin MFIâ€type Zeolite Catalysts for Propane Dehydrogenation. ChemCatChem, 2022, 14, .	1.8	16
8	Enhanced Catalytic Performance through In Situ Encapsulation of Ultrafine Ru Clusters within a High-Aluminum Zeolite. ACS Catalysis, 2022, 12, 1847-1856.	5.5	37
9	Uncovering the reaction mechanism behind CoO as active phase for CO2 hydrogenation. Nature Communications, 2022, 13, 324.	5.8	69
10	Tandem catalysis with double-shelled hollow spheres. Nature Materials, 2022, 21, 572-579.	13.3	65
11	Mechanistic Characterization of Zeolite-Catalyzed Aromatic Electrophilic Substitution at Realistic Operating Conditions. Jacs Au, 2022, 2, 502-514.	3.6	17
12	New insights into the NH₃-selective catalytic reduction of NO over Cu-ZSM-5 as revealed by operando spectroscopy. Catalysis Science and Technology, 2022, 12, 2589-2603.	2.1	12
13	Using Biomass Gasification Mineral Residue as Catalyst to Produce Light Olefins from CO, CO₂, and H₂ Mixtures. ChemSusChem, 2022, 15, e202200436.	3.6	2
14	Emerging analytical methods to characterize zeolite-based materials. National Science Review, 2022, 9, .	4.6	11
15	RÃ¼cktitelbild: Unravelling Channel Structureâ€“Diffusivity Relationships in Zeolite ZSMâ€5 at the Singleâ€Molecule Level (Angew. Chem. 5/2022). Angewandte Chemie, 2022, 134, .	1.6	0
16	Unravelling Channel Structureâ€“Diffusivity Relationships in Zeolite ZSMâ€5 at the Singleâ€Molecule Level. Angewandte Chemie - International Edition, 2022, 61, .	7.2	19
17	Favoring the Methane Oxychlorination Reaction over EuOCl by Synergistic Effects with Lanthanum. ACS Catalysis, 2022, 12, 5698-5710.	5.5	5
18	Hole Dynamics in Photoexcited Hematite Studied with Femtosecond Oxygen K-edge X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 4207-4214.	2.1	5

#	Article	IF	Citations
19	Using Biomass Gasification Mineral Residue as Catalyst to Produce Light Olefins from CO, CO₂, and H₂ Mixtures. ChemSusChem, 2022, 15, e202200851.	3.6	2
20	An integrated approach to the key parameters in methanol-to-olefins reaction catalyzed by MFI/MEL zeolite materials. Chinese Journal of Catalysis, 2022, 43, 1879-1893.	6.9	6
21	Classification-based motion analysis of single-molecule trajectories using DiffusionLab. Scientific Reports, 2022, 12, .	1.6	6
22	Wasteâ€Derived Copperâ€Lead Electrocatalysts for CO₂ Reduction. ChemCatChem, 2022, 14, .	1.8	7
23	Single catalyst particle diagnostics in a microreactor for performing multiphase hydrogenation reactions. Faraday Discussions, 2021, 229, 267-280.	1.6	5
24	Reaction Mechanism of Pdâ€Catalyzed â€œCOâ€Freeâ€•Carbonylation Reaction Uncovered by In Situ Spectroscopy: The Formyl Mechanism. Angewandte Chemie - International Edition, 2021, 60, 3422-3427.	7.2	9
25	In situ Nanoscale Infrared Spectroscopy of Water Adsorption on Nanoislands of Surfaceâ€Anchored Metalâ€Organic Frameworks. Angewandte Chemie - International Edition, 2021, 60, 1620-1624.	7.2	29
26	Effect of Mesoporosity, Acidity and Crystal Size of Zeolite ZSMâ€5â€‰on Catalytic Performance during the Exâ€situ Catalytic Fast Pyrolysis of Biomass. ChemCatChem, 2021, 13, 1207-1219.	1.8	16
27	The nanogeochemistry of abiotic carbonaceous matter in serpentinites from the Yap Trench, western Pacific Ocean. Geology, 2021, 49, 330-334.	2.0	14
28	Catalytic Fast Pyrolysis of Biomass: Catalyst Characterization Reveals the Feed-Dependent Deactivation of a Technical ZSM-5-Based Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 291-304.	3.2	57
29	Reaction Mechanism of Pdâ€Catalyzed â€œCOâ€Freeâ€•Carbonylation Reaction Uncovered by In Situ Spectroscopy: The Formyl Mechanism. Angewandte Chemie, 2021, 133, 3464-3469.	1.6	3
30	In situ Nanoscale Infrared Spectroscopy of Water Adsorption on Nanoislands of Surfaceâ€Anchored Metalâ€Organic Frameworks. Angewandte Chemie, 2021, 133, 1644-1648.	1.6	5
31	Influence of Metalâ€Alkyls on Earlyâ€Stage Ethylene Polymerization over a Cr/SiO₂ Phillips Catalyst: A Bulk Characterization and Xâ€ray Chemical Imaging Study. Chemistry - A European Journal, 2021, 27, 1688-1699.	1.7	9
32	In Situ X-ray Raman Scattering Spectroscopy of the Formation of Cobalt Carbides in a Co/TiO₂ Fischerâ€“Tropsch Synthesis Catalyst. ACS Catalysis, 2021, 11, 809-819.	5.5	24
33	THEORETICAL MODELLING OF FUNCTIONAL MATERIALS. , 2021, , .		0
34	Visualizing defects and pore connectivity within metalâ€“organic frameworks by X-ray transmission tomography. Chemical Science, 2021, 12, 8458-8467.	3.7	10
35	Rapid fabrication of MOF-based mixed matrix membranes through digital light processing. Materials Advances, 2021, 2, 2739-2749.	2.6	12
36	Early-stage particle fragmentation behavior of a commercial silica-supported metallocene catalyst. Catalysis Science and Technology, 2021, 11, 5335-5348.	2.1	17

#	Article	IF	Citations
37	Advanced approaches: general discussion. Faraday Discussions, 2021, 229, 378-421.	1.6	1
38	Identification of Photoexcited Electron Relaxation in a Cobalt Phosphide Modified Carbon Nitride Photocatalyst. ChemPhotoChem, 2021, 5, 330-334.	1.5	8
39	TOWARDS IN-SILICO DESIGN OF FUNCTIONAL MATERIALS. , 2021, , .		0
40	5-Hydroxy-2-Methylfurfural from Sugar Beet Thick Juice: Kinetic and Modeling Studies. ACS Sustainable Chemistry and Engineering, 2021, 9, 2626-2638.	3.2	5
41	On the Cobalt Carbide Formation in a Co/TiO₂ Fischerâ€“Tropsch Synthesis Catalyst as Studied by High-Pressure, Long-Term Operando X-ray Absorption and Diffraction. ACS Catalysis, 2021, 11, 2956-2967.	5.5	33
42	Upscaling Effects on Alkali Metalâ€Grafted Ultrastable Y Zeolite Extrudates for Modeled Catalytic Deoxygenation of Bioâ€oils. ChemCatChem, 2021, 13, 1951-1965.	1.8	7
43	Single-molecule observation of diffusion and catalysis in nanoporous solids. Adsorption, 2021, 27, 423-452.	1.4	30
44	Influence of Pore Structure and Metalâ€Node Geometry on the Polymerization of Ethylene over Crâ€Based Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2021, 27, 5769-5781.	1.7	5
45	Reactivity of Single Transition Metal Atoms on a Hydroxylated Amorphous Silica Surface: A Periodic Conceptual DFT Investigation. Chemistry - A European Journal, 2021, 27, 6050-6063.	1.7	11
46	3â€D Xâ€ray Nanotomography Reveals Different Carbon Deposition Mechanisms in a Single Catalyst Particle. ChemCatChem, 2021, 13, 2494-2507.	1.8	22
47	Single Trap States in Single CdSe Nanoplatelets. ACS Nano, 2021, 15, 7216-7225.	7.3	30
48	Femtosecond Charge Density Modulations in Photoexcited CuWO₄. Journal of Physical Chemistry C, 2021, 125, 7329-7336.	1.5	6
49	Mapping Elevated Temperatures with a Micrometer Resolution Using the Luminescence of Chemically Stable Upconversion Nanoparticles. ACS Applied Nano Materials, 2021, 4, 4208-4215.	2.4	57
50	Transforming inactive coke molecules into active intermediates in zeolites. Joule, 2021, 5, 757-759.	11.7	2
51	Unravelling the effect of impurities on the methanol-to-olefins process in waste-derived zeolites ZSM-5. Journal of Catalysis, 2021, 396, 136-147.	3.1	16
52	Innentitelbild: Chemical Imaging of Hierarchical Porosity Formation within a Zeolite Crystal Visualized by Smallâ€Angle Xâ€Ray Scattering and Inâ€Situ Fluorescence Microscopy (Angew. Chem. 25/2021). Angewandte Chemie, 2021, 133, 13802-13802.	1.6	0
53	Chemical targets to deactivate biological and chemical toxins using surfaces and fabrics. Nature Reviews Chemistry, 2021, 5, 370-387.	13.8	47
54	Chemical Imaging of Hierarchical Porosity Formation within a Zeolite Crystal Visualized by Smallâ€Angle Xâ€Ray Scattering and Inâ€Situ Fluorescence Microscopy. Angewandte Chemie, 2021, 133, 13922-13925.	1.6	2

#	Article	IF	Citations
55	Chemical Imaging of Hierarchical Porosity Formation within a Zeolite Crystal Visualized by Smallâ€Angle Xâ€Ray Scattering and Inâ€Situ Fluorescence Microscopy. Angewandte Chemie - International Edition, 2021, 60, 13803-13806.	7.2	9
56	Photoinduced Force Microscopy as an Efficient Method Towards the Detection of Nanoplastics. Chemistry Methods, 2021, 1, 205-209.	1.8	11
57	Crystal Phase Effects on the Gasâ€Phase Ketonization of Small Carboxylic Acids over TiO₂ Catalysts. ChemSusChem, 2021, 14, 2710-2720.	3.6	15
58	Efficient Synthesis of Monomeric Fe Species in Zeolite ZSMâ€5 for the Lowâ€Temperature Oxidation of Methane. ChemCatChem, 2021, 13, 2766-2770.	1.8	16
59	Heterogeneity in the Fragmentation of Ziegler Catalyst Particles during Ethylene Polymerization Quantified by X-ray Nanotomography. Jacs Au, 2021, 1, 852-864.	3.6	20
60	Highly Selective Oxidation of Methane into Methanol over Cu-Promoted Monomeric Fe/ZSM-5. ACS Catalysis, 2021, 11, 6684-6691.	5.5	73
61	Separation and Purification of Hydrocarbons with Porous Materials. Angewandte Chemie - International Edition, 2021, 60, 18930-18949.	7.2	118
62	Photoinduced Force Microscopy as an Efficient Method Towards the Detection of Nanoplastics. Chemistry Methods, 2021, 1, 204-204.	1.8	0
63	Separation and Purification of Hydrocarbons with Porous Materials. Angewandte Chemie, 2021, 133, 19078-19097.	1.6	2
64	Crystal Phase Effects on the Gasâ€Phase Ketonization of Small Carboxylic Acids over TiO 2 Catalysts. ChemSusChem, 2021, 14, 2634-2634.	3.6	1
65	Subâ€Second Timeâ€Resolved Surfaceâ€Enhanced Raman Spectroscopy Reveals Dynamic CO Intermediates during Electrochemical CO₂ Reduction on Copper. Angewandte Chemie, 2021, 133, 16712-16720.	1.6	17
66	Subâ€Second Timeâ€Resolved Surfaceâ€Enhanced Raman Spectroscopy Reveals Dynamic CO Intermediates during Electrochemical CO₂ Reduction on Copper. Angewandte Chemie - International Edition, 2021, 60, 16576-16584.	7.2	141
67	Plastic Waste Conversion over a Refinery Waste Catalyst. Angewandte Chemie - International Edition, 2021, 60, 16101-16108.	7.2	78
68	Plastic Waste Conversion over a Refinery Waste Catalyst. Angewandte Chemie, 2021, 133, 16237-16244.	1.6	8
69	Waterâ€“active site interactions in zeolites and their relevance in catalysis. Trends in Chemistry, 2021, 3, 456-468.	4.4	29
70	Operando Shellâ€Isolated Nanoparticleâ€Enhanced Raman Spectroscopy of the NO Reduction Reaction over Rhodiumâ€Based Catalysts. ChemPhysChem, 2021, 22, 1595-1602.	1.0	6
71	Nanoscale Chemical Imaging in Zeolite Catalysts by Atom Probe Tomography. Microscopy and Microanalysis, 2021, 27, 984-985.	0.2	0
72	The active phase in cobalt-based Fischer-Tropsch synthesis. Chem Catalysis, 2021, 1, 339-363.	2.9	39

#	Article	IF	Citations
73	Calcination temperature effects on Pd/alumina catalysts: Particle size, surface species and activity in methane combustion. Catalysis Today, 2021, 382, 120-129.	2.2	21
74	Mechanistic Insights into the Lanthanide-Catalyzed Oxychlorination of Methane as Revealed by Operando Spectroscopy. ACS Catalysis, 2021, 11, 10574-10588.	5.5	8
75	Crowded catalyst, better catalyst. National Science Review, 2021, 8, nwab141.	4.6	3
76	Zeoliteâ€Tailored Active Site Proximity for the Efficient Production of Pentanoic Biofuels. Angewandte Chemie - International Edition, 2021, 60, 23713-23721.	7.2	43
77	Zeoliteâ€Tailored Active Site Proximity for the Efficient Production of Pentanoic Biofuels. Angewandte Chemie, 2021, 133, 23906-23914.	1.6	10
78	Detection of Spontaneous FeOOH Formation at the Hematite/Ni(Fe)OOH Interface During Photoelectrochemical Water Splitting by Operando X-ray Absorption Spectroscopy. ACS Catalysis, 2021, 11, 12324-12335.	5.5	18
79	Understanding Waterâ€“Zeolite Interactions: On the Accuracy of Density Functionals. Journal of Physical Chemistry C, 2021, 125, 20261-20274.	1.5	10
80	Propane to olefins tandem catalysis: a selective route towards light olefins production. Chemical Society Reviews, 2021, 50, 11503-11529.	18.7	104
81	New insights into the biphasic â€œCO-freeâ€•Pausonâ€“Khand cyclisation reaction through combinedin situspectroscopy and multiple linear regression modelling. Catalysis Science and Technology, 2021, 11, 1626-1636.	2.1	1
82	Stabilization effects in binary colloidal Cu and Ag nanoparticle electrodes under electrochemical CO₂ reduction conditions. Nanoscale, 2021, 13, 4835-4844.	2.8	29
83	Identifying key mononuclear Fe species for low-temperature methane oxidation. Chemical Science, 2021, 12, 3152-3160.	3.7	49
84	Mimicking industrial aging in fluid catalytic cracking: A correlative microscopy approach to unravel inter-particle heterogeneities. Journal of Catalysis, 2021, 404, 634-646.	3.1	5
85	Correlating the Morphological Evolution of Individual Catalyst Particles to the Kinetic Behavior of Metallocene-Based Ethylene Polymerization Catalysts. Jacs Au, 2021, 1, 1996-2008.	3.6	15
86	X-ray nanotomography uncovers morphological heterogeneity in a polymerization catalyst at multiple reaction stages. Chem Catalysis, 2021, 1, 1413-1426.	2.9	6
87	Production of Hexane-1,2,5,6-tetrol from Biorenewable Levoglucosanol over Pt-WO_x/TiO₂. ACS Sustainable Chemistry and Engineering, 2021, 9, 16123-16132.	3.2	3
88	Monitoring Molecular Weight Changes during Technical Lignin Depolymerization by Operando Attenuated Total Reflectance Infrared Spectroscopy and Chemometrics. ChemSusChem, 2021, 14, 5517-5524.	3.6	9
89	Toward an e-chemistree: Materials for electrification of the chemical industry. MRS Bulletin, 2021, 46, 1187-1196.	1.7	31
90	Elucidation of the pre-nucleation phase directing metal-organic framework formation. Cell Reports Physical Science, 2021, 2, 100680.	2.8	11

#	Article	IF	Citations
91	High-throughput activity screening and sorting of single catalyst particles with a droplet microreactor using dielectrophoresis. Nature Catalysis, 2021, 4, 1070-1079.	16.1	23
92	Dynamic restructuring of supported metal nanoparticles and its implications for structure insensitive catalysis. Nature Communications, 2021, 12, 7096.	5.8	33
93	Stable niobia-supported nickel catalysts for the hydrogenation of carbon monoxide to hydrocarbons. Catalysis Today, 2020, 343, 56-62.	2.2	18
94	Nanoweb Surfaceâ€Mounted Metalâ€“Organic Framework Films with Tunable Amounts of Acid Sites as Tailored Catalysts. Chemistry - A European Journal, 2020, 26, 691-698.	1.7	11
95	Synthesis of Hexane-Tetrols and -Triols with Fixed Hydroxyl Group Positions and Stereochemistry from Methyl Glycosides over Supported Metal Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 800-805.	3.2	13
96	Melamineâ€Based Microporous Organic Framework Thin Films on an Alumina Membrane for Highâ€Flux Organic Solvent Nanofiltration. ChemSusChem, 2020, 13, 136-140.	3.6	16
97	Direct observation of the electronic states of photoexcited hematite with ultrafast 2p3d X-ray absorption spectroscopy and resonant inelastic X-ray scattering. Physical Chemistry Chemical Physics, 2020, 22, 2685-2692.	1.3	26
98	Nickel Poisoning of a Cracking Catalyst Unravelled by Singleâ€Particle Xâ€ray Fluorescenceâ€Diffractionâ€Absorption Tomography. Angewandte Chemie - International Edition, 2020, 59, 3922-3927.	7.2	36
99	Nickel Poisoning of a Cracking Catalyst Unravelled by Singleâ€Particle Xâ€ray Fluorescenceâ€Diffractionâ€Absorption Tomography. Angewandte Chemie, 2020, 132, 3950-3955.	1.6	5
100	Structure Sensitivity in Steam and Dry Methane Reforming over Nickel: Activity and Carbon Formation. ACS Catalysis, 2020, 10, 1428-1438.	5.5	109
101	Creating value from plastic waste. Science, 2020, 370, 400-401.	6.0	71
102	Frontispiece: Matrix Effects in a Fluid Catalytic Cracking Catalyst Particle: Influence on Structure, Acidity, and Accessibility. Chemistry - A European Journal, 2020, 26, .	1.7	0
103	Identification of Iron Carbides in Fe(â˜Naâ˜S)/Î±â€Al₂O₃ Fischerâ€Tropsch Synthesis Catalysts with Xâ€ray Powder Diffractometry and MÃ¶ssbauer Absorption Spectroscopy. ChemCatChem, 2020, 12, 5121-5139.	1.8	13
104	Two-in-One Catalyst Turns Carbon Dioxide in Base Chemicals. CheM, 2020, 6, 3167-3169.	5.8	1
105	Titelbild: Elucidating Zeolite Channel Geometryâ€“Reaction Intermediate Relationships for the Methanolâ€toâ€Hydrocarbon Process (Angew. Chem. 45/2020). Angewandte Chemie, 2020, 132, 19893-19893.	1.6	0
106	Elucidating Zeolite Channel Geometryâ€“Reaction Intermediate Relationships for the Methanolâ€toâ€Hydrocarbon Process. Angewandte Chemie - International Edition, 2020, 59, 20024-20030.	7.2	30
107	Finned zeolite catalysts. Nature Materials, 2020, 19, 1074-1080.	13.3	116
108	Continuous Flow Pickering Emulsion Catalysis in Droplet Microfluidics Studied with In Situ Raman Microscopy. Chemistry - A European Journal, 2020, 26, 15099-15102.	1.7	14

