Jan Dierk Grunwaldt

List of Publications by Year in Descending Order

396 papers	16,305 citations	70 h-index	108 g-index
424 ext. papers	18,436 ext. citations	6.7 avg, IF	6.84 L-index

#	Paper	IF	Citations
396	Operando XAS Study of Pt-Doped CeO2 for the Nonoxidative Conversion of Methane. *ACS Catalysis* , **2022**, 12, 3897-3908	13.1	0
395	Using Transient XAS to Detect Minute Levels of Reversible S-O Exchange at the Active Sites of MoS2-Based Hydrotreating Catalysts: Effect of Metal Loading, Promotion, Temperature, and Oxygenate Reactant. *ACS Catalysis*, **2022**, 12, 633-647	13.1	1
394	Dynamic Structural Evolution of Ceria-Supported Pt Particles: A Thorough Spectroscopic Study. *Journal of Physical Chemistry C*, **2022**, 126, 9051-9058	3.8	1
393	In situ formation of ZnO species for efficient propane dehydrogenation. *Nature*, **2021**, 599, 234-238	50.4	19
392	Continuous-flow reactor setup for operando x-ray absorption spectroscopy of high pressure heterogeneous liquid-solid catalytic processes.. *Review of Scientific Instruments*, **2021**, 92, 124101	1.7	0
391	Spatiotemporal Investigation of the Temperature and Structure of a Pt/CeO2 Oxidation Catalyst for CO and Hydrocarbon Oxidation during Pulse Activation. *Industrial & Engineering Chemistry Research*, **2021**, 60, 6662-6675	3.9	3
390	Chemical Imaging of Mixed Metal Oxide Catalysts for Propylene Oxidation: From Model Binary Systems to Complex Multicomponent Systems. *ChemCatChem*, **2021**, 13, 2483-2493	5.2	1
389	The Impact of Pressure and Hydrocarbons on NOx Abatement over Cu- and Fe-Zeolites at Pre-Turbocharger Position. *Catalysts*, **2021**, 11, 336	4	0
388	Sample Environment for Operando Hard X-ray Tomography—An Enabling Technology for Multimodal Characterization in Heterogeneous Catalysis. *Catalysts*, **2021**, 11, 459	4	0
387	Rationalizing an Unexpected Structure Sensitivity in Heterogeneous Catalysis—CO Hydrogenation over Rh as a Case Study. *ACS Catalysis*, **2021**, 11, 5189-5201	13.1	2
386	Insights into the Structural Dynamics of Pt/CeO2 Single-Site Catalysts during CO Oxidation. *Catalysts*, **2021**, 11, 617	4	1
385	Liquid-Phase Synthesis of Highly Reactive Rare-Earth Metal Nanoparticles. *Angewandte Chemie - International Edition*, **2021**, 60, 17373-17377	16.4	6
384	Spatially-Resolved Insights Into Local Activity and Structure of Ni-Based CO2 Methanation Catalysts in Fixed-Bed Reactors. *ChemCatChem*, **2021**, 13, 3010-3020	5.2	1
383	Liquid-Phase Synthesis of Highly Reactive Rare-Earth Metal Nanoparticles. *Angewandte Chemie*, **2021**, 133, 17513-17517	3.6	
382	HCl-doping of V/TiO2-based catalysts reveals the promotion of NH3-SCR and the rate limiting role of NO oxidative activation. *Chemical Engineering Journal*, **2021**, 416, 128933	14.7	6
381	Increased Ir–Ir Interaction in Iridium Oxide during the Oxygen Evolution Reaction at High Potentials Probed by Operando Spectroscopy. *ACS Catalysis*, **2021**, 11, 10043-10057	13.1	20
380	Design of bimetallic Au/Cu nanoparticles in ionic liquids: Synthesis and catalytic properties in 5-(hydroxymethyl)furfural oxidation. *ChemNanoMat*, **2021**, 7, 1108	3.5	0

379	Impact of gas phase reactions and catalyst poisons on the NH3-SCR activity of a V2O5-WO3/TiO2 catalyst at pre-turbine position. *Applied Catalysis B: Environmental*, **2021**, 288, 119991	21.8	8
378	In situ probing of Pt/TiO2 activity in low-temperature ammonia oxidation. *Catalysis Science and Technology*, **2021**, 11, 250-263	5.5	6
377	Chemical gradients in automotive Cu-SSZ-13 catalysts for NOx removal revealed by operando X-ray spectrotomography. *Nature Catalysis*, **2021**, 4, 46-53	36.5	21
376	Stability of Cobalt Particles In and Outside HZSM-5 under CO Hydrogenation Conditions Studied by ex situ and in situ Electron Microscopy. *ChemCatChem*, **2021**, 13, 718-729	5.2	3
375	CO2 Reduction over Mo2C-Based Catalysts. *ACS Catalysis*, **2021**, 11, 1624-1639	13.1	10
374	Liquid-phase synthesis of highly oxophilic zerovalent niobium and tantalum nanoparticles. *Chemical Communications*, **2021**, 57, 3648-3651	5.8	2
373	Spatial activity profiling along a fixed bed of powder catalyst during selective oxidation of propylene to acrolein. *Catalysis Science and Technology*, **2021**, 11, 5781-5790	5.5	0
372	Versatile and high temperature spectroscopic cell for operando fluorescence and transmission x-ray absorption spectroscopic studies of heterogeneous catalysts. *Review of Scientific Instruments*, **2021**, 92, 023106	1.7	2
371	Effect of Selectivity Enhancers on the Structure of Palladium during High-Pressure Continuous-Flow Direct Synthesis of Hydrogen Peroxide in Ethanol. *Journal of Physical Chemistry C*, **2021**, 125, 3451-3462	3.8	1
370	Phase- and Surface Composition-Dependent Electrochemical Stability of Ir-Ru Nanoparticles during Oxygen Evolution Reaction. *ACS Catalysis*, **2021**, 11, 9300-9316	13.1	16
369	Unravelling the Zn-Cu Interaction during Activation of a Zn-promoted Cu/MgO Model Methanol Catalyst. *ChemCatChem*, **2021**, 13, 4120	5.2	7
368	Tracking dynamic structural changes in catalysis by rapid 2D-XANES microscopy. *Journal of Synchrotron Radiation*, **2021**, 28, 1518-1527	2.4	1
367	Catalytic CO Oxidation and H2O2 Direct Synthesis over Pd and Pt-Impregnated Titania Nanotubes. *Catalysts*, **2021**, 11, 949	4	0
366	NaCl-template-based synthesis of TiO-Pd/Pt hollow nanospheres for HO direct synthesis and CO oxidation. *Nanoscale*, **2021**, 13, 2005-2011	7.7	3
365	Freisetzung von toxischem HCN bei der Stickoxidreduktion mittels NH3-SCR in mager betriebenen Erdgasmotoren. *Angewandte Chemie*, **2020**, 132, 14530-14535	3.6	2
364	Structural dynamics of an iron molybdate catalyst under redox cycling conditions studied with in situ multi edge XAS and XRD. *Physical Chemistry Chemical Physics*, **2020**, 22, 11713-11723	3.6	7
363	Emission of Toxic HCN During NO Removal by Ammonia SCR in the Exhaust of Lean-Burn Natural Gas Engines. *Angewandte Chemie - International Edition*, **2020**, 59, 14423-14428	16.4	12
362	Exploiting the dynamic properties of Pt on ceria for low-temperature CO oxidation. *Catalysis Science and Technology*, **2020**, 10, 3904-3917	5.5	21