#	Article	IF	Citations
109	Highâ€Pressure Operando UVâ€Vis Microâ€Spectroscopy of Coke Formation in Zeoliteâ€based Catalyst Extrudates during the Transalkylation of Aromatics. ChemCatChem, 2020, 12, 5465-5475.	1.8	12
110	Mechanistic Insights into the Conversion of Biorenewable Levoglucosanol to Dideoxysugars. ACS Sustainable Chemistry and Engineering, 2020, 8, 16339-16349.	3.2	4
111	Elucidating Zeolite Channel Geometryâ€“Reaction Intermediate Relationships for the Methanolâ€toâ€Hydrocarbon Process. Angewandte Chemie, 2020, 132, 20199-20205.	1.6	3
112	Toward Catalytic Ketonization of Volatile Fatty Acids Extracted from Fermented Wastewater by Adsorption. ACS Sustainable Chemistry and Engineering, 2020, 8, 11292-11298.	3.2	20
113	Spectroscopy, microscopy, diffraction and scattering of archetypal MOFs: formation, metal sites in catalysis and thin films. Chemical Society Reviews, 2020, 49, 6694-6732.	18.7	71
114	Combined In Situ X-ray Powder Diffractometry/Raman Spectroscopy of Iron Carbide and Carbon Species Evolution in Fe(â^'Naâ€“S)/Î±-Al₂O₃ Catalysts during Fischerâ€“Tropsch Synthesis. ACS Catalysis, 2020, 10, 9837-9855.	5.5	44
115	Disk-Shaped Cobalt Nanocrystals as Fischerâ€“Tropsch Synthesis Catalysts Under Industrially Relevant Conditions. Topics in Catalysis, 2020, 63, 1398-1411.	1.3	3
116	Tuning the Redox Chemistry of a Cr/SiO₂ Phillips Catalyst for Controlling Activity, Induction Period and Polymer Properties. ChemPhysChem, 2020, 21, 1665-1674.	1.0	4
117	In Situ Spectroscopy of Calcium Fluoride Anchored Metalâ€“Organic Framework Thin Films during Gas Sorption. Angewandte Chemie, 2020, 132, 19713-19720.	1.6	6
118	In Situ Spectroscopy of Calcium Fluoride Anchored Metalâ€“Organic Framework Thin Films during Gas Sorption. Angewandte Chemie - International Edition, 2020, 59, 19545-19552.	7.2	13
119	Beyond Mechanical Recycling: Giving New Life to Plastic Waste. Angewandte Chemie - International Edition, 2020, 59, 15402-15423.	7.2	809
120	Catalytic Hydrogenation of Renewable Levulinic Acid to Î³-Valerolactone: Insights into the Influence of Feed Impurities on Catalyst Performance in Batch and Flow Reactors. ACS Sustainable Chemistry and Engineering, 2020, 8, 5903-5919.	3.2	35
121	Die nÃchste Generation des Recyclings â€“ neues Leben fÃ¼r KunststoffmÃ¼ll. Angewandte Chemie, 2020, 132, 15524-15548.	1.6	62
122	Single Particle Assays to Determine Heterogeneities within Fluid Catalytic Cracking Catalysts. Chemistry - A European Journal, 2020, 26, 8482-8482.	1.7	3
123	Role of Rare Earth Ions in the Prevention of Dealumination of Zeolite Y for Fluid Cracking Catalysts. Journal of Physical Chemistry C, 2020, 124, 4626-4636.	1.5	29
124	Inâ€…Situ Shellâ€Isolated Nanoparticleâ€Enhanced Raman Spectroscopy of Nickelâ€Catalyzed Hydrogenation Reactions. ChemPhysChem, 2020, 21, 625-632.	1.0	21
125	Alkali Promotion in the Formation of CH₄ from CO₂ and Renewably Produced H₂ over Supported Ni Catalysts. ChemCatChem, 2020, 12, 2792-2800.	1.8	17
126	Matrix Effects in a Fluid Catalytic Cracking Catalyst Particle: Influence on Structure, Acidity, and Accessibility. Chemistry - A European Journal, 2020, 26, 11995-12009.	1.7	19

#	Article	IF	Citations
127	Single Particle Assays to Determine Heterogeneities within Fluid Catalytic Cracking Catalysts. Chemistry - A European Journal, 2020, 26, 8546-8554.	1.7	10
128	Controlling the Depolymerization of Paraformaldehyde with Pdâ€“Phosphine Complexes. Chemistry - A European Journal, 2020, 26, 5297-5302.	1.7	8
129	Correlated X-ray Ptychography and Fluorescence Nano-Tomography on the Fragmentation Behavior of an Individual Catalyst Particle during the Early Stages of Olefin Polymerization. Journal of the American Chemical Society, 2020, 142, 3691-3695.	6.6	41
130	Basicity and Electrolyte Composition Dependent Stability of Niâ€Feâ€S and Niâ€Mo Electrodes during Water Splitting. ChemPhysChem, 2020, 21, 518-524.	1.0	5
131	Multiâ€Spectroscopic Interrogation of the Spatial Linker Distribution in Defectâ€Engineered Metalâ€“Organic Framework Crystals: The [Cu 3 (btc) 2â^' x (cydc) x] Showcase. Chemistry - A European Journal, 2020, 26, 3614-3625.	1.7	12
132	Cobalt nanocrystals on carbon nanotubes in the Fischer-Tropsch synthesis: Impact of support oxidation. Applied Catalysis A: General, 2020, 593, 117441.	2.2	31
133	Disentangling Reaction Processes of Zeolites within Singleâ€Oriented Channels. Angewandte Chemie - International Edition, 2020, 59, 15502-15506.	7.2	49
134	Deactivation of Cuâ€Exchanged Automotiveâ€Emission NH 3 â€SCR Catalysts Elucidated with Nanoscale Resolution Using Scanning Transmission Xâ€ray Microscopy. Angewandte Chemie, 2020, 132, 15740-15747.	1.6	8
135	Disentangling Reaction Processes of Zeolites within Singleâ€Oriented Channels. Angewandte Chemie, 2020, 132, 15632-15636.	1.6	10
136	Inâ€...Situ Study on Niâ€“Mo Stability in a Waterâ€Splitting Device: Effect of Catalyst Substrate and Electric Potential. ChemSusChem, 2020, 13, 3172-3179.	3.6	13
137	Carbon Pathways, Sodiumâ€Sulphur Promotion and Identification of Iron Carbides in Ironâ€based Fischerâ€Tropsch Synthesis. ChemCatChem, 2020, 12, 4202-4223.	1.8	27
138	Tandem catalytic aromatization of volatile fatty acids. Green Chemistry, 2020, 22, 3229-3238.	4.6	15
139	Operando Nanoscale Sensors in Catalysis: All Eyes on Catalyst Particles. ACS Nano, 2020, 14, 3725-3735.	7.3	61
140	Deactivation of Cuâ€Exchanged Automotiveâ€Emission NH₃â€SCR Catalysts Elucidated with Nanoscale Resolution Using Scanning Transmission Xâ€ray Microscopy. Angewandte Chemie - International Edition, 2020, 59, 15610-15617.	7.2	34
141	Fresh evidence challenges the consensus view of active sites in an industrial catalyst. Nature, 2020, 586, 678-679.	13.7	2
142	Nanoscale Chemical Imaging of a Single Catalyst Particle with Tipâ€Enhanced Fluorescence Microscopy. ChemCatChem, 2019, 11, 417-423.	1.8	19
143	Suzukiâ€Miyaura Crossâ€Coupling Using Plasmonic Pdâ€Decorated Au Nanorods as Catalyst: A Study on the Contribution of Laser Illumination. ChemCatChem, 2019, 11, 4974-4980.	1.8	16
144	Chemical Imaging of the Binderâ€Dependent Coke Formation in Zeoliteâ€Based Catalyst Bodies During the Transalkylation of Aromatics. ChemCatChem, 2019, 11, 4788-4796.	1.8	17

#	Article	IF	Citations
145	Facile Twoâ€Step Synthesis of Delafossite CuFeO₂ Photocathodes by Ultrasonic Spray Pyrolysis and Hybrid Microwave Annealing. ChemPhotoChem, 2019, 3, 1238-1245.	1.5	11
146	Catalytic hydrogenation of dihydrolevoglucosenone to levoglucosanol with a hydrotalcite/mixed oxide copper catalyst. Green Chemistry, 2019, 21, 5000-5007.	4.6	18
147	Efficient and Highly Transparent Ultraâ€Thin Nickelâ€Iron Oxyâ€hydroxide Catalyst for Oxygen Evolution Prepared by Successive Ionic Layer Adsorption and Reaction. ChemPhotoChem, 2019, 3, 1050-1054.	1.5	6
148	Impact of Niobium in the Metalâ€“Organic Framework-Mediated Synthesis of Co-Based Catalysts for Synthesis Gas Conversion. Catalysis Letters, 2019, 149, 3279-3286.	1.4	16
149	Stable platinum in a zeolite channel. Nature Materials, 2019, 18, 778-779.	13.3	10
150	Hexane-1,2,5,6-tetrol as a Versatile and Biobased Building Block for the Synthesis of Sustainable (Chiral) Crystalline Mesoporous Polyboronates. ACS Sustainable Chemistry and Engineering, 2019, 7, 13430-13436.	3.2	7
151	Extending Surfaceâ€Enhanced Raman Spectroscopy to Liquids Using Shellâ€Isolated Plasmonic Superstructures. Chemistry - A European Journal, 2019, 25, 15772-15778.	1.7	3
152	In Situ Local Temperature Mapping in Microscopy Nanoâ€Reactors with Luminescence Thermometry. ChemCatChem, 2019, 11, 5505-5512.	1.8	41
153	Template-Free Nanostructured Fluorine-Doped Tin Oxide Scaffolds for Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 36485-36496.	4.0	17
154	Microfluidics and catalyst particles. Lab on A Chip, 2019, 19, 3575-3601.	3.1	32
155	In Situ Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy to Unravel Sequential Hydrogenation of Phenylacetylene over Platinum Nanoparticles. ACS Catalysis, 2019, 9, 10794-10802.	5.5	32
156	Unraveling the Homologation Reaction Sequence of the Zeoliteâ€Catalyzed Ethanolâ€toâ€Hydrocarbons Process. Angewandte Chemie - International Edition, 2019, 58, 3908-3912.	7.2	38
157	Unraveling the Homologation Reaction Sequence of the Zeoliteâ€Catalyzed Ethanolâ€toâ€Hydrocarbons Process. Angewandte Chemie, 2019, 131, 3948-3952.	1.6	8
158	Inâ€situ Xâ€Ray Absorption Near Edge Structure Spectroscopy of a Solid Catalyst using a Laboratoryâ€Based Setâ€up. ChemCatChem, 2019, 11, 1039-1044.	1.8	30
159	Probing the Effect of Chemical Dopant Phase on Photoluminescence of Monolayer MoS₂ Using in Situ Raman Microspectroscopy. Journal of Physical Chemistry C, 2019, 123, 15738-15743.	1.5	11
160	Elucidating the Kâ€Edge Xâ€Ray Absorption Nearâ€Edge Structure of Cobalt Carbide. ChemCatChem, 2019, 11, 3042-3045.	1.8	16
161	Synthesis and Characterization of Ruâ€Loaded Anodized Aluminum Oxide for Hydrogenation Catalysis. ChemistryOpen, 2019, 8, 532-538.	0.9	5
162	Electrolyte Effects on the Stability of Niâ€"Mo Cathodes for the Hydrogen Evolution Reaction. ChemSusChem, 2019, 12, 3491-3500.	3.6	37

#	Article	IF	Citations
163	Isotherms of individual pores by gas adsorption crystallography. Nature Chemistry, 2019, 11, 562-570.	6.6	88
164	Cooperative Role of Water Molecules during the Initial Stage of Water-Induced Zeolite Dealumination. ACS Catalysis, 2019, 9, 5119-5135.	5.5	53
165	Multiscale Mechanistic Insights of Shaped Catalyst Body Formulations and Their Impact on Catalytic Properties. ACS Catalysis, 2019, 9, 4792-4803.	5.5	72
166	Recovery and conversion of acetic acid from a phosphonium phosphinate ionic liquid to enable valorization of fermented wastewater. Green Chemistry, 2019, 21, 2023-2034.	4.6	37
167	Nanoscale chemical imaging using tip-enhanced Raman spectroscopy. Nature Protocols, 2019, 14, 1169-1193.	5.5	86
168	Geminal Diol of Dihydrolevoglucosenone as a Switchable Hydrotrope: A Continuum of Green Nanostructured Solvents. ACS Sustainable Chemistry and Engineering, 2019, 7, 7878-7883.	3.2	43
169	3D Raman Spectroscopy of Large Zeolite ZSMâ€5 Crystals. Chemistry - A European Journal, 2019, 25, 7158-7167.	1.7	21
170	Vibrational Fingerprinting of Defects Sites in Thin Films of Zeolitic Imidazolate Frameworks. Chemistry - A European Journal, 2019, 25, 8070-8084.	1.7	17
171	Scalingâ€Up of Bioâ€Oil Upgrading during Biomass Pyrolysis over ZrO₂/ZSMâ€5â€Attapulgite. ChemSusChem, 2019, 12, 2428-2438.	3.6	17
172	In Situ Nanoscale Investigation of Catalytic Reactions in the Liquid Phase Using Zirconia-Protected Tip-Enhanced Raman Spectroscopy Probes. Journal of Physical Chemistry Letters, 2019, 10, 1669-1675.	2.1	52
173	Charting a course for chemistry. Nature Chemistry, 2019, 11, 286-294.	6.6	18
174	Ethylene Polymerization over Metalâ€“Organic Framework Crystallites and the Influence of Linkers on Their Fracturing Process. ACS Catalysis, 2019, 9, 3059-3069.	5.5	29
175	The renaissance of the Sabatier reaction and its applications on Earth and in space. Nature Catalysis, 2019, 2, 188-197.	16.1	369
176	Formation and Functioning of Bimetallic Nanocatalysts: The Power of Xâ€ray Probes. Angewandte Chemie - International Edition, 2019, 58, 13220-13230.	7.2	31
177	Phaseâ€Dependent Stability and Substrateâ€Induced Deactivation by Strong Metalâ€Support Interaction of Ru/TiO₂ Catalysts for the Hydrogenation of Levulinic Acid. ChemCatChem, 2019, 11, 2079-2088.	1.8	24
178	Formation and Functioning of Bimetallic Nanocatalysts: The Power of Xâ€ray Probes. Angewandte Chemie, 2019, 131, 13354-13364.	1.6	6
179	Luminescence thermometry for in situ temperature measurements in microfluidic devices. Lab on A Chip, 2019, 19, 1236-1246.	3.1	64
180	Extending Surfaceâ€Enhanced Raman Spectroscopy to Liquids Using Shellâ€Isolated Plasmonic Superstructures. Chemistry - A European Journal, 2019, 25, 15706-15706.	1.7	1

#	Article	IF	Citations
181	Characterization of deactivated and regenerated zeolite ZSM-5-based catalyst extrudates used in catalytic pyrolysis of biomass. Journal of Catalysis, 2019, 380, 108-122.	3.1	45
182	Understanding carbon dioxide activation and carbonâ€“carbon coupling over nickel. Nature Communications, 2019, 10, 5330.	5.8	124
183	Micro-spectroscopy of HKUST-1 metalâ€“organic framework crystals loaded with tetracyanoquinodimethane: effects of water on hostâ€“guest chemistry and electrical conductivity. Physical Chemistry Chemical Physics, 2019, 21, 25678-25689.	1.3	15
184	Operando monitoring of temperature and active species at the single catalyst particle level. Nature Catalysis, 2019, 2, 986-996.	16.1	99
185	Gallium-promoted HZSM-5 zeolites as efficient catalysts for the aromatization of biomass-derived furans. Chemical Engineering Science, 2019, 198, 305-316.	1.9	68
186	Probing the Location and Speciation of Elements in Zeolites with Correlated Atom Probe Tomography and Scanning Transmission Xâ€Ray Microscopy. ChemCatChem, 2019, 11, 488-494.	1.8	19
187	Insights into the activation of silica-supported metallocene olefin polymerization catalysts by methylaluminoxane. Catalysis Today, 2019, 334, 223-230.	2.2	29
188	Promoted cobalt metal catalysts suitable for the production of lower olefins from natural gas. Nature Communications, 2019, 10, 167.	5.8	79
189	Visualizing pore architecture and molecular transport boundaries in catalyst bodies with fluorescent nanoprobes. Nature Chemistry, 2019, 11, 23-31.	6.6	80
190	Preface: Catalysis for Valorization of Biomass and Biomass-derived Platform Molecules (18th NCC). Catalysis Today, 2019, 319, 1.	2.2	2
191	Chemically and thermally stable lanthanide-doped Y2O3 nanoparticles for remote temperature sensing in catalytic environments. Chemical Engineering Science, 2019, 198, 235-240.	1.9	49
192	Nature of cobalt species during the in situ sulfurization of Co(Ni)Mo/Al₂O₃ hydrodesulfurization catalysts. Journal of Synchrotron Radiation, 2019, 26, 811-818.	1.0	4
193	Cobaltâ€ironâ€Manganese Catalysts for the Conversion of Endâ€ofâ€Lifeâ€Tireâ€Derived Syngas into Light Terminal Olefins. Chemistry - A European Journal, 2018, 24, 4597-4606.	1.7	10
194	Spatiotemporal coke formation over zeolite ZSM-5 during the methanol-to-olefins process as studied with operando UV-vis spectroscopy: a comparison between H-ZSM-5 and Mg-ZSM-5. Catalysis Science and Technology, 2018, 8, 1632-1644.	2.1	55
195	Probing the dynamics of photogenerated holes in doped hematite photoanodes for solar water splitting using transient absorption spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 9806-9811.	1.3	21
196	Oxygenated commodity chemicals from chemoâ€catalytic conversion of biomass derived heterocycles. AICHE Journal, 2018, 64, 1910-1922.	1.8	73
197	In Situ Luminescence Thermometry To Locally Measure Temperature Gradients during Catalytic Reactions. ACS Catalysis, 2018, 8, 2397-2401.	5.5	91
198	Revealing Lattice Expansion of Small-Pore Zeolite Catalysts during the Methanol-to-Olefins Process Using Combined Operando X-ray Diffraction and UVâ€“vis Spectroscopy. ACS Catalysis, 2018, 8, 2060-2070.	5.5	62