361	Bridging the gap between industry and synchrotron: an operando study at 30 bar over 300 h during Fischer□Tropsch synthesis. *Reaction Chemistry and Engineering*, **2020**, 5, 1071-1082	4.9	11
360	Optimizing Ni□Fe□Ga alloys into Ni2FeGa for the Hydrogenation of CO2 into Methanol. *ChemCatChem*, **2020**, 12, 3265-3273	5.2	7
359	Dynamic structural changes of supported Pd, PdSn, and PdIn nanoparticles during continuous flow high pressure direct H2O2 synthesis. *Catalysis Science and Technology*, **2020**, 10, 4726-4742	5.5	10
358	High Stability of Rh Oxide-Based Thermoresistive Catalytic Combustion Sensors Proven by X-ray Absorption Spectroscopy and X-ray Diffraction. *ACS Sensors*, **2020**, 5, 2486-2496	9.2	5
357	Understanding sulfur poisoning of bimetallic Pd-Pt methane oxidation catalysts and their regeneration. *Applied Catalysis B: Environmental*, **2020**, 278, 119244	21.8	17
356	Mechanistic insights into the selective oxidation of 5-(hydroxymethyl)furfural over silver-based catalysts. *Catalysis Science and Technology*, **2020**, 10, 5036-5047	5.5	6
355	The direct synthesis of hydrogen peroxide from H2 and O2 using Pd□Ga and Pd□In catalysts. *Catalysis Science and Technology*, **2020**, 10, 1925-1932	5.5	18
354	The Influence of the Gold Particle Size on the Catalytic Oxidation of 5-(Hydroxymethyl)furfural. *Catalysts*, **2020**, 10, 342	4	9
353	Palladium-Based Bimetallic Nanocrystal Catalysts for the Direct Synthesis of Hydrogen Peroxide. *ChemSusChem*, **2020**, 13, 3243-3251	8.3	16
352	PtyNAMi: ptychographic nano-analytical microscope. *Journal of Applied Crystallography*, **2020**, 53, 957-973	18	9
351	Tomographic reconstruction with a generative adversarial network. *Journal of Synchrotron Radiation*, **2020**, 27, 486-493	2.4	15
350	Applications of Operando Hard X-ray Spectroscopy in Energy-Related and Environmental Catalysis. *Synchrotron Radiation News*, **2020**, 33, 11-17	0.6	
349	Visible light-enhanced photothermal CO2 hydrogenation over Pt/Al2O3 catalyst. *Chinese Journal of Catalysis*, **2020**, 41, 286-293	11.3	9
348	PGM based catalysts for exhaust-gas after-treatment under typical diesel, gasoline and gas engine conditions with focus on methane and formaldehyde oxidation. *Applied Catalysis B: Environmental*, **2020**, 265, 118571	21.8	24
347	Stability of Iron-Molybdate Catalysts for Selective Oxidation of Methanol to Formaldehyde: Influence of Preparation Method. *Catalysis Letters*, **2020**, 150, 1434-1444	2.8	8
346	Selective Aerobic Oxidation of 5-(Hydroxymethyl)furfural over Heterogeneous Silver-Gold Nanoparticle Catalysts. *Advanced Synthesis and Catalysis*, **2020**, 362, 5681-5696	5.6	8
345	Structural dynamics in Ni□Fe catalysts during CO2 methanation □ role of iron oxide clusters. *Catalysis Science and Technology*, **2020**, 10, 7542-7554	5.5	19
344	Elucidating the Nature of Active Sites and Fundamentals for their Creation in Zn-Containing ZrO2□Based Catalysts for Nonoxidative Propane Dehydrogenation. *ACS Catalysis*, **2020**, 10, 8933-8949	13.1	28

343	Toward an Intensified Process of Biomass-Derived Monomers: The Influence of 5-(Hydroxymethyl)furfural Byproducts on the Gold-Catalyzed Synthesis of 2,5-Furandicarboxylic Acid. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11512-11521	8.3	11
342	Stabilizing Cu+ in Cu/SiO2 Catalysts with a Shattuckite-Like Structure Boosts CO2 Hydrogenation into Methanol. *ACS Catalysis*, **2020**, 10, 14694-14706	13.1	38
341	Influence of Titania Synthesized by Pulsed Laser Ablation on the State of Platinum during Ammonia Oxidation. *Applied Sciences (Switzerland)*, **2020**, 10, 4699	2.6	8
340	Microfluidic Crystallization of Surfactant-Free Doped Zinc Sulfide Nanoparticles for Optical Bioimaging Applications. *ACS Applied Materials & Interfaces*, **2020**, 12, 44074-44087	9.5	5
339	Tracking the formation, fate and consequence for catalytic activity of Pt single sites on CeO2. *Nature Catalysis*, **2020**, 3, 824-833	36.5	84
338	Hydrocarbon and Soot Oxidation over Cerium and Iron Doped Vanadium SCR Catalysts. *ChemCatChem*, **2020**, 12, 6272-6284	5.2	3
337	TiO2-Supported catalysts with ZnO and ZrO2 for non-oxidative dehydrogenation of propane: mechanistic analysis and application potential. *Catalysis Science and Technology*, **2020**, 10, 7046-7055	5.5	7
336	Insight into the Nature of Active Species of Pt/Al2O3 Catalysts for low Temperature NH3 Oxidation. *ChemCatChem*, **2020**, 12, 867-880	5.2	20
335	From agriculture residue to upgraded product: The thermochemical conversion of sugarcane bagasse for fuel and chemical products. *Fuel Processing Technology*, **2020**, 197, 106199	7.2	26
334	Reduction and carburization of iron oxides for Fischer□Tropsch synthesis. *Journal of Energy Chemistry*, **2020**, 51, 48-61	12	10
333	Synthesis and Characterisation of Hierarchically Structured Titanium Silicalite-1 Zeolites with Large Intracrystalline Macropores. *Chemistry - A European Journal*, **2019**, 25, 14430-14440	4.8	23
332	A versatile nanoreactor for complementary in situ X-ray and electron microscopy studies in catalysis and materials science. *Journal of Synchrotron Radiation*, **2019**, 26, 1769-1781	2.4	12
331	Supported Intermetallic PdZn Nanoparticles as Bifunctional Catalysts for the Direct Synthesis of Dimethyl Ether from CO-Rich Synthesis Gas. *Angewandte Chemie*, **2019**, 131, 15802-15806	3.6	6
330	Direct Catalytic Route to Biomass-Derived 2,5-Furandicarboxylic Acid and Its Use as Monomer in a Multicomponent Polymerization. *ACS Omega*, **2019**, 4, 16972-16979	3.9	13
329	The dynamic nature of Cu sites in Cu-SSZ-13 and the origin of the seagull NOx conversion profile during NH3-SCR. *Reaction Chemistry and Engineering*, **2019**, 4, 1000-1018	4.9	54
328	Oxidation State and Dielectric Properties of Ceria-Based Catalysts by Complementary Microwave Cavity Perturbation and X-Ray Absorption Spectroscopy Measurements. *Topics in Catalysis*, **2019**, 62, 227-236	2.3	9
327	Impact of Preparation Method and Hydrothermal Aging on Particle Size Distribution of Pt/□Al2O3and Its Performance in CO and NO Oxidation. *Journal of Physical Chemistry C*, **2019**, 123, 5433-5446	3.8	32
326	Probing the Active Sites of MoS2 Based Hydrotreating Catalysts Using Modulation Excitation Spectroscopy. *ACS Catalysis*, **2019**, 9, 2568-2579	13.1	28