#	Article	IF	Citations
199	Solid catalysts under the spotlight. Nature Catalysis, 2018, 1, 101-102.	16.1	2
200	Methane-to-methanol conversion over zeolite Cu-SSZ-13, and its comparison with the selective catalytic reduction of NO_x with NH₃. Catalysis Science and Technology, 2018, 8, 1028-1038.	2.1	72
201	Unravelling structure sensitivity in CO2 hydrogenation over nickel. Nature Catalysis, 2018, 1, 127-134.	16.1	386
202	Reactions in Confined Spaces. ChemPhysChem, 2018, 19, 339-340.	1.0	11
203	Thermally Stable TiO₂â€•and SiO₂â€Shellâ€Isolated Au Nanoparticles for In Situ Plasmonâ€Enhanced Raman Spectroscopy of Hydrogenation Catalysts. Chemistry - A European Journal, 2018, 24, 3733-3741.	1.7	44
204	Nanoscale chemical imaging of solidâ€“liquid interfaces using tip-enhanced Raman spectroscopy. Nanoscale, 2018, 10, 1815-1824.	2.8	68
205	The Multifaceted Role of Methylaluminoxane in Metallocene-Based Olefin Polymerization Catalysis. Macromolecules, 2018, 51, 343-355.	2.2	74
206	Nanoscale Chemical Imaging of Zeolites Using Atom Probe Tomography. Angewandte Chemie - International Edition, 2018, 57, 10422-10435.	7.2	31
207	Metalâ€Organic Frameworks as Catalyst Supports: Influence of Lattice Disorder on Metal Nanoparticle Formation. Chemistry - A European Journal, 2018, 24, 7498-7506.	1.7	29
208	Operando micro-spectroscopy on ZSM-5 containing extrudates during the oligomerization of 1-hexene. Catalysis Science and Technology, 2018, 8, 2175-2185.	2.1	20
209	Time-Resolved In Situ Liquid-Phase Atomic Force Microscopy and Infrared Nanospectroscopy during the Formation of Metalâ€“Organic Framework Thin Films. Journal of Physical Chemistry Letters, 2018, 9, 1838-1844.	2.1	26
210	Frontispiece: Thermally Stable TiO₂â€•and SiO₂â€Shellâ€Isolated Au Nanoparticles for In Situ Plasmonâ€Enhanced Raman Spectroscopy of Hydrogenation Catalysts. Chemistry - A European Journal, 2018, 24, .	1.7	1
211	Cathodic Electrodeposition of Niâ^'Mo on Semiconducting NiFe₂O₄ for Photoelectrochemical Hydrogen Evolution in Alkaline Media. ChemSusChem, 2018, 11, 1374-1381.	3.6	3
212	Hydrogenation of levulinic acid to Î³-valerolactone over anatase-supported Ru catalysts: Effect of catalyst synthesis protocols on activity. Applied Catalysis A: General, 2018, 549, 197-206.	2.2	69
213	Diagnosing the Internal Architecture of Zeolite Ferrierite. ChemPhysChem, 2018, 19, 367-372.	1.0	7
214	Influence of Levulinic Acid Hydrogenation on Aluminum Coordination in Zeoliteâ€Supported Ruthenium Catalysts: Aâ€‰²⁷Al 3QMAS Nuclear Magnetic Resonance Study. ChemPhysChem, 2018, 19, 379-385.	1.0	15
215	RÃ¼cktitelbild: Integrated Transmission Electron and Singleâ€Molecule Fluorescence Microscopy Correlates Reactivity with Ultrastructure in a Single Catalyst Particle (Angew. Chem. 1/2018). Angewandte Chemie, 2018, 130, 366-366.	1.6	0
216	Silica deposition as an approach for improving the hydrothermal stability of an alumina support during glycerol aqueous phase reforming. Applied Catalysis A: General, 2018, 551, 13-22.	2.2	32

#	Article	IF	Citations
217	Integrated Transmission Electron and Singleâ€Molecule Fluorescence Microscopy Correlates Reactivity with Ultrastructure in a Single Catalyst Particle. Angewandte Chemie - International Edition, 2018, 57, 257-261.	7.2	48
218	Mechanistic Insights into Growth of Surfaceâ€Mounted Metalâ€Organic Framework Films Resolved by Infrared (Nanoâ€) Spectroscopy. Chemistry - A European Journal, 2018, 24, 187-195.	1.7	57
219	Electrophilic aromatic substitution over zeolites generates Wheland-type reaction intermediates. Nature Catalysis, 2018, 1, 23-31.	16.1	69
220	Integrated Transmission Electron and Singleâ€Molecule Fluorescence Microscopy Correlates Reactivity with Ultrastructure in a Single Catalyst Particle. Angewandte Chemie, 2018, 130, 263-267.	1.6	11
221	Micro-Spectroscopy to Interrogate Solid Catalysts at Work. , 2018, , 304-320.		2
222	Reversible and Site-Dependent Proton-Transfer in Zeolites Uncovered at the Single-Molecule Level. Journal of the American Chemical Society, 2018, 140, 14195-14205.	6.6	22
223	Spatially-Resolved Photoluminescence of Monolayer MoS₂ under Controlled Environment for Ambient Optoelectronic Applications. ACS Applied Nano Materials, 2018, 1, 6226-6235.	2.4	23
224	Deconvoluting the Competing Effects of Zeolite Framework Topology and Diffusion Path Length on Methanol to Hydrocarbons Reaction. ACS Catalysis, 2018, 8, 11042-11053.	5.5	69
225	Catalytic production of hexane-1,2,5,6-tetrol from bio-renewable levoglucosanol in water: effect of metal and acid sites on (stereo)-selectivity. Green Chemistry, 2018, 20, 4557-4565.	4.6	21
226	Bridging the Gap between the Direct and Hydrocarbon Pool Mechanisms of the Methanolâ€toâ€Hydrocarbons Process. Angewandte Chemie - International Edition, 2018, 57, 8095-8099.	7.2	104
227	Nanosheets of Nonlayered Aluminum Metalâ€“Organic Frameworks through a Surfactantâ€Assisted Method. Advanced Materials, 2018, 30, e1707234.	11.1	117
228	Communicating catalysts. Nature Chemistry, 2018, 10, 580-582.	6.6	2
229	Quality control for Ziegler-Natta catalysis via spectroscopic fingerprinting. Journal of Catalysis, 2018, 363, 128-135.	3.1	15
230	Structureâ€“performance descriptors and the role of Lewis acidity in the methanol-to-propylene process. Nature Chemistry, 2018, 10, 804-812.	6.6	221
231	Practical Guidelines for Shellâ€Isolated Nanoparticleâ€Enhanced Raman Spectroscopy of Heterogeneous Catalysts. ChemPhysChem, 2018, 19, 2461-2467.	1.0	18
232	Multi-doped Brookite-Prevalent TiO2 Photocatalyst with Enhanced Activity in the Visible Light. Catalysis Letters, 2018, 148, 2459-2471.	1.4	8
233	Magnetophoretic Sorting of Single Catalyst Particles. Angewandte Chemie - International Edition, 2018, 57, 10589-10594.	7.2	18
234	Engineering the acidity and accessibility of the zeolite ZSM-5 for efficient bio-oil upgrading in catalytic pyrolysis of lignocellulose. Green Chemistry, 2018, 20, 3499-3511.	4.6	101

#	Article	IF	Citations
235	Probing acid sites in solid catalysts with pyridine UV-Vis spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 21647-21659.	1.3	43
236	Capturing the Genesis of an Active Fischerâ€“Tropsch Synthesis Catalyst with Operando Xâ€ray Nanospectroscopy. Angewandte Chemie, 2018, 130, 12133-12138.	1.6	7
237	Deactivation of Sn-Beta during carbohydrate conversion. Applied Catalysis A: General, 2018, 564, 113-122.	2.2	31
238	Uniformly Oriented Zeolite ZSMâ€5 Membranes with Tunable Wettability on a Porous Ceramic. Angewandte Chemie - International Edition, 2018, 57, 12458-12462.	7.2	19
239	Uniformly Oriented Zeolite ZSMâ€5 Membranes with Tunable Wettability on a Porous Ceramic. Angewandte Chemie, 2018, 130, 12638-12642.	1.6	7
240	Genesis of MgCl₂â€based Zieglerâ€Natta Catalysts as Probed with Operando Spectroscopy. ChemPhysChem, 2018, 19, 2662-2671.	1.0	16
241	Magnetophoretic Sorting of Single Catalyst Particles. Angewandte Chemie, 2018, 130, 10749-10754.	1.6	3
242	Capturing the Genesis of an Active Fischerâ€“Tropsch Synthesis Catalyst with Operando Xâ€ray Nanospectroscopy. Angewandte Chemie - International Edition, 2018, 57, 11957-11962.	7.2	42
243	Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick Xâ€ray Absorption Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 12430-12434.	7.2	15
244	Identification of a diagnostic structural motif reveals a new reaction intermediate and condensation pathway in kraft lignin formation. Chemical Science, 2018, 9, 6348-6360.	3.7	143
245	Giant and explosive plasmonic bubbles by delayed nucleation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7676-7681.	3.3	76
246	Isolating Clusters of Light Elements in Molecular Sieves with Atom Probe Tomography. Journal of the American Chemical Society, 2018, 140, 9154-9158.	6.6	27
247	Intraâ€and Interparticle Heterogeneities in Solid Activators for Singleâ€Site Olefin Polymerization Catalysis as Revealed by Microâ€Spectroscopy. Chemistry - A European Journal, 2018, 24, 11944-11953.	1.7	17
248	Nanoskalige chemische Bildgebung von Zeolithen durch Atomsondentomographie. Angewandte Chemie, 2018, 130, 10580-10593.	1.6	1
249	Revealing long- and short-range structural modifications within phosphorus-treated HZSM-5 zeolites by atom probe tomography, nuclear magnetic resonance and powder X-ray diffraction. Physical Chemistry Chemical Physics, 2018, 20, 27766-27777.	1.3	18
250	Spatial and temporal exploration of heterogeneous catalysts with synchrotron radiation. Nature Reviews Materials, 2018, 3, 324-340.	23.3	153
251	Advances in X-ray Micro-Spectroscopy of Heterogeneous Catalysts. Microscopy and Microanalysis, 2018, 24, 412-415.	0.2	1
252	Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick Xâ€ray Absorption Spectroscopy. Angewandte Chemie, 2018, 130, 12610-12614.	1.6	2

#	Article	IF	Citations
253	Behavior of a Metal Organic Framework Thinâ€Film at Elevated Temperature and Pressure as Studied with an Autoclaveâ€Inserted Atomic Force Microscope. ChemPhysChem, 2018, 19, 2397-2404.	1.0	5
254	Bridging the Gap between the Direct and Hydrocarbon Pool Mechanisms of the Methanolâ€toâ€Hydrocarbons Process. Angewandte Chemie, 2018, 130, 8227-8231.	1.6	17
255	Recent trends and fundamental insights in the methanol-to-hydrocarbons process. Nature Catalysis, 2018, 1, 398-411.	16.1	507
256	Iridium-catalysed primary alcohol oxidation and hydrogen shuttling for the depolymerisation of lignin. Green Chemistry, 2018, 20, 3214-3221.	4.6	50
257	Electron crystallography with the EIGER detector. IUCrJ, 2018, 5, 190-199.	1.0	33
258	Tip-enhanced Raman spectroscopy applications: from graphene to heterogeneous catalysis. , 2018, , .		1
259	Chapter 7. Catalytic Conversion of Lignin-derived Aromatic Compounds into Chemicals. RSC Energy and Environment Series, 2018, , 159-198.	0.2	0
260	OPERANDO SPECTROSCOPY OF A CATALYTIC SOLID: TOWARDS A MOLECULAR MOVIE. , 2018, , .		0
261	NaYF₄:Er³⁺,Yb³⁺/SiO₂ Core/Shell Upconverting Nanocrystals for Luminescence Thermometry up to 900 K. Journal of Physical Chemistry C, 2017, 121, 3503-3510.	1.5	185
262	Electronic and bite angle effects in catalytic Câ€“O bond cleavage of a lignin model compound using ruthenium Xantphos complexes. Catalysis Science and Technology, 2017, 7, 619-626.	2.1	10
263	Probing Zeolite Crystal Architecture and Structural Imperfections using Differently Sized Fluorescent Organic Probe Molecules. Chemistry - A European Journal, 2017, 23, 6305-6314.	1.7	24
264	A DNP-supported solid-state NMR study of carbon species in fluid catalytic cracking catalysts. Chemical Communications, 2017, 53, 3933-3936.	2.2	27
265	Insights into the Activity and Deactivation of the Methanol-to-Olefins Process over Different Small-Pore Zeolites As Studied with Operando UVâ€“vis Spectroscopy. ACS Catalysis, 2017, 7, 4033-4046.	5.5	122
266	Quantification and Classification of Carbonyls in Industrial Humins and Lignins by ¹⁹F NMR. ACS Sustainable Chemistry and Engineering, 2017, 5, 965-972.	3.2	33
267	Thermally Stable and Regenerable Platinumâ€“Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. Angewandte Chemie - International Edition, 2017, 56, 8986-8991.	7.2	262
268	Thermally Stable and Regenerable Platinumâ€“Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. Angewandte Chemie, 2017, 129, 9114-9119.	1.6	49
269	Influence of Sulfuric Acid on the Performance of Rutheniumâ€based Catalysts in the Liquidâ€Phase Hydrogenation of Levulinic Acid to Î³â€Valerolactone. ChemSusChem, 2017, 10, 2891-2896.	3.6	47
270	Oxygen Vacancies in Reduced Rh/ and Pt/Ceria for Highly Selective and Reactive Reduction of NO into N₂ in excess of O₂. ChemCatChem, 2017, 9, 2935-2938.	1.8	20

#	Article	IF	Citations
271	Zeolite molecular accessibility and hostâ€“guest interactions studied by adsorption of organic probes of tunable size. Physical Chemistry Chemical Physics, 2017, 19, 1857-1867.	1.3	34
272	Nanoscale infrared imaging of zeolites using photoinduced force microscopy. Chemical Communications, 2017, 53, 13012-13014.	2.2	25
273	InnenrÃ¼cktitelbild: Highly Oriented Growth of Catalytically Active Zeolite ZSMâ€5 Films with a Broad Range of Si/Al Ratios (Angew. Chem. 37/2017). Angewandte Chemie, 2017, 129, 11427-11427.	1.6	0
274	Operando Spectroscopy of the Gas-Phase Aldol Condensation of Propanal over Solid Base Catalysts. Topics in Catalysis, 2017, 60, 1522-1536.	1.3	29
275	Single-Molecule Fluorescence Microscopy Reveals Local Diffusion Coefficients in the Pore Network of an Individual Catalyst Particle. Journal of the American Chemical Society, 2017, 139, 13632-13635.	6.6	70
276	Increasing the availability of active sites in Zn-Co double metal cyanides by dispersion onto a SiO2 support. Journal of Catalysis, 2017, 354, 92-99.	3.1	36
277	CO₂ Hydrogenation over Pt-Containing UiO-67 Zr-MOFsâ€”The Base Case. Industrial & Engineering Chemistry Research, 2017, 56, 13206-13218.	1.8	67
278	Highly Oriented Growth of Catalytically Active Zeolite ZSMâ€5 Films with a Broad Range of Si/Al Ratios. Angewandte Chemie - International Edition, 2017, 56, 11217-11221.	7.2	40
279	Highly Oriented Growth of Catalytically Active Zeolite ZSMâ€5 Films with a Broad Range of Si/Al Ratios. Angewandte Chemie, 2017, 129, 11369-11373.	1.6	10
280	Decoding Nucleation and Growth of Zeolitic Imidazolate Framework Thin Films with Atomic Force Microscopy and Vibrational Spectroscopy. Chemistry - A European Journal, 2017, 23, 10915-10924.	1.7	62
281	Nanoscale Chemical Imaging of Coking Mechanisms in a Zeolite ZSM-5 Crystal by Atom Probe Tomography. Microscopy and Microanalysis, 2017, 23, 674-675.	0.2	5
282	Enhanced activity of desilicated Cu-SSZ-13 for the selective catalytic reduction of NO_x and its comparison with steamed Cu-SSZ-13. Catalysis Science and Technology, 2017, 7, 3851-3862.	2.1	51
283	Nanoscale tomography reveals the deactivation of automotive copper-exchanged zeolite catalysts. Nature Communications, 2017, 8, 1666.	5.8	105
284	Influence of the Reaction Temperature on the Nature of the Active and Deactivating Species During Methanol-to-Olefins Conversion over H-SAPO-34. ACS Catalysis, 2017, 7, 5268-5281.	5.5	95
285	The role of tungsten oxide in the selective hydrogenolysis of glycerol to 1,3-propanediol over Pt/WOx/Al2O3. Applied Catalysis B: Environmental, 2017, 204, 260-272.	10.8	119
286	Operando EXAFS and XANES of Catalytic Solids and Related Materials. , 2017, , 167-191.		6
287	Selectivity Control in the Tandem Aromatization of Bioâ€Based Furanics Catalyzed by Solid Acids and Palladium. ChemSusChem, 2017, 10, 277-286.	3.6	21
288	Effect of Feedstock and Catalyst Impurities on the Methanolâ€toâ€Olefin Reaction over Hâ€SAPOâ€34. ChemCatChem, 2017, 9, 183-194.	1.8	30

#	Article	IF	Citations
289	Design and characterization of a microreactor for monodisperse catalytic droplet generation at both elevated temperatures and pressures. , 2017, , .		1
290	Wege zur Verwertung von Lignin: Fortschritte in der Biotechnik, der Bioraffination und der Katalyse. Angewandte Chemie, 2016, 128, 8296-8354.	1.6	159
291	Paving the Way for Lignin Valorisation: Recent Advances in Bioengineering, Biorefining and Catalysis. Angewandte Chemie - International Edition, 2016, 55, 8164-8215.	7.2	1,576
292	Molybdenum Speciation and its Impact on Catalytic Activity during Methane Dehydroaromatization in Zeolite ZSMâ€5 as Revealed by Operando Xâ€Ray Methods. Angewandte Chemie, 2016, 128, 5301-5305.	1.6	37
293	Gold on Different Manganese Oxides: Ultra-Low-Temperature CO Oxidation over Colloidal Gold Supported on Bulk-MnO₂ Nanomaterials. Journal of the American Chemical Society, 2016, 138, 9572-9580.	6.6	88
294	Xâ€ray Excited Optical Fluorescence and Diffraction Imaging of Reactivity and Crystallinity in a Zeolite Crystal: Crystallography and Molecular Spectroscopy in One. Angewandte Chemie, 2016, 128, 7622-7626.	1.6	6
295	Coke Formation in a Zeolite Crystal During the Methanolâ€toâ€Hydrocarbons Reaction as Studied with Atom Probe Tomography. Angewandte Chemie, 2016, 128, 11339-11343.	1.6	16
296	Photo-spectroscopy of mixtures of catalyst particles reveals their age and type. Faraday Discussions, 2016, 188, 69-79.	1.6	10
297	A Facile Solidâ€Phase Route to Renewable Aromatic Chemicals from Biobased Furanics. Angewandte Chemie, 2016, 128, 1390-1393.	1.6	29
298	Molybdenum Speciation and its Impact on Catalytic Activity during Methane Dehydroaromatization in Zeolite ZSMâ€5 as Revealed by Operando Xâ€Ray Methods. Angewandte Chemie - International Edition, 2016, 55, 5215-5219.	7.2	133
299	A Facile Solidâ€Phase Route to Renewable Aromatic Chemicals from Biobased Furanics. Angewandte Chemie - International Edition, 2016, 55, 1368-1371.	7.2	81
300	Role of Magnesium Silicates in Wet-Kneaded Silicaâ€“Magnesia Catalysts for the Lebedev Ethanol-to-Butadiene Process. ACS Catalysis, 2016, 6, 4034-4045.	5.5	66
301	Large Ferrierite Crystals as Models for Catalyst Deactivation during Skeletal Isomerisation of Oleic Acid: Evidence for Pore Mouth Catalysis. Chemistry - A European Journal, 2016, 22, 199-210.	1.7	27
302	Surface- and Tip-Enhanced Raman Spectroscopy in Catalysis. Journal of Physical Chemistry Letters, 2016, 7, 1570-1584.	2.1	149
303	Combined Operando Xâ€ray Diffraction/Raman Spectroscopy of Catalytic Solids in the Laboratory: The Co/TiO₂ Fischerâ€“Tropsch Synthesis Catalyst Showcase. ChemCatChem, 2016, 8, 1531-1542.	1.8	62
304	FIB-SEM Tomography Probes the Mesoscale Pore Space of an Individual Catalytic Cracking Particle. ACS Catalysis, 2016, 6, 3158-3167.	5.5	45
305	Extending the plasmonic lifetime of tip-enhanced Raman spectroscopy probes. Physical Chemistry Chemical Physics, 2016, 18, 13710-13716.	1.3	35
306	1s3p Resonant Inelastic X-ray Scattering of Cobalt Oxides and Sulfides. Journal of Physical Chemistry C, 2016, 120, 24063-24069.	1.5	22

#	Article	IF	Citations
307	The Seventeenth International Symposium on Relations Between Homogeneous and Heterogeneous Catalysis Utrecht July 12â€“15 2015. Topics in Catalysis, 2016, 59, 1669-1670.	1.3	0
308	Single Molecule Nanospectroscopy Visualizes Proton-Transfer Processes within a Zeolite Crystal. Journal of the American Chemical Society, 2016, 138, 13586-13596.	6.6	71
309	Spectroscopic study on the active site of a SiO₂ supported niobia catalyst used for the gas-phase Beckmann rearrangement of cyclohexanone oxime to Ιμ-caprolactam. Physical Chemistry Chemical Physics, 2016, 18, 22636-22646.	1.3	27
310	Coke Formation in a Zeolite Crystal During the Methanolâ€toâ€Hydrocarbons Reaction as Studied with Atom Probe Tomography. Angewandte Chemie - International Edition, 2016, 55, 11173-11177.	7.2	74
311	Suppression of the Aromatic Cycle in Methanolâ€toâ€Olefins Reaction over ZSMâ€5 by Postâ€Synthetic Modification Using Calcium. ChemCatChem, 2016, 8, 3057-3063.	1.8	71
312	Characterization and Comparison of Fast Pyrolysis Bio-oils from Pinewood, Rapeseed Cake, and Wheat Straw Using ¹³C NMR and Comprehensive GC Ã— GC. ACS Sustainable Chemistry and Engineering, 2016, 4, 4974-4985.	3.2	109
313	Zeolites shine bright. Nature Materials, 2016, 15, 933-934.	13.3	5
314	Enhanced Photoresponse of FeS₂ Films: The Role of Marcasiteâ€“Pyrite Phase Junctions. Advanced Materials, 2016, 28, 9602-9607.	11.1	64
315	Visualizing Dealumination of a Single Zeolite Domain in a Realâ€Life Catalytic Cracking Particle. Angewandte Chemie - International Edition, 2016, 55, 11134-11138.	7.2	42
316	Visualizing Dealumination of a Single Zeolite Domain in a Realâ€Life Catalytic Cracking Particle. Angewandte Chemie, 2016, 128, 11300-11304.	1.6	31
317	Tandem Catalytic Depolymerization of Lignin by Waterâ€Tolerant Lewis Acids and Rhodium Complexes. ChemSusChem, 2016, 9, 2074-2079.	3.6	97
318	ZrO₂ Is Preferred over TiO₂ as Support for the Ru-Catalyzed Hydrogenation of Levulinic Acid to Î³-Valerolactone. ACS Catalysis, 2016, 6, 5462-5472.	5.5	169
319	Relating structure and composition with accessibility of a single catalyst particle using correlative 3-dimensional micro-spectroscopy. Nature Communications, 2016, 7, 12634.	5.8	74
320	Photoelectrochemistry: Enhanced Photoresponse of FeS2 Films: The Role of Marcasite-Pyrite Phase Junctions (Adv. Mater. 43/2016). Advanced Materials, 2016, 28, 9656-9656.	11.1	0
321	Templateâ€“Framework Interactions in Tetraethylammoniumâ€Directed Zeolite Synthesis. Angewandte Chemie, 2016, 128, 16278-16282.	1.6	13
322	Templateâ€“Framework Interactions in Tetraethylammoniumâ€Directed Zeolite Synthesis. Angewandte Chemie - International Edition, 2016, 55, 16044-16048.	7.2	58
323	Initial Carbonâ€“Carbon Bond Formation during the Early Stages of the Methanolâ€toâ€Olefin Process Proven by Zeoliteâ€Trapped Acetate and Methyl Acetate. Angewandte Chemie, 2016, 128, 16072-16077.	1.6	56
324	Correction to Role of Magnesium Silicates in Wet-Kneaded Silica-Magnesia Catalysts for the Lebedev Ethanol-to-Butadiene Process. ACS Catalysis, 2016, 6, 7685-7685.	5.5	1

#	Article	IF	Citations
325	Cu-Zeolite Selective Catalytic Reduction Catalysts for NOx Conversion. , 2016, , 433-450.		4
326	Initial Carbonâ€“Carbon Bond Formation during the Early Stages of the Methanolâ€toâ€Olefin Process Proven by Zeoliteâ€Trapped Acetate and Methyl Acetate. Angewandte Chemie - International Edition, 2016, 55, 15840-15845.	7.2	170
327	Xâ€ray Excited Optical Fluorescence and Diffraction Imaging of Reactivity and Crystallinity in a Zeolite Crystal: Crystallography and Molecular Spectroscopy in One. Angewandte Chemie - International Edition, 2016, 55, 7496-7500.	7.2	14
328	Realâ€time Analysis of a Working Triethylaluminiumâ€Modified Cr/Ti/SiO₂ Ethylene Polymerization Catalyst with Inâ€…Situ Infrared Spectroscopy. ChemCatChem, 2016, 8, 1937-1944.	1.8	20
329	Designing new catalysts: synthesis of new active structures: general discussion. Faraday Discussions, 2016, 188, 131-159.	1.6	4
330	Catalyst design from theory to practice: general discussion. Faraday Discussions, 2016, 188, 279-307.	1.6	2
331	Bridging model and real catalysts: general discussion. Faraday Discussions, 2016, 188, 565-589.	1.6	3
332	Application of novel catalysts: general discussion. Faraday Discussions, 2016, 188, 399-426.	1.6	0
333	Methanol-to-olefins process over zeolite catalysts with DDR topology: effect of composition and structural defects on catalytic performance. Catalysis Science and Technology, 2016, 6, 2663-2678.	2.1	55
334	Fluoride-assisted synthesis of bimodal microporous SSZ-13 zeolite. Chemical Communications, 2016, 52, 3227-3230.	2.2	36
335	The curious case of zeoliteâ€“clay/binder interactions and their consequences for catalyst preparation. Faraday Discussions, 2016, 188, 369-386.	1.6	61
336	Supported bimetallic nano-alloys as highly active catalysts for the one-pot tandem synthesis of imines and secondary amines from nitrobenzene and alcohols. Catalysis Science and Technology, 2016, 6, 5473-5482.	2.1	39
337	Insight into the Effect of Water on the Methanol-to-Olefins Conversion in H-SAPO-34 from Molecular Simulations and in Situ Microspectroscopy. ACS Catalysis, 2016, 6, 1991-2002.	5.5	110
338	Active phase distribution changes within a catalyst particle during Fischerâ€“Tropsch synthesis as revealed by multi-scale microscopy. Catalysis Science and Technology, 2016, 6, 4438-4449.	2.1	43
339	New insights into the structure and composition of technical lignins: a comparative characterisation study. Green Chemistry, 2016, 18, 2651-2665.	4.6	648
340	Role of Sn in the Regeneration of Pt/Î³-Al₂O₃ Light Alkane Dehydrogenation Catalysts. ACS Catalysis, 2016, 6, 2257-2264.	5.5	188
341	Trimodal Porous Hierarchical SSZ-13 Zeolite with Improved Catalytic Performance in the Methanol-to-Olefins Reaction. ACS Catalysis, 2016, 6, 2163-2177.	5.5	116
342	Nanoscale Chemical Imaging of an Individual Catalyst Particle with Soft X-ray Ptychography. ACS Catalysis, 2016, 6, 2178-2181.	5.5	91

#	Article	IF	Citations
343	NbOx/SiO2 in the gas-phase Beckmann rearrangement of cyclohexanone oxime to Îµ-caprolactam: Influence of calcination temperature, niobia loading and silylation post-treatment. Applied Catalysis B: Environmental, 2016, 185, 272-280.	10.8	12
344	Structureâ€“performance relationships of Cr/Ti/SiO₂ catalysts modified with TEAl for oligomerisation of ethylene: tuning the selectivity towards 1-hexene. Catalysis Science and Technology, 2016, 6, 731-743.	2.1	20
345	Protonated thiophene-based oligomers as formed within zeolites: understanding their electron delocalization and aromaticity. Physical Chemistry Chemical Physics, 2016, 18, 2080-2086.	1.3	17
346	Homogeneous and heterogenised masked N-heterocyclic carbenes for bio-based cyclic carbonate synthesis. Green Chemistry, 2016, 18, 1605-1618.	4.6	41
347	Aqueous-phase reforming of crude glycerol: effect of impurities on hydrogen production. Catalysis Science and Technology, 2016, 6, 134-143.	2.1	54
348	Simultaneous coking and dealumination of zeolite H-ZSM-5 during the transformation of chloromethane into olefins. Catalysis Science and Technology, 2016, 6, 296-306.	2.1	45
349	Effects of Coke Deposits on the Catalytic Performance of Large Zeolite Hâ€ZSMâ€5 Crystals during Alcoholâ€toâ€Hydrocarbon Reactions as Investigated by a Combination of Optical Spectroscopy and Microscopy. Chemistry - A European Journal, 2015, 21, 17324-17335.	1.7	47
350	Polyethylene with Reverse Coâ€monomer Incorporation: From an Industrial Serendipitous Discovery to Fundamental Understanding. Angewandte Chemie - International Edition, 2015, 54, 13073-13079.	7.2	31
351	Substituted Phthalic Anhydrides from Biobased Furanics: A New Approach to Renewable Aromatics. ChemSusChem, 2015, 8, 3052-3056.	3.6	62
352	Regioselective Cleavage of Electronâ€Rich Double Bonds in Dienes to Carbonyl Compounds with [Fe(OTf)₂(mixâ€BPBP)] and a Combination of H₂O₂ and NaIO₄. European Journal of Inorganic Chemistry, 2015, 2015, 3462-3466.	1.0	8
353	Phosphorus promotion and poisoning in zeolite-based materials: synthesis, characterisation and catalysis. Chemical Society Reviews, 2015, 44, 7406-7428.	18.7	147
354	Skeletal isomerisation of oleic acid over ferrierite: Influence of acid site number, accessibility and strength on activity and selectivity. Journal of Catalysis, 2015, 329, 195-205.	3.1	24
355	Life and death of a single catalytic cracking particle. Science Advances, 2015, 1, e1400199.	4.7	124
356	Xâ€ray Fluorescence Tomography of Aged Fluidâ€Catalyticâ€Cracking Catalyst Particles Reveals Insight into Metal Deposition Processes. ChemCatChem, 2015, 7, 3674-3682.	1.8	62
357	CaO as Dropâ€In Colloidal Catalysts for the Synthesis of Higher Polyglycerols. Chemistry - A European Journal, 2015, 21, 5101-5109.	1.7	11
358	Zeolites and Zeotypes for Oil and Gas Conversion. Advances in Catalysis, 2015, 58, 143-314.	0.1	65
359	Mapping Metals Incorporation of a Whole Single Catalyst Particle Using Element Specific X-ray Nanotomography. Journal of the American Chemical Society, 2015, 137, 102-105.	6.6	97
360	Influence of the Reaction Temperature on the Nature of the Active and Deactivating Species during Methanol to Olefins Conversion over H-SSZ-13. ACS Catalysis, 2015, 5, 992-1003.	5.5	112

#	Article	IF	Citations
361	Unraveling the Redox Behavior of a CoMoS Hydrodesulfurization Catalyst: A Scanning Transmission X-ray Microscopy Study in the Tender X-ray Range. Journal of Physical Chemistry C, 2015, 119, 2530-2536.	1.5	8
362	Highâ€Resolution Singleâ€Molecule Fluorescence Imaging of Zeolite Aggregates within Realâ€Life Fluid Catalytic Cracking Particles. Angewandte Chemie - International Edition, 2015, 54, 1836-1840.	7.2	85
363	Binder Effects in SiO₂â€•and Al₂O₃â€Bound Zeolite ZSMâ€5â€Based Extrudates as Studied by Microspectroscopy. ChemCatChem, 2015, 7, 1312-1321.	1.8	67
364	Differences in the Location of Guest Molecules within Zeolite Pores As Revealed by Multilaser Excitation Confocal Fluorescence Microscopy: Which Molecule Is Where?. Journal of the American Chemical Society, 2015, 137, 1916-1928.	6.6	34
365	Full, Reactive Solubilization of Humin Byproducts by Alkaline Treatment and Characterization of the Alkali-Treated Humins Formed. ACS Sustainable Chemistry and Engineering, 2015, 3, 533-543.	3.2	61
366	Differences in single and aggregated nanoparticle plasmon spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 2991-2995.	1.3	17
367	Separation of Time-Resolved Phenomena in Surface-Enhanced Raman Scattering of the Photocatalytic Reduction ofp-Nitrothiophenol. ChemPhysChem, 2015, 16, 489-489.	1.0	3
368	Sustainable production of dimethyl adipate by non-heme iron(iii) catalysed oxidative cleavage of catechol. Catalysis Science and Technology, 2015, 5, 2103-2109.	2.1	12
369	Structural characterization of ¹³C-enriched humins and alkali-treated ¹³C humins by 2D solid-state NMR. Green Chemistry, 2015, 17, 4383-4392.	4.6	134
370	Determining the location and nearest neighbours of aluminium in zeolites with atom probe tomography. Nature Communications, 2015, 6, 7589.	5.8	139
371	Surface- and Tip-Enhanced Raman Spectroscopy as Operando Probes for Monitoring and Understanding Heterogeneous Catalysis. Catalysis Letters, 2015, 145, 40-57.	1.4	55
372	Influence of acidâ€“base properties on the Lebedev ethanol-to-butadiene process catalyzed by SiO₂â€“MgO materials. Catalysis Science and Technology, 2015, 5, 2869-2879.	2.1	135
373	Controlled Synthesis of Phaseâ€Pure Zeolitic Imidazolate Framework Coâ€ZIFâ€9. European Journal of Inorganic Chemistry, 2015, 2015, 1625-1630.	1.0	36
374	High performing and stable supported nano-alloys for the catalytic hydrogenation of levulinic acid to Î³-valerolactone. Nature Communications, 2015, 6, 6540.	5.8	275
375	Quantitative 3D Fluorescence Imaging of Single Catalytic Turnovers Reveals Spatiotemporal Gradients in Reactivity of Zeolite H-ZSM-5 Crystals upon Steaming. Journal of the American Chemical Society, 2015, 137, 6559-6568.	6.6	69
376	Recent advances in zeolite chemistry and catalysis. Chemical Society Reviews, 2015, 44, 7022-7024.	18.7	333
377	Reusable Mgâ€“Al hydrotalcites for the catalytic synthesis of diglycerol dicarbonate from diglycerol and dimethyl carbonate. Catalysis Today, 2015, 257, 274-280.	2.2	14
378	Unlocking the potential of a sleeping giant: lignins as sustainable raw materials for renewable fuels, chemicals and materials. Green Chemistry, 2015, 17, 4860-4861.	4.6	91

#	Article	IF	Citations
379	Studying birth, life and death of catalytic solids with operando spectroscopy. National Science Review, 2015, 2, 147-149.	4.6	25
380	Agglutination of single catalyst particles during fluid catalytic cracking as observed by X-ray nanotomography. Chemical Communications, 2015, 51, 8097-8100.	2.2	44
381	Ex Situ and Operando Studies on the Role of Copper in Cu-Promoted SiO₂â€“MgO Catalysts for the Lebedev Ethanol-to-Butadiene Process. ACS Catalysis, 2015, 5, 6005-6015.	5.5	95
382	Fluid catalytic cracking: recent developments on the grand old lady of zeolite catalysis. Chemical Society Reviews, 2015, 44, 7342-7370.	18.7	716
383	Separation of Timeâ€Resolved Phenomena in Surfaceâ€Enhanced Raman Scattering of the Photocatalytic Reduction of pâ€Nitrothiophenol. ChemPhysChem, 2015, 16, 547-554.	1.0	19
384	Investigation of the Kinetics of a Surface Photocatalytic Reaction in Two Dimensions with Surfaceâ€enhanced Raman Scattering. ChemCatChem, 2014, 6, 3342-3346.	1.8	26
385	Realâ€Time Quantitative Operando Raman Spectroscopy of a CrO_x/Al₂O₃ Propane Dehydrogenation Catalyst in a Pilotâ€Scale Reactor. ChemCatChem, 2014, 6, 3139-3145.	1.8	43
386	Platinumâ€Promoted Ga/Al₂O₃ as Highly Active, Selective, and Stable Catalyst for the Dehydrogenation of Propane. Angewandte Chemie - International Edition, 2014, 53, 9251-9256.	7.2	215
387	Breakthroughs in Hard Xâ€ray Diffraction: Towards a Multiscale Science Approach in Heterogeneous Catalysis. Angewandte Chemie - International Edition, 2014, 53, 8556-8558.	7.2	6
388	Aluminum-Phosphate Binder Formation in Zeolites as Probed with X-ray Absorption Microscopy. Journal of the American Chemical Society, 2014, 136, 17774-17787.	6.6	33
389	Experimental and Computational Evidence for the Mechanism of Intradiol Catechol Dioxygenation by Nonâ€Heme Iron(III) Complexes. Chemistry - A European Journal, 2014, 20, 15686-15691.	1.7	22
390	Hexane Cracking over Steamed Phosphated Zeolite Hâ€ZSMâ€5: Promotional Effect on Catalyst Performance and Stability. Chemistry - A European Journal, 2014, 20, 16922-16932.	1.7	49
391	Selective staining of zeolite acidity: Recent progress and future perspectives on fluorescence microscopy. Microporous and Mesoporous Materials, 2014, 189, 136-143.	2.2	18
392	Chemical deactivation of Cu-SSZ-13 ammonia selective catalytic reduction (NH3-SCR) systems. Applied Catalysis B: Environmental, 2014, 154-155, 339-349.	10.8	123
393	Recent advances in secondary ion mass spectrometry of solid acid catalysts: large zeolite crystals under bombardment. Physical Chemistry Chemical Physics, 2014, 16, 5465-5474.	1.3	18
394	Singleâ€Particle Spectroscopy of Alcoholâ€toâ€Olefins over SAPOâ€34 at Different Reaction Stages: Crystal Accessibility and Hydrocarbons Reactivity. ChemCatChem, 2014, 6, 772-783.	1.8	27
395	Chemical imaging of the sulfur-induced deactivation of Cu/ZnO catalyst bodies. Journal of Catalysis, 2014, 314, 94-100.	3.1	35
396	Single-catalyst particle spectroscopy of alcohol-to-olefins conversions: Comparison between SAPO-34 and SSZ-13. Catalysis Today, 2014, 226, 14-24.	2.2	50