325	Sunlight induced photo-thermal synergistic catalytic CO2 conversion via localized surface plasmon resonance of MoO3−x. *Journal of Materials Chemistry A*, **2019**, 7, 2821-2830	13	100
324	NH3-SCR over V□W/TiO2 Investigated by Operando X-ray Absorption and Emission Spectroscopy. *Journal of Physical Chemistry C*, **2019**, 123, 14338-14349	3.8	17
323	Hydrodeoxygenation (HDO) of Aliphatic Oxygenates and Phenol over NiMo/MgAl2O4: Reactivity, Inhibition, and Catalyst Reactivation. *Catalysts*, **2019**, 9, 521	4	9
322	The Effect of Prereduction on the Performance of Pd/Al2O3 and Pd/CeO2 Catalysts during Methane Oxidation. *Industrial & Engineering Chemistry Research*, **2019**, 58, 12561-12570	3.9	34
321	Transition Metal Catalysis: Moving Frontiers in Transition Metal Catalysis: Synthesis, Characterization and Modeling (Adv. Mater. 26/2019). *Advanced Materials*, **2019**, 31, 1970187	24	
320	Trendbericht Technische Chemie. *Nachrichten Aus Der Chemie*, **2019**, 67, 50-58	0.1	
319	Chemical Nature of Microfluidically Synthesized AuPd Nanoalloys Supported on TiO2. *ACS Catalysis*, **2019**, 9, 5462-5473	13.1	22
318	The Influence of Active Phase Loading on the Hydrodeoxygenation (HDO) of Ethylene Glycol over Promoted MoS2/MgAl2O4 Catalysts. *Topics in Catalysis*, **2019**, 62, 752-763	2.3	3
317	Highly dispersed PdS preferably anchored on In2S3 of MnS/In2S3 composite for effective and stable hydrogen production from H2S. *Journal of Catalysis*, **2019**, 373, 48-57	7.3	28
316	Microfluidically synthesized Au, Pd and AuPd nanoparticles supported on SnO2 for gas sensing applications. *Sensors and Actuators B: Chemical*, **2019**, 292, 48-56	8.5	40
315	Moving Frontiers in Transition Metal Catalysis: Synthesis, Characterization and Modeling. *Advanced Materials*, **2019**, 31, e1807381	24	29
314	Activating a Cu/ZnO : Al Catalyst □Much More than Reduction: Decomposition, Self-Doping and Polymorphism. *ChemCatChem*, **2019**, 11, 1587-1592	5.2	22
313	Supported Intermetallic PdZn Nanoparticles as Bifunctional Catalysts for the Direct Synthesis of Dimethyl Ether from CO-Rich Synthesis Gas. *Angewandte Chemie - International Edition*, **2019**, 58, 15655-15659	16.4	18
312	Role of Iron on the Structure and Stability of Ni3.2Fe/Al2O3 during Dynamic CO2 Methanation for P2X Applications. *ChemCatChem*, **2019**, 11, 5018-5021	5.2	13
311	Operando XAS/XRD and Raman Spectroscopic Study of Structural Changes of the Iron Molybdate Catalyst during Selective Oxidation of Methanol. *ChemCatChem*, **2019**, 11, 4871-4883	5.2	16
310	Continuous production of higher alcohols from synthesis gas and ethanol using Cs-modified CuO/ZnO/Al2O3 catalysts. *Applied Catalysis A: General*, **2019**, 585, 117150	5.1	5
309	Mapping the Pore Architecture of Structured Catalyst Monoliths from Nanometer to Centimeter Scale with Electron and X-ray Tomographies. *Journal of Physical Chemistry C*, **2019**, 123, 25197-25208	3.8	11
308	Evaluation of High-Loaded Ni-Based Catalysts for Upgrading Fast Pyrolysis Bio-Oil. *Catalysts*, **2019**, 9, 784	4	6

307	Coupled ptychography and tomography algorithm improves reconstruction of experimental data. *Optica*, **2019**, 6, 1282	8.6	11
306	Unravelling the Different Reaction Pathways for Low Temperature CO Oxidation on Pt/CeO and Pt/AlO by Spatially Resolved Structure-Activity Correlations. *Journal of Physical Chemistry Letters*, **2019**, 10, 7698-7705	6.4	26
305	Homogeneous oxidation of light alkanes in the exhaust of turbocharged lean-burn gas engines. *Chemical Engineering Journal*, **2019**, 377, 119800	14.7	11
304	Formaldehyde Oxidation Over Platinum: On the Kinetics Relevant to Exhaust Conditions of Lean-Burn Natural Gas Engines. *Topics in Catalysis*, **2019**, 62, 206-213	2.3	2
303	Impact of the Support on the Catalytic Performance, Inhibition Effects and SO2 Poisoning Resistance of Pt-Based Formaldehyde Oxidation Catalysts. *Topics in Catalysis*, **2019**, 62, 198-205	2.3	6
302	Selective Catalytic Reduction of NOx with Ammonia and Hydrocarbon Oxidation Over V2O5MoO3/TiO2 and V2O5WO3/TiO2 SCR Catalysts. *Topics in Catalysis*, **2019**, 62, 129-139	2.3	9
301	Novel MnS/(InxCu1-x)2S3 composite for robust solar hydrogen sulphide splitting via the synergy of solid solution and heterojunction. *Applied Catalysis B: Environmental*, **2019**, 243, 790-800	21.8	25
300	Surface reaction kinetics of methane oxidation over PdO. *Journal of Catalysis*, **2019**, 370, 152-175	7.3	65
299	On the challenges and constrains of ultra-low emission limits: Formaldehyde oxidation in catalytic sinusoidal-shaped channels. *Chemical Engineering Science*, **2019**, 195, 841-850	4.4	13
298	Regeneration of Sulfur Poisoned PdPt/CeO2ZrO2Y2O3La2O3 and PdPt/Al2O3 Methane Oxidation Catalysts. *Topics in Catalysis*, **2019**, 62, 164-171	2.3	12
297	Correlative Multiscale 3D Imaging of a Hierarchical Nanoporous Gold Catalyst by Electron, Ion and X-ray Nanotomography. *ChemCatChem*, **2018**, 10, 2858-2867	5.2	19
296	An intermetallic Pd2Ga nanoparticle catalyst for the single-step conversion of CO-rich synthesis gas to dimethyl ether. *Applied Catalysis A: General*, **2018**, 562, 206-214	5.1	17
295	Tuning the Pt/CeO2 Interface by in Situ Variation of the Pt Particle Size. *ACS Catalysis*, **2018**, 8, 4800-4811	13.1	99
294	Operando Raman spectroscopy on CO2 methanation over alumina-supported Ni, Ni3Fe and NiRh0.1 catalysts: Role of carbon formation as possible deactivation pathway. *Applied Catalysis A: General*, **2018**, 556, 160-171	5.1	39
293	Revealing the Structure and Mechanism of Palladium during Direct Synthesis of Hydrogen Peroxide in Continuous Flow Using Operando Spectroscopy. *ACS Catalysis*, **2018**, 8, 2546-2557	13.1	51
292	Microfluidic Synthesis of Ultrasmall AuPd Nanoparticles with a Homogeneously Mixed Alloy Structure in Fast Continuous Flow for Catalytic Applications. *Journal of Physical Chemistry C*, **2018**, 122, 1721-1731	3.8	25
291	Inauguration Workshop of the CAT-ACT Beamline for Catalysis and Radionuclide Research at KIT. *Synchrotron Radiation News*, **2018**, 31, 16-19	0.6	
290	Bifunctional catalysts based on colloidal Cu/Zn nanoparticles for the direct conversion of synthesis gas to dimethyl ether and hydrocarbons. *Applied Catalysis A: General*, **2018**, 557, 99-107	5.1	9