#	Article	IF	Citations
397	Combined Operando UV/Vis/IR Spectroscopy Reveals the Role of Methoxy and Aromatic Species during the Methanolâ€toâ€Olefins Reaction over Hâ€SAPOâ€34. ChemCatChem, 2014, 6, 3396-3408.	1.8	57
398	Lignin up for break-down. Nature Chemistry, 2014, 6, 1035-1036.	6.6	138
399	Local silico-aluminophosphate interfaces within phosphated H-ZSM-5 zeolites. Physical Chemistry Chemical Physics, 2014, 16, 9892.	1.3	48
400	Determining the storage, availability and reactivity of NH₃within Cu-Chabazite-based Ammonia Selective Catalytic Reduction systems. Physical Chemistry Chemical Physics, 2014, 16, 1639-1650.	1.3	181
401	Selective staining of BrÃ¸nsted acidity in zeolite ZSM-5-based catalyst extrudates using thiophene as a probe. Physical Chemistry Chemical Physics, 2014, 16, 21531-21542.	1.3	20
402	Fe(6-Me-PyTACN)-catalyzed, one-pot oxidative cleavage of methyl oleate and oleic acid into carboxylic acids with H2O2 and NaIO4. Catalysis Science and Technology, 2014, 4, 708.	2.1	33
403	A Radical Twist to the Versatile Behavior of Iron in Selective Methane Activation. Angewandte Chemie - International Edition, 2014, 53, 11137-11139.	7.2	11
404	Selective, one-pot catalytic conversion of levulinic acid to pentanoic acid over Ru/H-ZSM5. Journal of Catalysis, 2014, 320, 33-41.	3.1	103
405	Catalytic Dehydrogenation of Light Alkanes on Metals and Metal Oxides. Chemical Reviews, 2014, 114, 10613-10653.	23.0	1,473
406	Phosphatation of Zeolite Hâ€ZSMâ€5: A Combined Microscopy and Spectroscopy Study. ChemPhysChem, 2014, 15, 283-292.	1.0	44
407	Transition metal-catalyzed oxidative double bond cleavage of simple and bio-derived alkenes and unsaturated fatty acids. Catalysis Science and Technology, 2014, 4, 2182.	2.1	99
408	Reactivity Descriptor in Solid Acid Catalysis: Predicting Turnover Frequencies for Propene Methylation in Zeotypes. Journal of Physical Chemistry Letters, 2014, 5, 1516-1521.	2.1	96
409	Effect of Preparation Method and CuO Promotion in the Conversion of Ethanol into 1,3â€Butadiene over SiO₂â€“MgO Catalysts. ChemSusChem, 2014, 7, 2505-2515.	3.6	109
410	Dispersion and Orientation of Zeolite ZSMâ€5 Crystallites within a Fluid Catalytic Cracking Catalyst Particle. Chemistry - A European Journal, 2014, 20, 3667-3677.	1.7	24
411	Active sites over CuO/CeO2 and inverse CeO2/CuO catalysts for preferential CO oxidation. Journal of Power Sources, 2014, 256, 301-311.	4.0	75
412	Skeletal isomerisation of oleic acid over ferrierite in the presence and absence of triphenylphosphine: Pore mouth catalysis and related deactivation mechanisms. Journal of Catalysis, 2014, 316, 24-35.	3.1	31
413	A metal-free, one-pot method for the oxidative cleavage of internal aliphatic alkenes into carboxylic acids. RSC Advances, 2013, 3, 6606.	1.7	22
414	Liquid-phase reforming and hydrodeoxygenation as a two-step route to aromatics from lignin. Green Chemistry, 2013, 15, 3049.	4.6	159

#	Article	IF	Citations
415	Singleâ€Particle Spectroscopy on Large SAPOâ€34 Crystals at Work: Methanolâ€toâ€Olefin versus Ethanolâ€toâ€Olefin Processes. Chemistry - A European Journal, 2013, 19, 11204-11215.	1.7	54
416	Formation, Molecular Structure, and Morphology of Humins in Biomass Conversion: Influence of Feedstock and Processing Conditions. ChemSusChem, 2013, 6, 1745-1758.	3.6	482
417	Progress in controlling the size, composition and nanostructure of supported goldâ€“palladium nanoparticles for catalytic applications. Catalysis Science and Technology, 2013, 3, 2869.	2.1	56
418	Spatial Distribution of Zeolite ZSMâ€5 within Catalyst Bodies Affects Selectivity and Stability of Methanolâ€toâ€Hydrocarbons Conversion. ChemCatChem, 2013, 5, 2827-2831.	1.8	38
419	Interplay between nanoscale reactivity and bulk performance of H-ZSM-5 catalysts during the methanol-to-hydrocarbons reaction. Journal of Catalysis, 2013, 307, 185-193.	3.1	51
420	Mechanistic Study of the Pd/TOMPP-Catalyzed Telomerization of 1,3-Butadiene: Influence of Aromatic Solvents on Bis-Phosphine Complex Formation and Regioselectivity. Organometallics, 2013, 32, 5047-5057.	1.1	9
421	Large Zeolite Hâ€ZSMâ€5 Crystals as Models for the Methanolâ€toâ€Hydrocarbons Process: Bridging the Gap between Singleâ€Particle Examination and Bulk Catalyst Analysis. Chemistry - A European Journal, 2013, 19, 8533-8542.	1.7	29
422	Feâ€Catalyzed Oneâ€Pot Oxidative Cleavage of Unsaturated Fatty Acids into Aldehydes with Hydrogen Peroxide and Sodium Periodate. Chemistry - A European Journal, 2013, 19, 15012-15018.	1.7	44
423	Shale Gas Revolution: An Opportunity for the Production of Biobased Chemicals?. Angewandte Chemie - International Edition, 2013, 52, 11980-11987.	7.2	278
424	Die Schiefergasrevolution: eine Chance zur Herstellung von Chemikalien auf Biobasis?. Angewandte Chemie, 2013, 125, 12198-12206.	1.6	40
425	Development of a 4,4â€²-biphenyl/phosphine-based COF for the heterogeneous Pd-catalysed telomerisation of 1,3-butadiene. Catalysis Science and Technology, 2013, 3, 2571.	2.1	37
426	Carbon Nanofiber Supported Transitionâ€Metal Carbide Catalysts for the Hydrodeoxygenation of Guaiacol. ChemCatChem, 2013, 5, 2964-2972.	1.8	180
427	X-ray nanoscopy of cobalt Fischerâ€“Tropsch catalysts at work. Chemical Communications, 2013, 49, 4622.	2.2	71
428	In situ spectroscopic investigation of oxidative dehydrogenation and disproportionation of benzyl alcohol. Physical Chemistry Chemical Physics, 2013, 15, 12147.	1.3	43
429	Pd/TOMPP-catalysed telomerisation of 1,3-butadiene with lignin-type phenols and thermal Claisen rearrangement of linear telomers. Catalysis Science and Technology, 2013, 3, 1215-1223.	2.1	19
430	Imaging the effect of a hydrothermal treatment on the pore accessibility and acidity of large ZSM-5 zeolite crystals by selective staining. Catalysis Science and Technology, 2013, 3, 1208-1214.	2.1	19
431	Local Environment and Nature of Cu Active Sites in Zeolite-Based Catalysts for the Selective Catalytic Reduction of NO_x. ACS Catalysis, 2013, 3, 413-427.	5.5	301
432	Highly Selective Bimetallic Ptâ€Cu/Mg(Al)O Catalysts for the Aqueousâ€Phase Reforming of Glycerol. ChemCatChem, 2013, 5, 529-537.	1.8	34

#	Article	IF	Citations
433	Mechanistic Studies on Chabaziteâ€Type Methanolâ€toâ€Olefin Catalysts: Insights from Timeâ€Resolved UV/Vis Microspectroscopy Combined with Theoretical Simulations. ChemCatChem, 2013, 5, 173-184.	1.8	70
434	New Editorial Board Members: Refreshing our Catalyst!. ChemCatChem, 2013, 5, 6-8.	1.8	1
435	Ruthenium-catalyzed hydrogenation of levulinic acid: Influence of the support and solvent on catalyst selectivity and stability. Journal of Catalysis, 2013, 301, 175-186.	3.1	281
436	Noninvasive Spatiotemporal Profiling of the Processes of Impregnation and Drying within Mo/Al₂O₃ Catalyst Bodies by a Combination of X-ray Absorption Tomography and Diagonal Offset Raman Spectroscopy. ACS Catalysis, 2013, 3, 339-347.	5.5	23
437	Operando Raman spectroscopy study on the deactivation of Pt/Al2O3 and Ptâ€“Sn/Al2O3 propane dehydrogenation catalysts. Physical Chemistry Chemical Physics, 2013, 15, 12095.	1.3	98
438	Xâ€Ray Imaging of SAPOâ€34 Molecular Sieves at the Nanoscale: Influence of Steaming on the Methanolâ€toâ€Hydrocarbons Reaction. ChemCatChem, 2013, 5, 1386-1394.	1.8	32
439	Catalytic oxidative cleavage of catechol by a non-heme iron(iii) complex as a green route to dimethyl adipate. Chemical Communications, 2013, 49, 6912.	2.2	14
440	Guestâ€“host interactions of arenes in H-ZSM-5 and their impact on methanol-to-hydrocarbons deactivation processes. Journal of Catalysis, 2013, 300, 235-241.	3.1	61
441	Chemocatalytic Conversion of Ethanol into Butadiene and Other Bulk Chemicals. ChemSusChem, 2013, 6, 1595-1614.	3.6	371
442	Changing active sites in Cuâ€“CHA catalysts: deNOx selectivity as a function of the preparation method. Microporous and Mesoporous Materials, 2013, 166, 144-152.	2.2	131
443	Structure and acidity of individual Fluid Catalytic Cracking catalyst particles studied by synchrotron-based infrared micro-spectroscopy. Microporous and Mesoporous Materials, 2013, 166, 86-92.	2.2	23
444	Intergrowth Structure and Aluminium Zoning of a Zeolite ZSMâ€5 Crystal as Resolved by Synchrotronâ€Based Micro Xâ€Ray Diffraction Imaging. Angewandte Chemie - International Edition, 2013, 52, 13382-13386.	7.2	51
445	Probing the Different Life Stages of a Fluid Catalytic Cracking Particle with Integrated Laser and Electron Microscopy. Chemistry - A European Journal, 2013, 19, 3846-3859.	1.7	32
446	Stability of Pt/Î³-Al₂O₃ Catalysts in Lignin and Lignin Model Compound Solutions under Liquid Phase Reforming Reaction Conditions. ACS Catalysis, 2013, 3, 464-473.	5.5	82
447	Operando UV-Vis spectroscopy of a catalytic solid in a pilot-scale reactor: deactivation of a CrOx/Al2O3 propane dehydrogenation catalyst. Chemical Communications, 2013, 49, 1518.	2.2	50
448	Data-processing strategies for nano-tomography with elemental specification. Proceedings of SPIE, 2013, , .	0.8	1
449	Identification of Intermediates in Zeoliteâ€Catalyzed Reactions by In Situ UV/Vis Microspectroscopy and a Complementary Set of Molecular Simulations. Chemistry - A European Journal, 2013, 19, 16595-16606.	1.7	68
450	3D Nanoscale Chemical Imaging of the Distribution of Aluminum Coordination Environments in Zeolites with Soft Xâ€Ray Microscopy. ChemPhysChem, 2013, 14, 496-499.	1.0	33

#	Article	IF	Citations
451	Recalcitrance of Nature: Chemocatalysis for the Production of Biomassâ€Based Building Blocks. ChemSusChem, 2013, 6, 1559-1563.	3.6	9
452	Synthesis and Morphology Control of AMâ€6 Nanofibers with Tailored â€Vâ€Oâ€Vâ€Intermediates. Chemistry - A European Journal, 2013, 19, 14200-14204.	1.7	5
453	Hard Xâ€ray Spectroscopic Nanoâ€Imaging of Hierarchical Functional Materials at Work. ChemPhysChem, 2013, 14, 3655-3666.	1.0	51
454	Correlating Metal Poisoning with Zeolite Deactivation in an Individual Catalyst Particle by Chemical and Phaseâ€Sensitive Xâ€ray Microscopy. Angewandte Chemie - International Edition, 2013, 52, 5983-5987.	7.2	74
455	Pd/TOMPP-catalyzed telomerization of 1,3-butadiene: From biomass-based substrates to new mechanistic insights. Pure and Applied Chemistry, 2012, 84, 1713-1727.	0.9	11
456	Combination of characterization techniques for atomic layer deposition MoO3 coatings: From the amorphous to the orthorhombic Î±-MoO3 crystalline phase. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	51
457	Pd-Catalyzed Telomerization of 1,3-Dienes with Multifunctional Renewable Substrates: Versatile Routes for the Valorization of Biomass-Derived Platform Molecules. Topics in Organometallic Chemistry, 2012, , 45-101.	0.7	13
458	An eye on the inside: imaging of catalytic particles under reaction conditions. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, s44-s44.	0.3	0
459	Looking inside Catalyst Extrudates with Time-Resolved Surface-Enhanced Raman Spectroscopy (TR-SERS). Applied Spectroscopy, 2012, 66, 1179-1185.	1.2	8
460	Triazacyclophane (TAC)-scaffolded histidine and aspartic acid residues as mimics of non-heme metalloenzyme active sites. Organic and Biomolecular Chemistry, 2012, 10, 1088-1092.	1.5	1
461	Hard Xâ€ray Nanotomography of Catalytic Solids at Work. Angewandte Chemie - International Edition, 2012, 51, 11986-11990.	7.2	96
462	Operando surface spectroscopyâ€"placing catalytic solids at work under the spotlight. Physical Chemistry Chemical Physics, 2012, 14, 2125.	1.3	20
463	Styrene oligomerization as a molecular probe reaction for BrÃ¸nsted acidity at the nanoscale. Physical Chemistry Chemical Physics, 2012, 14, 6967.	1.3	20
464	Active phase evolution in single Ni/Al₂O₃methanation catalyst bodies studied in real time using combined Î¼-XRD-CT and Î¼-absorption-CT. Chemical Science, 2012, 3, 509-523.	3.7	73
465	On the Polymerization Behavior of Telomers: Metathesis versus Thiolâ€"Ene Chemistry. Macromolecules, 2012, 45, 1866-1878.	2.2	30
466	Confirmation of Isolated Cu²⁺ Ions in SSZ-13 Zeolite as Active Sites in NH₃-Selective Catalytic Reduction. Journal of Physical Chemistry C, 2012, 116, 4809-4818.	1.5	310
467	Catalytic processes monitored at the nanoscale with tip-enhanced Raman spectroscopy. Nature Nanotechnology, 2012, 7, 583-586.	15.6	570
468	â€œExtractingâ€the Key Fragment in ETSâ€10 Crystallization and Its Application in AMâ€6 Assembly. Chemistry - A European Journal, 2012, 18, 12078-12084.	1.7	8

#	Article	IF	Citations
469	Heterogeneities of individual catalyst particles in space and time as monitored by spectroscopy. Nature Chemistry, 2012, 4, 873-886.	6.6	392
470	Tracing Catalytic Conversion on Single Zeolite Crystals in 3D with Nonlinear Spectromicroscopy. Journal of the American Chemical Society, 2012, 134, 1124-1129.	6.6	22
471	Techniques Coupling for Catalyst Characterisation. , 2012, , 1075-1117.		6
472	Mechanistic insights in the olefin epoxidation with cyclohexyl hydroperoxide. Catalysis Science and Technology, 2012, 2, 951.	2.1	18
473	Structure and Basicity of Microporous Titanosilicate ETS-10 and Vanadium-Containing ETS-10. Journal of Physical Chemistry C, 2012, 116, 17124-17133.	1.5	9
474	KÎ² Detected High-Resolution XANES of FeII and FeIII Models of the 2-His-1-Carboxylate Motif: Analysis of the Carboxylate Binding Mode. European Journal of Inorganic Chemistry, 2012, 2012, 1589-1597.	1.0	13
475	An integrated AFM-Raman instrument for studying heterogeneous catalytic systems: a first showcase. Chemical Communications, 2012, 48, 1742.	2.2	31
476	Xâ€ray Imaging of Zeolite Particles at the Nanoscale: Influence of Steaming on the State of Aluminum and the Methanolâ€Toâ€Olefin Reaction. Angewandte Chemie - International Edition, 2012, 51, 3616-3619.	7.2	62
477	On the Microdistributions of Crâ€ion Complexes within mmâ€Sized Î³â€Al₂O₃ Catalyst Bodies upon Impregnation as Studied by UV/Vis and Raman Microspectroscopy. ChemCatChem, 2012, 4, 217-227.	1.8	3
478	Solid Acidâ€Catalyzed Cellulose Hydrolysis Monitored by Inâ€…Situ ATRâ€IR Spectroscopy. ChemSusChem, 2012, 5, 430-437.	3.6	46
479	Catalytic Lignin Valorization Process for the Production of Aromatic Chemicals and Hydrogen. ChemSusChem, 2012, 5, 1602-1609.	3.6	248
480	Microspectroscopic insight into the deactivation process of individual cracking catalyst particles with basic sulfur components. Applied Catalysis A: General, 2012, 419-420, 84-94.	2.2	34
481	CoMo sulfide-catalyzed hydrodeoxygenation of lignin model compounds: An extended reaction network for the conversion of monomeric and dimeric substrates. Journal of Catalysis, 2012, 285, 315-323.	3.1	270
482	Staining of Fluidâ€Catalyticâ€Cracking Catalysts: Localising BrÃ¸nsted Acidity within a Single Catalyst Particle. Chemistry - A European Journal, 2012, 18, 1094-1101.	1.7	43
483	Hostâ€“Guest Geometry in Pores of Zeolite ZSMâ€5 Spatially Resolved with Multiplex CARS Spectromicroscopy. Angewandte Chemie - International Edition, 2012, 51, 1343-1347.	7.2	27
484	Integrated Laser and Electron Microscopy Correlates Structure of Fluid Catalytic Cracking Particles to BrÃ¸nsted Acidity. Angewandte Chemie - International Edition, 2012, 51, 1428-1431.	7.2	45
485	Chemical Probing within Catalyst Bodies by Diagonal Offset Raman Spectroscopy. Angewandte Chemie - International Edition, 2012, 51, 957-960.	7.2	23
486	Isolated Cu²⁺ions: active sites for selective catalytic reduction of NO. Chemical Communications, 2011, 47, 800-802.	2.2	243

#	Article	IF	Citations
487	In situ spectroscopic investigation of the cobalt-catalyzed oxidation of lignin model compounds in ionic liquids. Green Chemistry, 2011, 13, 671.	4.6	90
488	Protonation of the oxygen axial ligand in galactose oxidase model compounds as seen with high resolution X-ray emission experiments and FEFF simulations. Physical Chemistry Chemical Physics, 2011, 13, 5600.	1.3	12
489	Understanding the Promotion Effect of Lanthanum Oxide on Gold-Based Catalysts in the Partial Oxidation of Methanol by in Situ XAFS and DSC Studies. Journal of Physical Chemistry C, 2011, 115, 15545-15554.	1.5	10
490	Dynamic Cu/Zn Interaction in SiO₂ Supported Methanol Synthesis Catalysts Unraveled by in Situ XAFS. Journal of Physical Chemistry C, 2011, 115, 20175-20191.	1.5	57
491	Probing ZnAPO-34 Self-Assembly Using Simultaneous Multiple in Situ Techniques. Journal of Physical Chemistry C, 2011, 115, 6331-6340.	1.5	35
492	New Insights into the Active Surface Species of Silver Alumina Catalysts in the Selective Catalytic Reduction of NO. Journal of Physical Chemistry C, 2011, 115, 885-896.	1.5	58
493	Cyclohexene Epoxidation with Cyclohexyl Hydroperoxide: A Catalytic Route to Largely Increase Oxygenate Yield from Cyclohexane Oxidation. ACS Catalysis, 2011, 1, 1183-1192.	5.5	24
494	Telomerization of 1,3-Butadiene with Biomass-Derived Alcohols over a Heterogeneous Pd/TPPTS Catalyst Based on Layered Double Hydroxides. ACS Catalysis, 2011, 1, 526-536.	5.5	18
495	Coreâ€“shell H-ZSM-5/silicalite-1 composites: BrÃ¸nsted acidity and catalyst deactivation at the individual particle level. Physical Chemistry Chemical Physics, 2011, 13, 15985.	1.3	47
496	Complexity behind CO₂ Capture on NH₂-MIL-53(Al). Langmuir, 2011, 27, 3970-3976.	1.6	274
497	Co₃O₄â€“SiO₂ Nanocomposite: A Very Active Catalyst for CO Oxidation with Unusual Catalytic Behavior. Journal of the American Chemical Society, 2011, 133, 11279-11288.	6.6	189
498	Catalytic activity in individual cracking catalyst particles imaged throughout different life stages by selective staining. Nature Chemistry, 2011, 3, 862-867.	6.6	132
499	New insight in the template decomposition process of large zeolite ZSM-5 crystals: an in situUV-Vis/fluorescence micro-spectroscopy study. Physical Chemistry Chemical Physics, 2011, 13, 3681-3685.	1.3	32
500	Template removal processes within individual micron-sized SAPO-34 crystals: Effect of gas atmosphere and crystal size. Microporous and Mesoporous Materials, 2011, 146, 28-35.	2.2	12
501	Spatial and temporal mapping of coke formation during paraffin and olefin aromatization in individual H-ZSM-5 crystals. Applied Catalysis A: General, 2011, 404, 12-20.	2.2	18
502	Experimental and theoretical IR study of methanol and ethanol conversion over H-SAPO-34. Catalysis Today, 2011, 177, 12-24.	2.2	41
503	Conceptual chemistry approach towards the support effect in supported vanadium oxides: Valence bond calculations on the ionicity of vanadium catalysts. Catalysis Today, 2011, 177, 3-11.	2.2	6
504	Mechanistic Study of the Pd/TOMPPâ€Catalyzed Telomerization of 1,3â€Butadiene with Biomassâ€Based Alcohols: On the Reversibility of Phosphine Alkylation. ChemCatChem, 2011, 3, 845-852.	1.8	17