289	Hydrotreatment of Fast Pyrolysis Bio-oil Fractions Over Nickel-Based Catalyst. *Topics in Catalysis*, **2018**, 61, 1769-1782	2.3	23
288	Copper Coordination to Water and Ammonia in CuII-Exchanged SSZ-13: Atomistic Insights from DFT Calculations and in Situ XAS Experiments. *Journal of Physical Chemistry C*, **2018**, 122, 16741-16755	3.8	23
287	Influence of feedstock, catalyst, pyrolysis and hydrotreatment temperature on the composition of upgraded oils from intermediate pyrolysis. *Biomass and Bioenergy*, **2018**, 116, 236-248	5.3	28
286	Influence of H 2 O and H 2 S on the composition, activity, and stability of sulfided Mo, CoMo, and NiMo supported on MgAl 2 O 4 for hydrodeoxygenation of ethylene glycol. *Applied Catalysis A: General*, **2018**, 551, 106-121	5.1	21
285	Platinum loaded tin dioxide: a model system for unravelling the interplay between heterogeneous catalysis and gas sensing. *Journal of Materials Chemistry A*, **2018**, 6, 2034-2046	13	63
284	Exploiting Synergies in Catalysis and Gas Sensing using Noble Metal-Loaded Oxide Composites. *ChemCatChem*, **2018**, 10, 864-880	5.2	39
283	Rhodium Oxide Surface-Loaded Gas Sensors. *Nanomaterials*, **2018**, 8,	5.4	20
282	Structural Evolution of Highly Active Multicomponent Catalysts for Selective Propylene Oxidation. *Catalysts*, **2018**, 8, 356	4	7
281	Photothermal Catalysis over Nonplasmonic Pt/TiO2 Studied by Operando HERFD-XANES, Resonant XES, and DRIFTS. *ACS Catalysis*, **2018**, 8, 11398-11406	13.1	49
280	Synthesis and Regeneration of Nickel-Based Catalysts for Hydrodeoxygenation of Beech Wood Fast Pyrolysis Bio-Oil. *Catalysts*, **2018**, 8, 449	4	13
279	Reactivity of Bismuth Molybdates for Selective Oxidation of Propylene Probed by Correlative Operando Spectroscopies. *ACS Catalysis*, **2018**, 8, 6462-6475	13.1	12
278	Synchrotron Radiation and Neutrons for Catalysis, Materials Research and Development. *Synchrotron Radiation News*, **2018**, 31, 56-58	0.6	1
277	Supported gold- and silver-based catalysts for the selective aerobic oxidation of 5-(hydroxymethyl)furfural to 2,5-furandicarboxylic acid and 5-hydroxymethyl-2-furancarboxylic acid. *Green Chemistry*, **2018**, 20, 3530-3541	10	51
276	Transportation fuels from biomass fast pyrolysis, catalytic hydrodeoxygenation, and catalytic fast hydropyrolysis. *Progress in Energy and Combustion Science*, **2018**, 68, 268-309	33.6	122
275	Continuous Synthesis of Γ-Valerolactone in a Trickle-Bed Reactor over Supported Nickel Catalysts. *Industrial & Engineering Chemistry Research*, **2017**, 56, 2680-2689	3.9	22
274	Stability of a Bifunctional Cu-Based Core@Zeolite Shell Catalyst for Dimethyl Ether Synthesis Under Redox Conditions Studied by Environmental Transmission Electron Microscopy and In Situ X-Ray Ptychography. *Microscopy and Microanalysis*, **2017**, 23, 501-512	0.5	14
273	In Situ Multimodal 3D Chemical Imaging of a Hierarchically Structured Core@Shell Catalyst. *Journal of the American Chemical Society*, **2017**, 139, 7855-7863	16.4	31
272	Bottom-Up Design of a Copper-Ruthenium Nanoparticulate Catalyst for Low-Temperature Ammonia Oxidation. *Angewandte Chemie - International Edition*, **2017**, 56, 8711-8715	16.4	12

271	Bottom-Up Design of a Copper–Ruthenium Nanoparticulate Catalyst for Low-Temperature Ammonia Oxidation. *Angewandte Chemie*, **2017**, 129, 8837-8841	3.6	7
270	Effect of NO2 and water on the catalytic oxidation of soot. *Applied Catalysis B: Environmental*, **2017**, 205, 182-188	21.8	22
269	Beamstop-based low-background ptychography to image weakly scattering objects. *Ultramicroscopy*, **2017**, 173, 52-57	3.1	22
268	Continuous microfluidic synthesis of colloidal ultrasmall gold nanoparticles: in situ study of the early reaction stages and application for catalysis. *Reaction Chemistry and Engineering*, **2017**, 2, 876-884	4.9	24
267	Morphological analysis of cerium oxide stabilized nanoporous gold catalysts by soft X-ray ASAXS. *RSC Advances*, **2017**, 7, 45344-45350	3.7	3
266	The Effect of Electrical Polarization on Electronic Structure in LSM Electrodes: An Operando XAS, RIXS and XES Study. *Journal of the Electrochemical Society*, **2017**, 164, F3064-F3072	3.9	8
265	Reactivity of platform molecules in pyrolysis oil and in water during hydrotreatment over nickel and ruthenium catalysts. *Biomass and Bioenergy*, **2017**, 106, 63-73	5.3	23
264	Effect of pyrolysis oil components on the activity and selectivity of nickel-based catalysts during hydrotreatment. *Applied Catalysis A: General*, **2017**, 544, 161-172	5.1	26
263	Genesis of a Co-Salicylaldimine Complex on Silica Followed in Situ by FTIR and XAS. *ChemPhysChem*, **2017**, 18, 2835-2839	3.2	1
262	Tuning the Structure of Platinum Particles on Ceria In Situ for Enhancing the Catalytic Performance of Exhaust Gas Catalysts. *Angewandte Chemie - International Edition*, **2017**, 56, 13078-13082	16.4	132
261	Potential of an Alumina-Supported Ni3Fe Catalyst in the Methanation of CO2: Impact of Alloy Formation on Activity and Stability. *ACS Catalysis*, **2017**, 7, 6802-6814	13.1	89
260	Tuning the Structure of Platinum Particles on Ceria In Situ for Enhancing the Catalytic Performance of Exhaust Gas Catalysts. *Angewandte Chemie*, **2017**, 129, 13258-13262	3.6	21
259	Transient structural and catalytic behaviour of Pt-particles probed by operando spectroscopy during a realistic driving cycle. *Catalysis Science and Technology*, **2017**, 7, 3999-4006	5.5	6
258	CAT-ACT-A new highly versatile x-ray spectroscopy beamline for catalysis and radionuclide science at the KIT synchrotron light facility ANKA. *Review of Scientific Instruments*, **2017**, 88, 113113	1.7	66
257	Recent Advances in Selective Propylene Oxidation over Bismuth Molybdate Based Catalysts: Synthetic, Spectroscopic, and Theoretical Approaches. *ACS Catalysis*, **2017**, 7, 5628-5642	13.1	44
256	Sulfur poisoning and regeneration of bimetallic Pd-Pt methane oxidation catalysts. *Applied Catalysis B: Environmental*, **2017**, 218, 833-843	21.8	49
255	Comparison of the Catalytic Performance and Carbon Monoxide Sensing Behavior of Pd-SnO2 Core@Shell Nanocomposites. *ChemCatChem*, **2017**, 9, 407-413	5.2	12
254	Cell Designs for In Situ and Operando Studies **2017**, 75-89		11