#	Article	IF	Citations
505	Editorial: Solving the Material and Energy Challenges of the Future. ChemCatChem, 2011, 3, 619-621.	1.8	0
506	An Attempt to Selectively Oxidize Methane over Supported Gold Catalysts. Catalysis Letters, 2011, 141, 1429-1434.	1.4	11
507	Oxidation of methane to methanol and formaldehyde over Coâ€“ZSM-5 molecular sieves: Tuning the reactivity and selectivity by alkaline and acid treatments of the zeolite ZSM-5 agglomerates. Microporous and Mesoporous Materials, 2011, 138, 176-183.	2.2	96
508	Scanning Transmission Xâ€Ray Microscopy as a Novel Tool to Probe Colloidal and Photonic Crystals. Small, 2011, 7, 804-811.	5.2	21
509	Using DFT in Search for Support Effects During Methanol Oxidation on Supported Molybdenum Oxides. ChemPhysChem, 2011, 12, 3281-3290.	1.0	10
510	Lignin Solubilization and Aqueous Phase Reforming for the Production of Aromatic Chemicals and Hydrogen. ChemSusChem, 2011, 4, 369-378.	3.6	117
511	On the Surface Chemistry of Iron Oxides in Reactive Gas Atmospheres. Angewandte Chemie - International Edition, 2011, 50, 1584-1588.	7.2	82
512	Architectureâ€Dependent Distribution of Mesopores in Steamed Zeolite Crystals as Visualized by FIBâ€SEM Tomography. Angewandte Chemie - International Edition, 2011, 50, 1294-1298.	7.2	63
513	Dynamic Xâ€Ray Diffraction Computed Tomography Reveals Realâ€Time Insight into Catalyst Active Phase Evolution. Angewandte Chemie - International Edition, 2011, 50, 10148-10152.	7.2	97
514	Coke Formation during the Methanolâ€toâ€Olefin Conversion: In Situ Microspectroscopy on Individual Hâ€ZSMâ€5 Crystals with Different BrÃ¸nsted Acidity. Chemistry - A European Journal, 2011, 17, 2874-2884.	1.7	244
515	On the Synergistic Catalytic Properties of Bimetallic Mesoporous Materials Containing Aluminum and Zirconium: The Prins Cyclisation of Citronellal. Chemistry - A European Journal, 2011, 17, 2077-2088.	1.7	34
516	The Porosity, Acidity, and Reactivity of Dealuminated Zeolite ZSMâ€5 at the Single Particle Level: The Influence of the Zeolite Architecture. Chemistry - A European Journal, 2011, 17, 13773-13781.	1.7	94
517	Alkaline treatment of template containing zeolites: Introducing mesoporosity while preserving acidity. Catalysis Today, 2011, 168, 48-56.	2.2	39
518	Closing the operando gap: The application of high energy photons for studying catalytic solids at work. Applied Catalysis A: General, 2011, 391, 468-476.	2.2	34
519	Catalytic oxidation of aromatic oxygenates by the heterogeneous catalyst Co-ZIF-9. Applied Catalysis A: General, 2011, 394, 79-85.	2.2	103
520	Transition metal catalyzed oxidation of Alcell lignin, soda lignin, and lignin model compounds in ionic liquids. Green Chemistry, 2010, 12, 1225.	4.6	153
521	Preface: recent advances in the in-situ characterization of heterogeneous catalysts. Chemical Society Reviews, 2010, 39, 4557.	18.7	116
522	The Catalytic Conversion of Thiophenes over Large Hâ€ZSMâ€5 Crystals: An Xâ€Ray, UV/Vis, and Fluorescence Microspectroscopic Study. ChemCatChem, 2010, 2, 564-571.	1.8	27

#	Article	IF	Citations
523	Mesopore formation in zeolite H-SSZ-13 by desilication with NaOH. Microporous and Mesoporous Materials, 2010, 132, 384-394.	2.2	150
524	Partial Oxidation of Methane Over Co-ZSM-5: Tuning the Oxygenate Selectivity by Altering the Preparation Route. Catalysis Letters, 2010, 136, 52-56.	1.4	88
525	Cu-ZSM-5 Zeolites for the Formation of Methanol from Methane and Oxygen: Probing the Active Sites and Spectator Species. Catalysis Letters, 2010, 138, 14-22.	1.4	152
526	Aerobic oxidation of cyclohexane by gold-based catalysts: New mechanistic insight by thorough product analysis. Journal of Catalysis, 2010, 270, 16-25.	3.1	156
527	Selective adsorption of manganese onto cobalt for optimized Mn/Co/TiO2 Fischerâ€“Tropsch catalysts. Journal of Catalysis, 2010, 270, 95-102.	3.1	98
528	A combined in situ time-resolved UVâ€“Vis, Raman and high-energy resolution X-ray absorption spectroscopy study on the deactivation behavior of Pt and PtSn propane dehydrogenation catalysts under industrial reaction conditions. Journal of Catalysis, 2010, 276, 268-279.	3.1	256
529	Inâ€situ Scanning Transmission Xâ€Ray Microscopy of Catalytic Solids and Related Nanomaterials. ChemPhysChem, 2010, 11, 951-962.	1.0	129
530	Detection of Carbocationic Species in Zeolites: Large Crystals Pave the Way. Chemistry - A European Journal, 2010, 16, 9340-9348.	1.7	26
531	Facile Access to Key Reactive Intermediates in the Pd/PR₃â€Catalyzed Telomerization of 1,3â€Butadiene. Angewandte Chemie - International Edition, 2010, 49, 7972-7975.	7.2	29
532	Unified Internal Architecture and Surface Barriers for Molecular Diffusion of Microporous Crystalline Aluminophosphates. Angewandte Chemie - International Edition, 2010, 49, 6790-6794.	7.2	23
533	Magnetic resonance imaging as an emerging tool for studying the preparation of supported catalysts. Applied Catalysis A: General, 2010, 374, 126-136.	2.2	25
534	Synthesis of octyl-ethers of biomass-based glycols through two competitive catalytic routes: Telomerization and etherification. Catalysis Today, 2010, 158, 130-138.	2.2	28
535	Quantitative CARS Of Chemistry In Confinement. , 2010, , .		0
536	Functional Groups and Sulfur K-Edge XANES Spectra: Divalent Sulfur and Disulfides. Journal of Physical Chemistry A, 2010, 114, 9523-9528.	1.1	20
537	Stability and Reactivity of Ïµâ^'Ï‡â^'Î¸ Iron Carbide Catalyst Phases in Fischerâ^'Tropsch Synthesis: Controlling Î¼_C. Journal of the American Chemical Society, 2010, 132, 14928-14941.	6.6	426
538	Sulfur Speciation of Crude Oils by Partial Least Squares Regression Modeling of Their Infrared Spectra. Energy & Fuels, 2010, 24, 557-562.	2.5	22
539	Optical Investigation of the Intergrowth Structure and Accessibility of BrÃ¸nsted Acid Sites in Etched SSZ-13 Zeolite Crystals by Confocal Fluorescence Microscopyâ€. Langmuir, 2010, 26, 16510-16516.	1.6	14
540	Chemical Imaging of Catalyst Deactivation during the Conversion of Renewables at the Single Particle Level: Etherification of Biomass-Based Polyols with Alkenes over H-Beta Zeolites. Journal of the American Chemical Society, 2010, 132, 10429-10439.	6.6	55

#	Article	IF	Citations
541	Promotion Effects in the Reduction of NO by CO over Zeolite-Supported Rh Catalysts. Journal of Physical Chemistry C, 2010, 114, 2282-2292.	1.5	19
542	Infrared and Raman imaging of heterogeneous catalysts. Chemical Society Reviews, 2010, 39, 4615.	18.7	170
543	Chemical imaging of catalytic solids with synchrotron radiation. Chemical Society Reviews, 2010, 39, 4656.	18.7	141
544	The role of Cu on the reduction behavior and surface properties of Fe-based Fischerâ€“Tropsch catalysts. Physical Chemistry Chemical Physics, 2010, 12, 667-680.	1.3	96
545	The Catalytic Valorization of Lignin for the Production of Renewable Chemicals. Chemical Reviews, 2010, 110, 3552-3599.	23.0	3,704
546	The role of synchrotron radiation in examining the self-assembly of crystalline nanoporous framework materials: from zeolites and aluminophosphates to metal organic hybrids. Chemical Society Reviews, 2010, 39, 4767.	18.7	43
547	Profiling Physicochemical Changes within Catalyst Bodies during Preparation: New Insights from Invasive and Noninvasive Microspectroscopic Studies. Accounts of Chemical Research, 2010, 43, 1279-1288.	7.6	35
548	A UV-Vis micro-spectroscopic study to rationalize the influence of Clâ¯(aq) on the formation of different Pd macro-distributions on Î³-Al₂O₃catalyst bodies. Physical Chemistry Chemical Physics, 2010, 12, 97-107.	1.3	29
549	EXAFS as a tool to interrogate the size and shape of mono and bimetallic catalyst nanoparticles. Physical Chemistry Chemical Physics, 2010, 12, 5562.	1.3	157
550	Styrene oligomerization as a molecular probe reaction for zeolite acidity: a UV-Vis spectroscopy and DFT study. Physical Chemistry Chemical Physics, 2010, 12, 7032.	1.3	42
551	Multi-Technique In Situ Approach Towards the Study of Catalytic Solids at Work Using Synchrotron Radiation. Synchrotron Radiation News, 2009, 22, 22-30.	0.2	4
552	In-situ Scanning Transmission X-ray Microscopy of catalytic materials under reaction conditions. Journal of Physics: Conference Series, 2009, 190, 012161.	0.3	5
553	Local and long range order in promoted iron-based Fischerâ€“Tropsch catalysts: A combined in situ X-ray absorption spectroscopy/wide angle X-ray scattering study. Journal of Catalysis, 2009, 262, 244-256.	3.1	160
554	Product shape selectivity dominates the Methanol-to-Olefins (MTO) reaction over H-SAPO-34 catalysts. Journal of Catalysis, 2009, 264, 77-87.	3.1	344
555	The role of support oxygen in the epoxidation of propene over goldâ€“titania catalysts investigated by isotopic transient kinetics. Journal of Catalysis, 2009, 265, 161-169.	3.1	34
556	Synthesis of long alkyl chain ethers through direct etherification of biomass-based alcohols with 1-octene over heterogeneous acid catalysts. Journal of Catalysis, 2009, 268, 251-259.	3.1	48
557	Theoretical Study on the Role of Surface Basicity and Lewis Acidity on the Etherification of Glycerol over Alkaline Earth Metal Oxides. Chemistry - A European Journal, 2009, 15, 10864-10870.	1.7	62
558	Selective Oxidation of Methanol to Hydrogen over Gold Catalysts Promoted by Alkalineâ€Earthâ€Metal and Lanthanum Oxides. ChemSusChem, 2009, 2, 743-748.	3.6	27

#	Article	IF	Citations
559	Baseâ€free Pd/TOMPPâ€Catalyzed Telomerization of 1,3â€Butadiene with Carbohydrates and Sugar Alcohols. ChemSusChem, 2009, 2, 855-858.	3.6	36
560	Nanoscale Chemical Imaging of the Reduction Behavior of a Single Catalyst Particle. Angewandte Chemie - International Edition, 2009, 48, 3632-3636.	7.2	72
561	Chemical Imaging of Spatial Heterogeneities in Catalytic Solids at Different Length and Time Scales. Angewandte Chemie - International Edition, 2009, 48, 4910-4943.	7.2	339
562	Labelâ€Free Chemical Imaging of Catalytic Solids by Coherent Antiâ€Stokes Raman Scattering and Synchrotronâ€Based Infrared Microscopy. Angewandte Chemie - International Edition, 2009, 48, 8990-8994.	7.2	65
563	A Combined Multi-Technique In Situ Approach Used to Probe the Stability of Iron Molybdate Catalysts During Redox Cycling. Topics in Catalysis, 2009, 52, 1400-1409.	1.3	17
564	Catch me if you can!. Nature Chemistry, 2009, 1, 690-692.	6.6	21
565	Morphology-dependent zeolite intergrowth structures leading to distinct internal and outer-surface molecular diffusion barriers. Nature Materials, 2009, 8, 959-965.	13.3	251
566	Partial least squares modeling of combined infrared, 1H NMR and 13C NMR spectra to predict long residue properties of crude oils. Vibrational Spectroscopy, 2009, 51, 205-212.	1.2	30
567	An iron molybdate catalyst for methanol to formaldehyde conversion prepared by a hydrothermal method and its characterization. Applied Catalysis A: General, 2009, 363, 143-152.	2.2	58
568	Spatiotemporal Multitechnique Imaging of a Catalytic Solid in Action: Phase Variation and Volatilization During Molybdenum Oxide Reduction. ChemCatChem, 2009, 1, 99-102.	1.8	29
569	Crossing the Interfaces of Catalysis. ChemCatChem, 2009, 1, 7-7.	1.8	1
570	The Interpretation of Sulfur K-Edge XANES Spectra: A Case Study on Thiophenic and Aliphatic Sulfur Compounds. Journal of Physical Chemistry A, 2009, 113, 2750-2756.	1.1	38
571	Tomographic Energy Dispersive Diffraction Imaging To Study the Genesis of Ni Nanoparticles in 3D within Î³-Al₂O₃ Catalyst Bodies. Journal of the American Chemical Society, 2009, 131, 16932-16938.	6.6	57
572	Prediction of Long-Residue Properties of Potential Blends from Mathematically Mixed Infrared Spectra of Pure Crude Oils by Partial Least-Squares Regression Models. Energy & Fuels, 2009, 23, 2164-2168.	2.5	14
573	Chemical Reactivity Indices as a Tool for Understanding the Support-Effect in Supported Metal Oxide Catalysts. Journal of Physical Chemistry C, 2009, 113, 19905-19912.	1.5	14
574	Magnetic Resonance Imaging Studies on Catalyst Impregnation Processes: Discriminating Metal Ion Complexes within Millimeter-Sized Î³-Al₂O₃ Catalyst Bodies. Journal of the American Chemical Society, 2009, 131, 6525-6534.	6.6	39
575	On the Active Oxygen in Bulk MoO3 during the Anaerobic Dehydrogenation of Methanol. Journal of Physical Chemistry C, 2009, 113, 4890-4897.	1.5	39
576	Editorial Highlight: Molecules in confined spaces. Physical Chemistry Chemical Physics, 2009, 11, 2794.	1.3	53

#	Article	IF	Citations
577	Telomerization of 1,3-butadiene with various alcohols by Pd/TOMPP catalysts: new opportunities for catalytic biomass valorization. Green Chemistry, 2009, 11, 1155.	4.6	44
578	Dehydrochlorination of Intermediates in the Production of Vinyl Chloride over Lanthanum Oxide-Based Catalysts. Catalysis Letters, 2008, 122, 238-246.	1.4	22
579	Implementation of a combined SAXS/WAXS/QEXAFS set-up for time-resolvedin situexperiments. Journal of Synchrotron Radiation, 2008, 15, 632-640.	1.0	243
580	Monitoring Transport Phenomena of Paramagnetic Metalâ€Ion Complexes Inside Catalyst Bodies with Magnetic Resonance Imaging. Chemistry - A European Journal, 2008, 14, 2363-2374.	1.7	50
581	Visualizing the Crystal Structure and Locating the Catalytic Activity of Microâ€and Mesoporous ZSMâ€5 Zeolite Crystals by Using In Situ Optical and Fluorescence Microscopy. Chemistry - A European Journal, 2008, 14, 1718-1725.	1.7	116
582	Glycerol Etherification over Highly Active CaOâ€Based Materials: New Mechanistic Aspects and Related Colloidal Particle Formation. Chemistry - A European Journal, 2008, 14, 2016-2024.	1.7	161
583	Palladium-Based Telomerization of 1,3-Butadiene with Glycerol Using Methoxy-Functionalized Triphenylphosphine Ligands. Chemistry - A European Journal, 2008, 14, 8995-9005.	1.7	56
584	Spaceâ€and Timeâ€Resolved Inâ€situ Spectroscopy on the Coke Formation in Molecular Sieves: Methanolâ€toâ€Olefin Conversion over Hâ€ZSMâ€5 and Hâ€SAPOâ€34. Chemistry - A European Journal, 2008, 14, 11320-11327.	1.7	303
585	Highly Active Catalysts for the Telomerization of Crude Glycerol with 1,3â€Butadiene. ChemSusChem, 2008, 1, 193-196.	3.6	69
586	In Situ Synchrotronâ€Based IR Microspectroscopy To Study Catalytic Reactions in Zeolite Crystals. Angewandte Chemie - International Edition, 2008, 47, 3543-3547.	7.2	88
587	Catalytic Hydrogenâ€Chlorine Exchange between Chlorinated Hydrocarbons under Oxygenâ€Free Conditions. Angewandte Chemie - International Edition, 2008, 47, 5002-5004.	7.2	21
588	Intergrowth Structure of Zeolite Crystals and Pore Orientation of Individual Subunits Revealed by Electron Backscatter Diffraction/Focused Ion Beam Experiments. Angewandte Chemie - International Edition, 2008, 47, 5637-5640.	7.2	80
589	On the interaction between Co- and Mo-complexes in impregnation solutions used for the preparation of Al2O3-supported HDS catalysts: A combined Raman/UVâ€“visâ€“NIR spectroscopy study. Catalysis Today, 2008, 130, 117-125.	2.2	56
590	Pore curvature and support composition effects on the electronic properties of supported Pt catalysts: An infrared spectroscopy study with CO as probe molecule. Vibrational Spectroscopy, 2008, 48, 92-100.	1.2	20
591	Nanoscale chemical imaging of a working catalyst by scanning transmission X-ray microscopy. Nature, 2008, 456, 222-225.	13.7	376
592	Spectroscopic evidence for the adsorption of propene on gold nanoparticles during the hydro-epoxidation of propene. Journal of Catalysis, 2008, 258, 256-264.	3.1	51
593	Understanding the effect of postsynthesis ammonium treatment on the catalytic activity of Au/Ti-SBA-15 catalysts for the oxidation of propene. Journal of Catalysis, 2008, 259, 43-53.	3.1	28
594	Effect of the Nickel Precursor on the Impregnation and Drying of Î³-Al₂O₃ Catalyst Bodies:â€‰ A UVâ€vis and IR Microspectroscopic Study. Journal of Physical Chemistry C, 2008, 112, 7201-7209.	1.5	65