253	Water-gas shift reaction over platinum/strontium apatite catalysts. *Applied Catalysis B: Environmental*, **2017**, 202, 587-596	21.8	17
252	Future Challenges in Heterogeneous Catalysis: Understanding Catalysts under Dynamic Reaction Conditions. *ChemCatChem*, **2017**, 9, 17-29	5.2	194
251	Origin of the Normal and Inverse Hysteresis Behavior during CO Oxidation over Pt/Al2O3. *ACS Catalysis*, **2017**, 7, 343-355	13.1	47
250	The Impact of Pre-Turbine Catalyst Placement on Methane Oxidation in Lean-Burn Gas Engines: An Experimental and Numerical Study **2017**,		5
249	Surface Oxidation of Supported Ni Particles and Its Impact on the Catalytic Performance during Dynamically Operated Methanation of CO2. *Catalysts*, **2017**, 7, 279	4	34
248	Bifunctional hybrid catalysts derived from Cu/Zn-based nanoparticles for single-step dimethyl ether synthesis. *Catalysis Science and Technology*, **2016**, 6, 1054-1063	5.5	26
247	Using in situ environmental transmission microscopy and operando X-ray absorption spectroscopy to investigate ceria based diesel oxidation catalysts **2016**, 139-140		
246	A Microfluidic Device for the Investigation of Rapid Gold Nanoparticle Formation in Continuous Turbulent Flow. *Journal of Physics: Conference Series*, **2016**, 712, 012072	0.3	4
245	Influence of gas atmospheres and ceria on the stability of nanoporous gold studied by environmental electron microscopy and in situ ptychography. *RSC Advances*, **2016**, 6, 83031-83043	3.7	15
244	Interplay of Pt and Crystal Facets of TiO2: CO Oxidation Activity and Operando XAS/DRIFTS Studies. *ACS Catalysis*, **2016**, 6, 7799-7809	13.1	72
243	Gold-Loaded Tin Dioxide Gas Sensing Materials: Mechanistic Insights and the Role of Gold Dispersion. *ACS Sensors*, **2016**, 1, 1322-1329	9.2	54
242	Lithographically fabricated silicon microreactor foroperandoQEXAFS studies in exhaust gas catalysis during simulation of a standard driving cycle. *Journal of Physics: Conference Series*, **2016**, 712, 012030	0.3	1
241	Using combined XAS/DRIFTS to study CO/NO Oxidation over Pt/Al2O3catalysts. *Journal of Physics: Conference Series*, **2016**, 712, 012045	0.3	5
240	Flame made ceria supported noble metal catalysts for efficient H2production via the water gas shift reaction. *Journal of Physics: Conference Series*, **2016**, 712, 012065	0.3	
239	HERFD-XANES and XES as complementaryoperandotools for monitoring the structure of Cu-based zeolite catalysts during NOx-removal by ammonia SCR. *Journal of Physics: Conference Series*, **2016**, 712, 012071	0.3	5
238	The 16thInternational Conference on X-ray Absorption Fine Structure (XAFS16). *Journal of Physics: Conference Series*, **2016**, 712, 011001	0.3	
237	Towards advanced structural analysis of iron oxide clusters on the surface of □Al2O3 using EXAFS. *Applied Surface Science*, **2016**, 386, 234-246	6.7	9
236	Deactivation of Ni-MoS2 by bio-oil impurities during hydrodeoxygenation of phenol and octanol. *Applied Catalysis A: General*, **2016**, 523, 159-170	5.1	43

235	Cu-SSZ-13 as pre-turbine NOx-removal-catalyst: Impact of pressure and catalyst poisons. *Applied Catalysis B: Environmental*, **2016**, 198, 548-557	21.8	28
234	Facile synthesis of surface N-doped Bi2O2CO3: Origin of visible light photocatalytic activity and in situ DRIFTS studies. *Journal of Hazardous Materials*, **2016**, 307, 163-72	12.8	109
233	Influence on nickel particle size on the hydrodeoxygenation of phenol over Ni/SiO 2. *Catalysis Today*, **2016**, 259, 277-284	5.3	87
232	Importance of the oxygen bond strength for catalytic activity in soot oxidation. *Applied Catalysis B: Environmental*, **2016**, 188, 235-244	21.8	30
231	Structure and chemistry of surface-doped Pt:SnO2 gas sensing materials. *RSC Advances*, **2016**, 6, 28149-28155	3.7	35
230	Electrochemically Synthesized Pt/Al2O3 Oxidation Catalysts. *Catalysis Letters*, **2016**, 146, 452-463	2.8	19
229	The CAT-ACT Beamline at ANKA: A new high energy X-ray spectroscopy facility for CATalysis and ACTinide research. *Journal of Physics: Conference Series*, **2016**, 712, 012019	0.3	12
228	Study of the relation between Mg content and dissolution kinetics of natural lime stone using XRF, XRD and XAS. *Journal of Physics: Conference Series*, **2016**, 712, 012144	0.3	3
227	Dynamic transformation of small Ni particles during methanation of CO2under fluctuating reaction conditions monitored byoperandoX-ray absorption spectroscopy. *Journal of Physics: Conference Series*, **2016**, 712, 012050	0.3	10
226	In situcharacterization of catalysts and membranes in a microchannel under high-temperature water gas shift reaction conditions. *Journal of Physics: Conference Series*, **2016**, 712, 012054	0.3	4
225	Ti(0) nanoparticles via lithium-naphthalenide-driven reduction. *Chemical Communications*, **2016**, 52, 6316-9	5.8	23
224	In Situ Ptychography of Heterogeneous Catalysts using Hard X-Rays: High Resolution Imaging at Ambient Pressure and Elevated Temperature. *Microscopy and Microanalysis*, **2016**, 22, 178-88	0.5	19
223	The SCR of NOx with NH3 Examined by Novel X-ray Emission and X-ray Absorption Methods. *Topics in Catalysis*, **2016**, 59, 866-874	2.3	21
222	XAFS16 at KIT: Five Days of Cutting-Edge X-ray Science in Karlsruhe. *Synchrotron Radiation News*, **2016**, 29, 9-10	0.6	
221	Effect of the Addition of Ethanol to Synthesis Gas on the Production of Higher Alcohols over Cs and Ru Modified Cu/ZnO Catalysts. *Industrial & Engineering Chemistry Research*, **2015**, 54, 1452-1463	3.9	10
220	Structure and activity of flame made ceria supported Rh and Pt water gas shift catalysts. *Applied Catalysis A: General*, **2015**, 504, 381-390	5.1	24
219	Influence of single- and double-flame spray pyrolysis on the structure of MnOx/Al2O3 and FeOx/Al2O3 catalysts and their behaviour in CO removal under lean exhaust gas conditions. *Catalysis Science and Technology*, **2015**, 5, 455-464	5.5	26
218	Influence of gas composition on activity and durability of bimetallic Pd-Pt/Al2O3 catalysts for total oxidation of methane. *Catalysis Today*, **2015**, 258, 470-480	5.3	78