#	Article	IF	Citations
595	Molecular adsorption of H2 on small cationic nickel clusters. Physical Chemistry Chemical Physics, 2008, 10, 5743.	1.3	22
596	On the intergrowth structure of zeolite crystals as revealed by wide field and confocal fluorescence microscopy of the template removal processes. Studies in Surface Science and Catalysis, 2008, 174, 757-762.	1.5	5
597	The renaissance of iron-based Fischerâ€“Tropsch synthesis: on the multifaceted catalyst deactivation behaviour. Chemical Society Reviews, 2008, 37, 2758.	18.7	730
598	Prediction of Long and Short Residue Properties of Crude Oils from Their Infrared and Near-Infrared Spectra. Applied Spectroscopy, 2008, 62, 414-422.	1.2	23
599	Geometric and Electronic Structure of Î±-Oxygen Sites in Mn-ZSM-5 Zeolites. Journal of Physical Chemistry C, 2008, 112, 12409-12416.	1.5	26
600	The Effect of Charge on CO Binding in Rhodium Carbonyls:â€‰ From Bridging to Terminal CO. Journal of the American Chemical Society, 2008, 130, 2126-2127.	6.6	39
601	H₂ Adsorption on 3d Transition Metal Clusters:â€‰ A Combined Infrared Spectroscopy and Density Functional Study. Journal of Physical Chemistry A, 2008, 112, 1139-1149.	1.1	79
602	Promotion Effects in the Oxidation of CO over Zeolite-Supported Rh Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 9394-9404.	1.5	23
603	An eye on the inside of zeolite crystals in the act: Studying BrÃ¸nsted acidity with in-situ micro-spectroscopy. Studies in Surface Science and Catalysis, 2008, , 21-32.	1.5	3
604	The Epoxidation of Propene over Gold Nanoparticle Catalysts. , 2008, , 339-354.		6
605	Mn and Fe ions and oxo clusters in ZSM-5: pushing the limits of X-ray spectroscopy. Studies in Surface Science and Catalysis, 2007, , 796-799.	1.5	3
606	Understanding the crystallisation processes leading to the formation of microporous aluminophosphates. Studies in Surface Science and Catalysis, 2007, 170, 748-755.	1.5	2
607	Bio-inspired manipulation of catalytic sites via immobilization of metal ion complexes in zeolites. Studies in Surface Science and Catalysis, 2007, 170, 1546-1551.	1.5	2
608	Unraveling the Structure of Mn-Promoted Co/TiO2 Fischer-Tropsch Catalysts by In Situ X-Ray Absorption Spectroscopy. AIP Conference Proceedings, 2007, , .	0.3	4
609	ED-XAS Data Reveal In-situ Time-Resolved Adsorbate Coverage on Supported Molybdenum Oxide Catalysts during Propane Dehydrogenation. AIP Conference Proceedings, 2007, , .	0.3	3
610	Propene epoxidation over Au/Ti-SBA-15 catalysts. Journal of Catalysis, 2007, 248, 235-248.	3.1	147
611	Modeling the 2-His-1-Carboxylate Facial Triad:Â Ironâ“Catecholato Complexes as Structural and Functional Models of the Extradiol Cleaving Dioxygenases. Journal of the American Chemical Society, 2007, 129, 2275-2286.	6.6	94
612	Scaffolded amino acids as a close structural mimic of type-3 copper binding sites. Chemical Communications, 2007, , 4895.	2.2	18

#	Article	IF	Citations
613	Atomic XAFS as a Tool To Probe the Reactivity of Metal Oxide Catalysts:Â Quantifying Metal Oxide Support Effects. Journal of the American Chemical Society, 2007, 129, 3189-3197.	6.6	53
614	Hydrogen-Induced Transition from Dissociative to Molecular Chemisorption of CO on Vanadium Clusters. Journal of the American Chemical Society, 2007, 129, 2516-2520.	6.6	43
615	New Highly Mixed Phases in Ball-Milled Cu/ZnO Catalysts as Established by EXAFS and XANES. AIP Conference Proceedings, 2007, , .	0.3	6
616	Observing the Influence of X-Rays on Aqueous Copper Solutions by In Situ Combined Video/XAFS/UV-Vis Spectroscopy. AIP Conference Proceedings, 2007, , .	0.3	4
617	Application of AXAFS Spectroscopy to Transition-Metal Oxides: Influence of the Nearest and Next Nearest Neighbour Shells in Vanadium Oxides. Chemistry - A European Journal, 2007, 13, 5845-5856.	1.7	8
618	Revealing Shape Selectivity and Catalytic Activity Trends Within the Pores of Hâ€ZSMâ€5 Crystals by Timeâ€• and Spaceâ€Resolved Optical and Fluorescence Microspectroscopy. Chemistry - A European Journal, 2007, 13, 7057-7065.	1.7	98
619	Intermediates in the Destruction of Chlorinated C₁ Hydrocarbons on Laâ€Based Materials: Mechanistic Implications. Chemistry - A European Journal, 2007, 13, 9561-9571.	1.7	18
620	Dichloromethane as a Selective Modifying Agent To Create a Family of Highly Reactive Chromium Polymerization Sites. Angewandte Chemie - International Edition, 2007, 46, 1465-1468.	7.2	26
621	Controlling the Bonding of CO on Cobalt Clusters by Coadsorption of H2. Angewandte Chemie - International Edition, 2007, 46, 5317-5320.	7.2	18
622	Nonuniform Catalytic Behavior of Zeolite Crystals as Revealed by In Situ Optical Microspectroscopy. Angewandte Chemie - International Edition, 2007, 46, 3652-3655.	7.2	118
623	Real-Time Control of a Catalytic Solid in a Fixed-Bed Reactor Based on In Situ Spectroscopy. Angewandte Chemie - International Edition, 2007, 46, 5412-5416.	7.2	35
624	Probing the Transport of Paramagnetic Complexes inside Catalyst Bodies in a Quantitative Manner by Magnetic Resonance Imaging. Angewandte Chemie - International Edition, 2007, 46, 7224-7227.	7.2	50
625	Intergrowth Structure of Zeolite Crystals as Determined by Optical and Fluorescence Microscopy of the Templateâ€Removal Process. Angewandte Chemie - International Edition, 2007, 46, 7228-7231.	7.2	120
626	Tomographic Energy Dispersive Diffraction Imaging as a Tool To Profile in Three Dimensions the Distribution and Composition of Metal Oxide Species in Catalyst Bodies. Angewandte Chemie - International Edition, 2007, 46, 8832-8835.	7.2	52
627	Hydration effects on the molecular structure of silica-supported vanadium oxide catalysts: A combined IR, Raman, UVâ€“vis and EXAFS study. Vibrational Spectroscopy, 2007, 43, 140-151.	1.2	122
628	Turning a Cr-based heterogeneous ethylene polymerisation catalyst into a selective ethylene trimerisation catalyst. Journal of Molecular Catalysis A, 2007, 269, 5-11.	4.8	13
629	New Insights into the Coordination Chemistry and Molecular Structure of Copper(II) Histidine Complexes in Aqueous Solutions. Inorganic Chemistry, 2006, 45, 1960-1971.	1.9	78
630	Dealing with a local heating effect when measuring catalytic solids in a reactor with Raman spectroscopy. Physical Chemistry Chemical Physics, 2006, 8, 2413.	1.3	31

#	Article	IF	Citations
631	Elucidation of the molecular structure of hydrated vanadium oxide species by X-ray absorption spectroscopy: correlation between the Vâ‹V coordination number and distance and the point of zero charge of the support oxide. Physical Chemistry Chemical Physics, 2006, 8, 4814-4824.	1.3	14
632	Phase Segregation in Ceriumâ"Lanthanum Solid Solutions. Journal of Physical Chemistry B, 2006, 110, 9984-9990.	1.2	64
633	Monitoring the coordination of aluminium during microporous oxide crystallisation by in situ soft X-ray absorption spectroscopy. Chemical Communications, 2006, , 4410.	2.2	28
634	Molecular Structure of a Supported VO4Cluster and Its Interfacial Geometry as a Function of the SiO2, Nb2O5, and ZrO2Support. Journal of Physical Chemistry B, 2006, 110, 14313-14325.	1.2	48
635	Unique Organicâ"Inorganic Interactions Leading to a Structure-Directed Microporous Aluminophosphate Crystallization as Observed with in situ Raman Spectroscopy. Journal of the American Chemical Society, 2006, 128, 11744-11745.	6.6	75
636	Highly Mixed Phases in Ball-milled Cu/ZnO Catalysts:â€‰ An EXAFS and XANES Study. Journal of Physical Chemistry B, 2006, 110, 16892-16901.	1.2	29
637	Zeolite Framework Stabilized Copper Complex Inspired by the 2-His-1-carboxylate Facial Triad Motif Yielding Oxidation Catalysts. Journal of the American Chemical Society, 2006, 128, 3208-3217.	6.6	60
638	Unusual Coordination Behavior of Cr3+in Microporous Aluminophosphates. Journal of Physical Chemistry B, 2006, 110, 716-722.	1.2	37
639	X-ray Absorption Spectroscopy of Mn/Co/TiO2Fischerâ"Tropsch Catalysts:Â Relationships between Preparation Method, Molecular Structure, and Catalyst Performance. Journal of Physical Chemistry B, 2006, 110, 8626-8639.	1.2	111
640	Probing the Influence of X-rays on Aqueous Copper Solutions Using Time-Resolved in Situ Combined Video/X-ray Absorption Near-Edge/Ultravioletâ"Visible Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 17671-17677.	1.2	61
641	The Production of Propene Oxide:Â Catalytic Processes and Recent Developments. Industrial & Engineering Chemistry Research, 2006, 45, 3447-3459.	1.8	456
642	Monitoring the preparation of (Co)Mo/Al2O3 extrudates using spatially resolved spectroscopic techniques. Studies in Surface Science and Catalysis, 2006, , 175-186.	1.5	9
643	Catalysts live and up close. Nature, 2006, 439, 548-548.	13.7	22
644	Combining operando techniques in one spectroscopic-reaction cell: New opportunities for elucidating the active site and related reaction mechanism in catalysis. Catalysis Today, 2006, 113, 3-15.	2.2	189
645	Synthesis, characterization and catalysis of (Co, V)-, (Co, Cr)- and (Cr, V)APO-5 molecular sieves. Microporous and Mesoporous Materials, 2006, 94, 348-357.	2.2	26
646	Spatially resolved UVâ€"vis microspectroscopy on the preparation of alumina-supported Co Fischerâ€"Tropsch catalysts: Linking activity to Co distribution and speciation. Journal of Catalysis, 2006, 242, 287-298.	3.1	116
647	Influence of the preparation method on the hydrotreating activity of MoS2/Al2O3 extrudates: A Raman microspectroscopy study on the genesis of the active phase. Journal of Catalysis, 2006, 243, 292-302.	3.1	102
648	Hostâ€"Guest Chemistry of Copper(II)â€"Histidine Complexes Encaged in Zeolite Y. Chemistry - A European Journal, 2006, 12, 7167-7177.	1.7	39

#	Article	IF	Citations
649	Controlled Assembly of a Heterogeneous Single-Site Ethylene Trimerization Catalyst as Probed by X-ray Absorption Spectroscopy. Chemistry - A European Journal, 2006, 12, 4756-4763.	1.7	27
650	A Combined SAXS/WAXS/XAFS Setup Capable of Observing Concurrent Changes Across the Nano-to-Micrometer Size Range in Inorganic Solid Crystallization Processes. Journal of the American Chemical Society, 2006, 128, 12386-12387.	6.6	106
651	Promotion effects in the oxidation of CO over zeolite-supported Pt nanoparticles. Studies in Surface Science and Catalysis, 2005, , 1239-1246.	1.5	3
652	Solvent effects in the synthesis of CoAPO-5, -11 and -34 molecular sieves. Microporous and Mesoporous Materials, 2005, 84, 116-126.	2.2	20
653	Infrared and Raman spectroscopic study of pH-induced structural changes of l-histidine in aqueous environment. Vibrational Spectroscopy, 2005, 39, 114-125.	1.2	128
654	New frontiers in X-ray spectroscopy in heterogeneous catalysis: Using Fe/ZSM-5 as test-system. Catalysis Today, 2005, 110, 228-238.	2.2	43
655	Modeling of kinetics and deactivation in the direct epoxidation of propene over goldâ€“titania catalysts. Journal of Catalysis, 2005, 236, 153-163.	3.1	55
656	Bis(1-methylimidazol-2-yl)propionates and Bis(1-methylbenzimidazol-2-yl)-propionates: A New Family of BiomimeticN,N,OLigands - Synthesis, Structures and CuII Coordination Complexes. European Journal of Inorganic Chemistry, 2005, 2005, 779-787.	1.0	32
657	Mechanistic Insights into the Oxidation of Veratryl Alcohol with Co(salen) and Oxygen in Aqueous Media: An in-situ Spectroscopic Study. European Journal of Inorganic Chemistry, 2005, 2005, 2591-2599.	1.0	62
658	The Role of Gold in Gold-Titania Epoxidation Catalysts. Angewandte Chemie - International Edition, 2005, 44, 1115-1118.	7.2	138
659	Spatially Resolved Raman and UV-visible-NIR Spectroscopy on the Preparation of Supported Catalyst Bodies: Controlling the Formation of H2PMo11CoO405â¯ Inside Al2O3 Pellets During Impregnation. Chemistry - A European Journal, 2005, 11, 4591-4601.	1.7	80
660	Promotion Effects in the Oxidation of CO over Zeolite-Supported Pt Nanoparticles.. ChemInform, 2005, 36, no.	0.1	0
661	In situ Spectroscopy of Catalysts. ChemInform, 2005, 36, no.	0.1	11
662	Mechanistic Insight in the Ethane Dehydrogenation Reaction over Cr/Al2O3 Catalysts. Catalysis Letters, 2005, 103, 143-148.	1.4	66
663	The role of water in the epoxidation over goldâ€“titania catalysts. Chemical Communications, 2005, , 6002.	2.2	27
664	1s2p Resonant Inelastic X-ray Scattering of Iron Oxides. Journal of Physical Chemistry B, 2005, 109, 20751-20762.	1.2	108
665	Relative Activity of La2O3, LaOCl, and LaCl3 in Reaction with CCl4 Studied with Infrared Spectroscopy and Density Functional Theory Calculations. Journal of Physical Chemistry B, 2005, 109, 11634-11642.	1.2	34
666	Combined EXAFS and STEM-EELS study of the electronic state and location of Mn as promoter in Co-based Fischerâ€“Tropsch catalysts. Physical Chemistry Chemical Physics, 2005, 7, 568-572.	1.3	63

#	Article	IF	Citations
667	Promotion Effects in the Oxidation of CO over Zeolite-Supported Pt Nanoparticles. Journal of Physical Chemistry B, 2005, 109, 3822-3831.	1.2	74
668	Unraveling the Crystallization Mechanism of CoAPO-5 Molecular Sieves under Hydrothermal Conditions. Journal of the American Chemical Society, 2005, 127, 14454-14465.	6.6	128
669	UVâ^'Vis Microspectroscopy:â€‰ Probing the Initial Stages of Supported Metal Oxide Catalyst Preparation. Journal of the American Chemical Society, 2005, 127, 5024-5025.	6.6	60
670	Î›O4Upside Down:Â A New Molecular Structure for Supported VO4Catalysts. Journal of Physical Chemistry B, 2005, 109, 10223-10233.	1.2	50
671	Destructive Adsorption of CCl4over Lanthanum-Based Solids:Â Linking Activity to Acidâ^'Base Properties. Journal of Physical Chemistry B, 2005, 109, 23993-24001.	1.2	34
672	Insights into the Preparation of Supported Catalysts:Â A Spatially Resolved Raman and UVâ^'Vis Spectroscopic Study into the Drying Process of CoMo/Î³-Al2O3Catalyst Bodies. Journal of Physical Chemistry B, 2005, 109, 14513-14522.	1.2	38
673	Atomic XAFS as a Tool to Probe the Electronic Properties of Supported Noble Metal Nanoclusters. Journal of the American Chemical Society, 2005, 127, 3272-3273.	6.6	39
674	Noninvasive In Situ Visualization of Supported Catalyst Preparations Using Multinuclear Magnetic Resonance Imaging. Journal of the American Chemical Society, 2005, 127, 11916-11917.	6.6	65
675	Synchrotron Radiation Effects on Catalytic Systems As Probed with a Combined In-Situ UVâ^'Vis/XAFS Spectroscopic Setup. Journal of Physical Chemistry B, 2005, 109, 4042-4047.	1.2	74
676	Range-extended EXAFS at theLedge of rare earths using high-energy-resolution fluorescence detection: A study of La in LaOCl. Physical Review B, 2005, 72, .	1.1	49
677	Mechanistic Study into the Direct Epoxidation of Propene over Gold/Titania Catalysts. Journal of Physical Chemistry B, 2005, 109, 19309-19319.	1.2	113
678	Single-site heterogeneous Cr-based catalyst for the selective trimerisation of ethylene. Chemical Communications, 2005, , 1865.	2.2	44
679	Real time quantitative Raman spectroscopy of supported metal oxide catalysts without the need of an internal standard. Physical Chemistry Chemical Physics, 2005, 7, 211.	1.3	82
680	Adding a third dimension to operando spectroscopy: a combined UV-Vis, Raman and XAFS setup to study heterogeneous catalysts under working conditions. Chemical Communications, 2005, , 3015.	2.2	124
681	Low-temperature catalytic destruction of CCl4, CHCl3 and CH2Cl2 over basic oxides. Physical Chemistry Chemical Physics, 2004, 6, 5256.	1.3	34
682	Bis(Î¼-OXO)dicopper as intermediate in the catalytic decomposition of No over Cu-ZSM-5. Studies in Surface Science and Catalysis, 2004, 154, 2449-2457.	1.5	7
683	Towards real-time spectroscopic process control for the dehydrogenation of propane over supported chromium oxide catalysts. Chemical Engineering Science, 2004, 59, 5487-5492.	1.9	95
684	In situ X-Ray Absorption of Co/Mn/TiO2 Catalysts for Fischerâ€”Tropsch Synthesis.. ChemInform, 2004, 35, no.	0.1	2