217	Methanation of carbon monoxide over promoted flame-synthesized cobalt clusters stabilized in zirconia matrix. *Journal of Catalysis*, **2015**, 326, 182-193	7.3	19
216	Systematic study on the influence of the morphology of β-MoO3 in the selective oxidation of propylene. *Journal of Solid State Chemistry*, **2015**, 228, 42-52	3.3	21
215	Methanation of CO2: Structural response of a Ni-based catalyst under fluctuating reaction conditions unraveled by operando spectroscopy. *Journal of Catalysis*, **2015**, 327, 48-53	7.3	117
214	Structural snapshots of the SCR reaction mechanism on Cu-SSZ-13. *Chemical Communications*, **2015**, 51, 9227-30	5.8	91
213	Soot and hydrocarbon oxidation over vanadia-based SCR catalysts. *Catalysis Today*, **2015**, 258, 461-469	5.3	21
212	Aging of a Pt/Al2O3 exhaust gas catalyst monitored by quasi in situ X-ray micro computed tomography. *RSC Advances*, **2015**, 5, 6893-6905	3.7	13
211	Intermetallic GaPd2 Nanoparticles on SiO2 for Low-Pressure CO2 Hydrogenation to Methanol: Catalytic Performance and In Situ Characterization. *ACS Catalysis*, **2015**, 5, 5827-5836	13.1	108
210	Catalytic hydrodeoxygenation of guaiacol over platinum supported on metal oxides and zeolites. *Applied Catalysis A: General*, **2015**, 490, 181-192	5.1	95
209	A review of catalyst performance and novel reaction engineering concepts in direct synthesis of hydrogen peroxide. *Catalysis Today*, **2015**, 248, 149-159	5.3	69
208	Lithographically fabricated silicon microreactor for in situ characterization of heterogeneous catalysts—enabling correlative characterization techniques. *Review of Scientific Instruments*, **2015**, 86, 065101	1.7	6
207	Solvent Influence on the Hydrodeoxygenation of Guaiacol over Pt/SiO2 and Pt/H-MFI 90 Catalysts. *Chemie-Ingenieur-Technik*, **2015**, 87, 1771-1780	0.8	14
206	Continuous Catalytic Hydrodeoxygenation of Guaiacol over Pt/SiO2 and Pt/H-MFI-90. *Catalysts*, **2015**, 5, 1152-1166	4	23
205	Bismuth Molybdate Catalysts Prepared by Mild Hydrothermal Synthesis: Influence of pH on the Selective Oxidation of Propylene. *Catalysts*, **2015**, 5, 1554-1573	4	27
204	Identification of the iron oxidation state and coordination geometry in iron oxide- and zeolite-based catalysts using pre-edge XAS analysis. *Journal of Synchrotron Radiation*, **2015**, 22, 410-26	2.4	31
203	Activity and stability of Mo2C/ZrO2 as catalyst for hydrodeoxygenation of mixtures of phenol and 1-octanol. *Journal of Catalysis*, **2015**, 328, 208-215	7.3	78
202	Operando spatially and time-resolved X-ray absorption spectroscopy and infrared thermography during oscillatory CO oxidation. *Journal of Catalysis*, **2015**, 328, 216-224	7.3	73
201	Synthesis of γ-valerolactone by hydrogenation of levulinic acid over supported nickel catalysts. *Applied Catalysis A: General*, **2015**, 502, 18-26	5.1	72
200	Structure–function relationships of conventionally and flame made Pd-doped sensors studied by X-ray absorption spectroscopy and DC-resistance. *Sensors and Actuators B: Chemical*, **2015**, 219, 315-323	8.5	19

199	Mild hydrotreatment of the light fraction of fast-pyrolysis oil produced from straw over nickel-based catalysts. *Biomass and Bioenergy*, **2015**, 83, 525-538	5.3	41
198	Study on the hydrothermal and SO2 stability of Al2O3-supported manganese and iron oxide catalysts for lean CO oxidation. *Catalysis Today*, **2015**, 258, 498-506	5.3	13
197	Flame-made Cu/ZnO/Al2O3 catalyst for dimethyl ether production. *Catalysis Communications*, **2014**, 43, 52-56	3.2	24
196	Structure, activity and kinetics of supported molybdenum oxide and mixed molybdenum–vanadium oxide catalysts prepared by flame spray pyrolysis for propane OHD. *Applied Catalysis A: General*, **2014**, 472, 29-38	5.1	26
195	In Situ Observation of Cu–Ni Alloy Nanoparticle Formation by X-Ray Diffraction, X-Ray Absorption Spectroscopy, and Transmission Electron Microscopy: Influence of Cu/Ni Ratio. *ChemCatChem*, **2014**, 6, 301-310	5.2	45
194	Confined-space alloying of nanoparticles for the synthesis of efficient PtNi fuel-cell catalysts. *Angewandte Chemie - International Edition*, **2014**, 53, 14250-4	16.4	108
193	Intermetallic compounds of Ni and Ga as catalysts for the synthesis of methanol. *Journal of Catalysis*, **2014**, 320, 77-88	7.3	81
192	Influence of preparation method on supported Cu–Ni alloys and their catalytic properties in high pressure CO hydrogenation. *Catalysis Science and Technology*, **2014**, 4, 378-386	5.5	29
191	Operando Spatially- and Time-Resolved XAS Study on Zeolite Catalysts for Selective Catalytic Reduction of NOx by NH3. *Journal of Physical Chemistry C*, **2014**, 118, 10204-10212	3.8	68
190	Selective catalytic reduction of NO over Fe-ZSM-5: mechanistic insights by operando HERFD-XANES and valence-to-core X-ray emission spectroscopy. *Journal of the American Chemical Society*, **2014**, 136, 13006-15	16.4	99
189	Stability and resistance of nickel catalysts for hydrodeoxygenation: carbon deposition and effects of sulfur, potassium, and chlorine in the feed. *Catalysis Science and Technology*, **2014**, 4, 3672-3686	5.5	57
188	One step flame-made fluorinated Pt/TiO2 photocatalysts for hydrogen production. *Applied Catalysis B: Environmental*, **2014**, 160-161, 144-151	21.8	65
187	Fe and Mn-Based Catalysts Supported on Al2O3 for CO Oxidation under O2-Rich Conditions. *ChemCatChem*, **2014**, 6, 1763-1773	5.2	36
186	Selective oxidation of propylene to acrolein by hydrothermally synthesized bismuth molybdates. *Applied Catalysis A: General*, **2014**, 482, 145-156	5.1	35
185	Ageing Effects on Exhaust Gas Catalysts: Microscopic Changes Captured by X-Ray Tomography. *Journal of Physics: Conference Series*, **2014**, 499, 012017	0.3	3
184	Electron Microscopy Study of the Deactivation of Nickel Based Catalysts for Bio Oil Hydrodeoxygenation. *Microscopy and Microanalysis*, **2014**, 20, 458-459	0.5	
183	One-step synthesis of bismuth molybdate catalysts via flame spray pyrolysis for the selective oxidation of propylene to acrolein. *Chemical Communications*, **2014**, 50, 15404-6	5.8	24
182	Methane Steam Reforming over an Ni-YSZ Solid Oxide Fuel Cell Anode in Stack Configuration. *Journal of Chemistry*, **2014**, 2014, 1-8	2.3	4

181	CHAPTER 6:Hydrodeoxygenation of Lignocellulose-Derived Platform Molecules. *RSC Energy and Environment Series*, **2014**, 125-150	0.6	2
180	Pd@SnO2 and SnO2@Pd Core@Shell Nanocomposite Sensors. *Particle and Particle Systems Characterization*, **2014**, 31, 591-596	3.1	22
179	Ceria Prepared by Flame Spray Pyrolysis as an Efficient Catalyst for Oxidation of Diesel Soot. *Catalysis Letters*, **2014**, 144, 1661-1666	2.8	10
178	Ti and Si doping as a way to increase low temperature activity of sulfated Ag/Al2O3 in H2-assisted NH3-SCR of NOx. *Applied Catalysis B: Environmental*, **2014**, 148-149, 62-69	21.8	11
177	The potential of operando XAFS for determining the role and structure of noble metal additives in metal oxide based gas sensors. *Journal of Physics: Conference Series*, **2013**, 430, 012078	0.3	4
176	Potential and Limitations of Natural Chabazite for Selective Catalytic Reduction of NOx with NH3. *Chemie-Ingenieur-Technik*, **2013**, 85, 632-641	0.8	7
175	Oscillatory CO Oxidation Over Pt/Al2O3 Catalysts Studied by In situ XAS and DRIFTS. *Topics in Catalysis*, **2013**, 56, 333-338	2.3	42
174	Spatially Resolved X-ray Absorption Spectroscopy **2013**, 49-73		6
173	Structure of alumina supported vanadia catalysts for oxidative dehydrogenation of propane prepared by flame spray pyrolysis. *Applied Catalysis A: General*, **2013**, 451, 207-215	5.1	25
172	Experimental determination and modeling of the phase behavior for the direct synthesis of dimethyl carbonate from methanol and carbon dioxide. *Journal of Supercritical Fluids*, **2013**, 84, 155-163	4.2	3
171	Supported molybdenum carbide for higher alcohol synthesis from syngas. *Catalysis Today*, **2013**, 215, 162-168	5.3	36
170	Imaging Catalysts at Work: A Hierarchical Approach from the Macro- to the Meso- and Nano-scale. *ChemCatChem*, **2013**, 5, 62-80	5.2	122
169	Fluid phase equilibria during propylene carbonate synthesis from propylene oxide in carbon dioxide medium. *Journal of Supercritical Fluids*, **2013**, 82, 106-115	4.2	7
168	Screening of Catalysts for Hydrodeoxygenation of Phenol as a Model Compound for Bio-oil. *ACS Catalysis*, **2013**, 3, 1774-1785	13.1	294
167	Two-Nozzle Flame Spray Pyrolysis (FSP) Synthesis of CoMo/Al2O3 Hydrotreating Catalysts. *Catalysis Letters*, **2013**, 143, 386-394	2.8	21
166	High-resolution chemical imaging of gold nanoparticles using hard x-ray ptychography. *Applied Physics Letters*, **2013**, 102, 203104	3.4	32
165	Abgasnachbehandlung in mobilen Systemen: Stand der Technik, Herausforderungen und Perspektiven. *Chemie-Ingenieur-Technik*, **2013**, 85, 595-617	0.8	71
164	Structure and reducibility of a Fe/Al2O3catalyst for selective catalytic reduction studied by Fe K-edge XAFS spectroscopy. *Journal of Physics: Conference Series*, **2013**, 430, 012054	0.3	6

163	Improving the sensitivity of QEXAFS using modulation excitation spectroscopy. *Journal of Physics: Conference Series*, **2013**, 430, 012126	0.3	4
162	Selective oxidation of benzyl alcohol in dense CO2: Insight by phase behavior modeling. *Journal of Supercritical Fluids*, **2012**, 63, 199-207	4.2	11
161	Aerobic epoxidation of olefins catalyzed by the cobalt-based metal-organic framework STA-12(Co). *Chemistry - A European Journal*, **2012**, 18, 887-98	4.8	99
160	Study of the chemical mechanism involved in the formation of tungstite in benzyl alcohol by the advanced QEXAFS technique. *Chemistry - A European Journal*, **2012**, 18, 2305-12	4.8	24
159	In Situ X-ray Absorption Spectroscopy/Energy-Dispersive X-ray Diffraction Studies on the Hydrothermal Formation of Bi2W1−xMoxO6 Nanomaterials. *European Journal of Inorganic Chemistry*, **2012**, 2012, 783-789	2.3	25
158	CO hydrogenation to methanol on Cu–Ni catalysts: Theory and experiment. *Journal of Catalysis*, **2012**, 293, 51-60	7.3	163
157	An Au clusters related spill-over sensitization mechanism in SnO2-based gas sensors identified by operando HERFD-XAS, work function changes, DC resistance and catalytic conversion studies. *Physical Chemistry Chemical Physics*, **2012**, 14, 13249-54	3.6	93
156	Oscillatory Behavior during the Catalytic Partial Oxidation of Methane: Following Dynamic Structural Changes of Palladium Using the QEXAFS Technique. *Journal of Physical Chemistry C*, **2012**, 116, 599-609	3.8	39
155	T-REX: new software for advanced QEXAFS data analysis. *Journal of Synchrotron Radiation*, **2012**, 19, 920-9	2.4	5
154	Fluid phase equilibria of the reaction mixture during the selective hydrogenation of 2-butenal in dense carbon dioxide. *Applied Catalysis A: General*, **2012**, 443-444, 67-75	5.1	6
153	Structure–activity relationships of Pt/Al2O3 catalysts for CO and NO oxidation at diesel exhaust conditions. *Applied Catalysis B: Environmental*, **2012**, 126, 315-325	21.8	110
152	Hydrodesoxygenierung von Lävulinsäure zu δ-Valerolacton an heterogenen Übergangsmetall-Katalysatoren. *Chemie-Ingenieur-Technik*, **2012**, 84, 1247-1247	0.8	
151	W/Mo-Oxide Nanomaterials: Structure–Property Relationships and Ammonia-Sensing Studies. *Journal of Physical Chemistry C*, **2011**, 115, 1134-1142	3.8	29
150	Identification of the active species generated from supported Pd catalysts in Heck reactions: an in situ quick scanning EXAFS investigation. *Journal of the American Chemical Society*, **2011**, 133, 3921-30	16.4	88
149	A review of catalytic upgrading of bio-oil to engine fuels. *Applied Catalysis A: General*, **2011**, 407, 1-19	5.1	1228
148	Redox properties of supported copper catalysts studied in liquid and gas phase by in situ ATR-IR and XAS. *Catalysis Today*, **2011**, 178, 124-131	5.3	9
147	Experimental determination and modeling of the phase behavior for the selective oxidation of benzyl alcohol in supercritical CO2. *Fluid Phase Equilibria*, **2011**, 302, 83-92	2.5	10
146	Heterogeneously Catalysed Aldol Reactions in Supercritical Carbon Dioxide as Innovative and Non-Flammable Reaction Medium. *Topics in Catalysis*, **2011**, 54, 1115-1123	2.3	11