#	Article	IF	Citations
685	Surface Acidity and Basicity of La2O3, LaOCl, and LaCl3 Characterized by IR Spectroscopy, TPD, and DFT Calculations.. ChemInform, 2004, 35, no.	0.1	0
686	Low-Temperature Destruction of Carbon Tetrachloride over Lanthanide Oxide-Based Catalysts: From Destructive Adsorption to a Catalytic Reaction Cycle. Chemistry - A European Journal, 2004, 10, 1637-1646.	1.7	40
687	Design and applications of a home-built in situ FT-Raman spectroscopic cell. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 2969-2975.	2.0	10
688	A new model for the molecular structure of supported vanadium oxide catalysts. Chemical Physics Letters, 2004, 397, 277-281.	1.2	48
689	In Situ X-ray Absorption of Co/Mn/TiO2Catalysts for Fischerâ˜Tropsch Synthesis. Journal of Physical Chemistry B, 2004, 108, 16201-16207.	1.2	165
690	Manganese promotion in cobalt-based Fischer-Tropsch catalysis. Studies in Surface Science and Catalysis, 2004, 147, 271-276.	1.5	24
691	KÎ²-Detected XANES of Framework-Substituted FeZSM-5 Zeolites. Journal of Physical Chemistry B, 2004, 108, 10002-10011.	1.2	77
692	Carboxylate Binding in Copper Histidine Complexes in Solution and in Zeolite Y:â€‰ X- and W-band Pulsed EPR/ENDOR Combined with DFT Calculations. Journal of the American Chemical Society, 2004, 126, 11733-11745.	6.6	72
693	Envisaging the Physicochemical Processes during the Preparation of Supported Catalysts:Â Raman Microscopy on the Impregnation of Mo onto Al2O3Extrudates. Journal of the American Chemical Society, 2004, 126, 14548-14556.	6.6	150
694	Surface Acidity and Basicity of La2O3, LaOCl, and LaCl3Characterized by IR Spectroscopy, TPD, and DFT Calculations. Journal of Physical Chemistry B, 2004, 108, 15770-15781.	1.2	127
695	The effect of chemical composition and structure on XPS binding energies in zeolites. Studies in Surface Science and Catalysis, 2004, , 1385-1392.	1.5	6
696	An operando optical fiber UVâ€“vis spectroscopic study of the catalytic decomposition of NO and N2O over Cu-ZSM-5. Journal of Catalysis, 2003, 220, 500-512.	3.1	129
697	Bis(Î¼-oxo)dicopper as Key Intermediate in the Catalytic Decomposition of Nitric Oxide. ChemPhysChem, 2003, 4, 626-630.	1.0	43
698	Chemistry, Spectroscopy and the Role of Supported Vanadium Oxides in Heterogeneous Catalysis. ChemInform, 2003, 34, no.	0.1	0
699	Chemistry, spectroscopy and the role of supported vanadium oxides in heterogeneous catalysis. Catalysis Today, 2003, 78, 25-46.	2.2	825
700	Bis(Î¼-oxo)dicopper in Cu-ZSM-5 and Its Role in the Decomposition of NO:Â A Combined in Situ XAFS, UVâ˜Visâ˜Near-IR, and Kinetic Study. Journal of the American Chemical Society, 2003, 125, 7629-7640.	6.6	338
701	In-Situ Soft X-ray Absorption of Over-exchanged Fe/ZSM5. Journal of Physical Chemistry B, 2003, 107, 13069-13075.	1.2	41
702	The Effect of Chemical Composition and Structure on XPS Binding Energies in Zeolites. Journal of Physical Chemistry B, 2003, 107, 678-684.	1.2	24

#	Article	IF	Citations
703	Operando spectroscopic investigation of supported metal oxide catalysts by combined time-resolved UV-VIS/Raman/on-line mass spectrometry. Physical Chemistry Chemical Physics, 2003, 5, 4361-4365.	1.3	81
704	Operando spectroscopy: fundamental and technical aspects of spectroscopy of catalysts under working conditions. Physical Chemistry Chemical Physics, 2003, 5, 1.	1.3	15
705	Determining the active site in a catalytic process: Operando spectroscopy is more than a buzzword. Physical Chemistry Chemical Physics, 2003, 5, 4351.	1.3	321
706	Redox behaviour of over-exchanged Fe/ZSM5 zeolites studied with in-situ soft X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2003, 5, 4484-4491.	1.3	27
707	Synthesis of Co-Rich CoAPO-5 Molecular Sieves: A Comparison between Glycerol and Water as Solvent. Journal of Nanoscience and Nanotechnology, 2003, 3, 271-275.	0.9	6
708	A New Templated Ordered Structure with Combined Micro- and Mesopores and Internal Silica Nanocapsules. Journal of Physical Chemistry B, 2002, 106, 5873-5877.	1.2	286
709	Plugged hexagonal templated silica: a unique micro- and mesoporous composite material with internal silica nanocapsulesElectronic supplementary information (ESI) available: Fig. S1: X-ray diffractogram of a PHTS material. Fig. S2: TEM images of SBA-15 and PHTS-2. Fig. S3: hydrothermal stabilities. See http://www.rsc.org/suppdata/cc/b2/b201424f/. Chemical Communications, 2002, , 1010-1011.	2.2	168
710	The siting of Cu(II) in mordenite: a theoretical spectroscopic study. Physical Chemistry Chemical Physics, 2002, 4, 134-145.	1.3	46
711	Plugged Hexagonal Mesoporous Templated Silica : A unique micro- and mesoporous material with internal silica nanocapsules.. Studies in Surface Science and Catalysis, 2002, 141, 45-52.	1.5	14
712	Snapshots of a working catalyst: possibilities and limitations of in situ spectroscopy in the field of heterogeneous catalysis. Chemical Communications, 2002, , 97-110.	2.2	266
713	Low-Temperature Destruction of Chlorinated Hydrocarbons over Lanthanide Oxide Based Catalysts. Angewandte Chemie - International Edition, 2002, 41, 4730-4732.	7.2	53
714	Vanadium-Incorporated MCM-48 Materials:Â Optimization of the Synthesis Procedure and an in Situ Spectroscopic Study of the Vanadium Species. Journal of Physical Chemistry B, 2001, 105, 3393-3399.	1.2	70
715	Supported Tantalum Oxide and Supported Vanadia-tantala Mixed Oxides: Structural Characterization and Surface Properties. Journal of Physical Chemistry B, 2001, 105, 6211-6220.	1.2	60
716	CATALYSIS BY SUPPORTED METAL OXIDES. , 2001, , 613-648.		13
717	Hydrothermal synthesis of Co-rich CoAPO-5 molecular sieves. Physical Chemistry Chemical Physics, 2001, 3, 3240-3246.	1.3	26
718	Incorporation of Transition Metal Ions in Aluminophosphate Molecular Sieves with AST Structure. Journal of Physical Chemistry B, 2001, 105, 2677-2686.	1.2	24
719	Relating Structure and Chemical Composition with Lewis Acidity in Zeolites:Â A Spectroscopic Study with Probe Molecules. Journal of Physical Chemistry B, 2001, 105, 4904-4911.	1.2	46
720	MCM-48-Supported Vanadium Oxide Catalysts, Prepared by the Molecular Designed Dispersion of VO(acac)2: A Detailed Study of the Highly Reactive MCM-48 Surface and the Structure and Activity of the Deposited VOx. Journal of Catalysis, 2001, 197, 160-171.	3.1	166

#	Article	IF	Citations
721	Effect of Mg and Zr Modification on the Activity of VOx/Al2O3 Catalysts in the Dehydrogenation of Butanes. Journal of Catalysis, 2001, 203, 242-252.	3.1	55
722	Monitoring Chromia/Alumina Catalysts in Situ during Propane Dehydrogenation by Optical Fiber UVâ€“Visible Diffuse Reflectance Spectroscopy. Journal of Catalysis, 2001, 204, 253-257.	3.1	52
723	Synthesis and characterization of zeolite encaged enzyme-mimetic copper histidine complexes. Studies in Surface Science and Catalysis, 2000, , 287-293.	1.5	2
724	Synthesis, Spectroscopy and Catalysis of [Cr(acac)3] Complexes Grafted onto MCM-41 Materials: Formation of Polyethylene Nanofibres within Mesoporous Crystalline Aluminosilicates. Chemistry - A European Journal, 2000, 6, 2960-2970.	1.7	90
725	In situ UVâ€“Vis diffuse reflectance spectroscopy â€” on line activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design. Journal of Molecular Catalysis A, 2000, 151, 115-131.	4.8	79
726	On the synthesis of vanadium containing molecular sieves by experimental design from a VOSO4Â·5H2OÂ·Al(iPrO)3Â·Pr2NHÂ·H2O gel: occurrence of VAPO-41 as a secondary structure in the synthesis of VAPO-11. Microporous and Mesoporous Materials, 2000, 39, 493-507.	2.2	19
727	Study of the coordination of Cu2+ in zeolite Y: Interaction with water and ammonia. Microporous and Mesoporous Materials, 2000, 37, 209-222.	2.2	56
728	In Situ Raman Spectroscopy of Supported Transition Metal Oxide Catalysts:Â18O2â^'16O2Isotopic Labeling Studies. Journal of Physical Chemistry B, 2000, 104, 7382-7387.	1.2	131
729	Synthesis and characterization of alumina-supported vanadium oxide catalysts prepared by the molecular designed dispersion of VO(acac)2 complexes. Physical Chemistry Chemical Physics, 2000, 2, 2673-2680.	1.3	48
730	Geometry and Framework Interactions of Zeolite-Encapsulated Copper(II)â^'Histidine Complexes. Journal of the American Chemical Society, 2000, 122, 11488-11496.	6.6	76
731	Synthesis of Co-rich CoAPO-CHA molecular sieves in the presence of ethanol and caesium. Chemical Communications, 2000, , 2249-2250.	2.2	13
732	Electron Spin Resonance of High-Spin Cobalt in Microporous Crystalline Cobalt-Containing Aluminophosphates. Journal of Physical Chemistry B, 2000, 104, 37-42.	1.2	72
733	AlOxCoating of Ultrastable Zeolite Y:Â A Possible Method for Vanadium Passivation of FCC Catalysts. Journal of Physical Chemistry B, 2000, 104, 9195-9202.	1.2	15
734	Destructive adsorption of carbon tetrachloride on lanthanum and cerium oxides. Physical Chemistry Chemical Physics, 1999, 1, 3157-3162.	1.3	57
735	On the synthesis of CoAPO-46, -11 and -44 molecular sieves from a Co(Ac)2Â·4H2OÂ·Al(iPrO)3Â·H3PO4Â·Pr2NHÂ·H2O gel via experimental design. Microporous and Mesoporous Materials, 1999, 27, 75-86.	2.2	23
736	Recent progress in diffuse reflectance spectroscopy of supported metal oxide catalysts. Catalysis Today, 1999, 49, 441-451.	2.2	173
737	Olefin polymerization over supported chromium oxide catalysts. Catalysis Today, 1999, 51, 215-221.	2.2	185
738	Alkane dehydrogenation over supported chromium oxide catalysts. Catalysis Today, 1999, 51, 223-232.	2.2	344

#	Article	IF	Citations
739	Spectroscopic characterization of an MoOx layer on the surface of silica. An evaluation of the molecular designed dispersion method. Physical Chemistry Chemical Physics, 1999, 1, 4099-4104.	1.3	46
740	Transition Metal Ions in Microporous Crystalline Aluminophosphates: Isomorphous Substitution. European Journal of Inorganic Chemistry, 1999, 1999, 565-577.	1.0	105
741	Synthesis and spectroscopy of clay intercalated Cu(II) bio-monomer complexes: coordination of Cu(II) with purines and nucleotides. Physical Chemistry Chemical Physics, 1999, 1, 2875-2880.	1.3	17
742	Ethylene polymerization over chromium complexes grafted onto MCM-41 materials. Chemical Communications, 1999, , 445-446.	2.2	15
743	Title is missing!. Catalysis Letters, 1998, 52, 31-36.	1.4	168
744	Conversion of Methane to Benzene over Transition Metal Ion ZSM-5 Zeolites. Journal of Catalysis, 1998, 175, 338-346.	3.1	250
745	Conversion of Methane to Benzene over Transition Metal Ion ZSM-5 Zeolites. Journal of Catalysis, 1998, 175, 347-351.	3.1	142
746	Spectroscopy and coordination chemistry of cobalt in molecular sieves. Microporous and Mesoporous Materials, 1998, 22, 165-178.	2.2	229
747	In situ UVâ€“VIS diffuse reflectance spectroscopyâ€“on-line activity measurements Significance of Cr n+ species (n=2, 3 and 6) in n-butane dehydrogenation catalyzed by supported chromium oxide catalysts. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2011-2014.	1.7	59
748	Supported Vanadium Oxide Catalysts: Quantitative Spectroscopy, Preferential Adsorption of V4+/5+, and Al2O3Coating of Zeolite Y. Journal of Physical Chemistry B, 1998, 102, 8005-8012.	1.2	101
749	In Situ Spectroscopic Investigation of Molecular Structures of Highly Dispersed Vanadium Oxide on Silica under Various Conditions. Journal of Physical Chemistry B, 1998, 102, 10842-10852.	1.2	338
750	Destructive Adsorption of Carbon Tetrachloride on Alkaline Earth Metal Oxides. Journal of Physical Chemistry B, 1998, 102, 3773-3778.	1.2	72
751	Methanol oxidation over supported vanadium oxide catalysts: New fundamental insights about oxidation reactions over metal oxide catalysts from transient and steady state kinetics. Studies in Surface Science and Catalysis, 1997, , 305-314.	1.5	31
752	Chemometric analysis of diffuse reflectance spectra of CoA zeolites: Spectroscopic fingerprinting of Co2+-sites. Studies in Surface Science and Catalysis, 1997, , 623-630.	1.5	6
753	Nature of adsorbed species during the reduction of CrO3/SiO2with CO In situFTIR spectroscopic study. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 4065-4069.	1.7	23
754	Mobility of chromium in inorganic oxides Spectroscopic fingerprinting of oxidation states and coordination environments. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2117-2120.	1.7	27
755	Characterization of Al2O3-Supported Manganese Oxides by Electron Spin Resonance and Diffuse Reflectance Spectroscopy. Journal of Physical Chemistry B, 1997, 101, 309-316.	1.2	135
756	In Situ Diffuse Reflectance Spectroscopy of Supported Chromium Oxide Catalysts:â€‰ Kinetics of the Reduction Process with Carbon Monoxide. Journal of Physical Chemistry B, 1997, 101, 2824-2829.	1.2	54

#	Article	IF	Citations
757	In Situ Raman Spectroscopy of Supported Chromium Oxide Catalysts:â€‰18O2â^'16O2 Isotopic Labeling Studies. Journal of Physical Chemistry B, 1997, 101, 2793-2796.	1.2	64
758	Diffuse Reflectance Spectroscopy of Supported Chromium Oxide Catalysts: A Self-Modeling Mixture Analysis. Journal of Catalysis, 1997, 166, 160-171.	3.1	106
759	Structure and reactivity of surface vanadium oxide species on oxide supports. Applied Catalysis A: General, 1997, 157, 67-90.	2.2	636
760	Catalytic Conversion of Methane into Aromatic Hydrocarbons over Iron Oxide Loaded ZSM-5 Zeolites. Angewandte Chemie International Edition in English, 1997, 36, 2374-2376.	4.4	74
761	Fundamental Studies of Butane Oxidation over Model-Supported Vanadium Oxide Catalysts: Molecular Structure-Reactivity Relationships. Journal of Catalysis, 1997, 170, 75-88.	3.1	132
762	Chemometric analysis of diffuse reflectance spectra of Co2+-exchanged zeolites: spectroscopic fingerprinting of coordination environments. Analytica Chimica Acta, 1997, 348, 267-272.	2.6	13
763	Surface Chemistry and Spectroscopy of Chromium in Inorganic Oxides. Chemical Reviews, 1996, 96, 3327-3350.	23.0	729
764	ESR Fine Structure of Manganese Ions in Zeolite A Detects Strong Variations of the Coordination Environment. Journal of the American Chemical Society, 1996, 118, 9615-9622.	6.6	44
765	Zeolite-Encapsulated Copper(II) Amino Acid Complexes: Synthesis, Spectroscopy, and Catalysis. The Journal of Physical Chemistry, 1996, 100, 9456-9461.	2.9	71
766	In SituRaman Spectroscopy of Supported Chromium Oxide Catalysts:Â Reactivity Studies with Methanol and Butane. The Journal of Physical Chemistry, 1996, 100, 14437-14442.	2.9	105
767	Raman spectroscopy of supported chromium oxide catalysts. Determination of chromiumâ€"oxygen bond distances and bond orders. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 1969-1973.	1.7	61
768	Electron paramagnetic resonance of heterogeneous chromium catalysts. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2431.	1.7	96
769	Clay intercalated Cu(II) amino acid complexes: synthesis, spectroscopy and catalysis. Clay Minerals, 1996, 31, 491-500.	0.2	27
770	Selective Catalytic Reduction of NO with NH3over Supported Vanadia Catalysts. Journal of Catalysis, 1996, 161, 211-221.	3.1	232
771	Homogeneity of Titania-Silica Mixed Oxides: On UV-DRS Studies as a Function of Titania Content. Journal of Catalysis, 1996, 163, 489-491.	3.1	101
772	Zeolite Encaged Cu(Histidine) Complexes as Mimics of Natural Cu Enzymes. Angewandte Chemie International Edition in English, 1996, 34, 2652-2654.	4.4	56
773	Effect of water vapor on the molecular structures of supported vanadium oxide catalysts at elevated temperatures. Journal of Molecular Catalysis A, 1996, 110, 41-54.	4.8	140
774	In situ Raman spectroscopy studies of bulk and surface metal oxide phases during oxidation reactions. Catalysis Today, 1996, 32, 47-55.	2.2	98

#	Article	IF	Citations
775	In Zeolithe eingeschlossene Kupferâ€Histidinâ€Komplexe als Mimetica natÃ¼rlicher Kupferenzyme. Angewandte Chemie, 1995, 107, 2868-2870.	1.6	12
776	Chemistry and spectroscopy of vanadium in VAPO-5 molecular sieves. Zeolites, 1995, 15, 482-489.	0.9	63
777	Combined DRSâ€“RSâ€“EXAFSâ€“XANESâ€“TPR study of supported chromium catalysts. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 3245-3253.	1.7	188
778	Redox Behavior and Dispersion of Supported Chromium Catalysts. The Journal of Physical Chemistry, 1995, 99, 320-326.	2.9	98
779	Diffuse Reflectance Spectroscopy of Dehydrated Cobalt-Exchanged Faujasite-Type Zeolites: A New Method for Co2+ Siting. The Journal of Physical Chemistry, 1995, 99, 15222-15228.	2.9	46
780	Surface chemistry of silicaâ€“titania-supported chromium oxide catalysts. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 953-961.	1.7	54
781	Spectroscopic characterization of supported Cr and Cr, Ti catalysts: Interaction with probe molecules. Studies in Surface Science and Catalysis, 1995, 91, 151-158.	1.5	18
782	Coordination Chemistry in Zeolites. Topics in Inclusion Science, 1995, , 185-213.	0.5	5
783	A quantitative diffuse reflectance spectroscopy study of chromium-containing zeolites. Zeolites, 1994, 14, 450-457.	0.9	31
784	Synthesis and chemistry of chromium in CrAPO-5 molecular sieves. Zeolites, 1994, 14, 360-366.	0.9	77
785	Chemistry and Spectroscopy of Chromium in Zeolites. Studies in Surface Science and Catalysis, 1994, 84, 965-972.	1.5	41
786	Diffuse reflectance spectroscopy study of the thermal genesis and molecular structure of chromium-supported catalysts. The Journal of Physical Chemistry, 1994, 98, 579-584.	2.9	119
787	The effect of nutrient supplementation on the biofiltration removal of butanal in contaminated air. Applied Microbiology and Biotechnology, 1993, 39, 395.	1.7	48
788	A quantitative diffuse reflectance spectroscopy study of supported chromium catalysts. The Journal of Physical Chemistry, 1993, 97, 4756-4763.	2.9	168
789	Monitoring Aqueous Phase Reactions by Operando ATRâ€IR Spectroscopy at High Temperature and Pressure: A Biomass Conversion Showcase. Chemistry Methods, 0, , .	1.8	1
790	Space and Time-Resolved Spectroscopy of Catalyst Bodies. , 0, , 201-216.		1
791	Probing the Dynamics of CO2 Electroreduction with Time-Resolved Raman Spectroscopy. , 0, , .		0
792	Near unity electrochemical CO2 to CO conversion over Sn-doped CuO nanoparticles with prolonged stability. , 0, , .		0