145	Characterization of highly porous nanoparticle deposits by permeance measurements. *Powder Technology*, **2011**, 207, 279-289	5.2	13
144	Interplay between size and crystal structure of molybdenum dioxide nanoparticles--synthesis, growth mechanism, and electrochemical performance. *Small*, **2011**, 7, 377-87	11	77
143	The structure and behavior of platinum in SnO2-based sensors under working conditions. *Angewandte Chemie - International Edition*, **2011**, 50, 2841-4	16.4	87
142	Catalysis Workshop at ANKA. *Synchrotron Radiation News*, **2011**, 24, 39-40	0.6	
141	Flame spray synthesis of CoMo/Al2O3 hydrotreating catalysts. *Applied Catalysis A: General*, **2011**, 397, 201-208	5.1	37
140	Kinetics of acetic acid synthesis from ethanol over a Cu/SiO2 catalyst. *Applied Catalysis A: General*, **2011**, 402, 69-79	5.1	12
139	Internal steam reforming in solid oxide fuel cells: Status and opportunities of kinetic studies and their impact on modelling. *Journal of Power Sources*, **2011**, 196, 25-38	8.9	124
138	Oscillatory behaviour of catalytic properties, structure and temperature during the catalytic partial oxidation of methane on Pd/Al(2)O(3). *Physical Chemistry Chemical Physics*, **2010**, 12, 2288-91	3.6	37
137	Hard and soft X-ray microscopy and tomography in catalysis: bridging the different time and length scales. *Chemical Society Reviews*, **2010**, 39, 4741-53	58.5	138
136	Role of Bi promotion and solvent in platinum-catalyzed alcohol oxidation probed by in situ X-ray absorption and ATR-IR spectroscopy. *Physical Chemistry Chemical Physics*, **2010**, 12, 5307-16	3.6	44
135	The dedicated QEXAFS facility at the SLS: Performance and Scientific Opportunities **2010**,		30
134	Next-Generation Catalysis for Renewables: Combining Enzymatic with Inorganic Heterogeneous Catalysis for Bulk Chemical Production. *ChemCatChem*, **2010**, 2, 249-258	5.2	67
133	Chemoenzymatic Combination of Glucose Oxidase with Titanium Silicalite-1. *ChemCatChem*, **2010**, 2, 943-945	5.2	24
132	Microwave-Hydrothermal Synthesis of Nanostructured Zinc-Copper Gallates. *European Journal of Inorganic Chemistry*, **2010**, 2010, 2036-2043	2.3	21
131	Asymmetric C-C bond-formation reaction with Pd: how to favor heterogeneous or homogeneous catalysis?. *Chemistry - A European Journal*, **2010**, 16, 9658-68	4.8	13
130	Flexibility and sorption selectivity in rigid metal-organic frameworks: the impact of ether-functionalised linkers. *Chemistry - A European Journal*, **2010**, 16, 14296-306	4.8	113
129	Substrate Size-Selective Catalysis with Zeolite-Encapsulated Gold Nanoparticles. *Angewandte Chemie*, **2010**, 122, 3582-3585	3.6	55
128	Substrate size-selective catalysis with zeolite-encapsulated gold nanoparticles. *Angewandte Chemie - International Edition*, **2010**, 49, 3504-7	16.4	146

127	Selective side-chain oxidation of alkyl aromatic compounds catalyzed by cerium modified silver catalysts. *Journal of Molecular Catalysis A*, **2010**, 331, 40-49		30
126	Hydrothermal synthesis of Bi6S2O15 nanowires: structural, in situ EXAFS, and humidity-sensing studies. *Small*, **2010**, 6, 1173-9	11	21
125	Synchrotron Studies of Catalysts: From XAFS to QEXAFS and Beyond. *Synchrotron Radiation News*, **2009**, 22, 2-4	0.6	18
124	X-ray Absorption Spectroscopic Microscopy: From the Micro- to the Nanoscale. *Synchrotron Radiation News*, **2009**, 22, 23-28	0.6	6
123	Selective liquid-phase oxidation of alcohols catalyzed by a silver-based catalyst promoted by the presence of ceria. *Journal of Catalysis*, **2009**, 266, 320-330	7.3	108
122	Axial Changes of Catalyst Structure and Temperature in a Fixed-Bed Microreactor During Noble Metal Catalysed Partial Oxidation of Methane. *Topics in Catalysis*, **2009**, 52, 1360-1370	2.3	18
121	In situ XAS study of the Mn(III)(salen)Br catalyzed synthesis of cyclic organic carbonates from epoxides and CO2. *Journal of Molecular Catalysis A*, **2009**, 297, 63-72		33
120	Gold-catalyzed aerobic oxidation of dibenzylamine: Homogeneous or heterogeneous catalysis?. *Journal of Molecular Catalysis A*, **2009**, 300, 111-115		44
119	Gold supported on Mg, Al and Cu containing mixed oxides: Relation between surface properties and behavior in catalytic aerobic oxidation of 1-phenylethanol. *Catalysis Today*, **2009**, 141, 349-354	5.3	27
118	Catalysts at work: From integral to spatially resolved X-ray absorption spectroscopy. *Catalysis Today*, **2009**, 145, 267-278	5.3	71
117	High throughput cell for X-ray absorption spectroscopy applied to study the effect of Au on Rh-catalyzed partial oxidation of methane. *Applied Catalysis A: General*, **2009**, 353, 36-45	5.1	13
116	The role of monomeric iron during the selective catalytic reduction of NOx by NH3 over Fe-BEA zeolite catalysts. *Applied Catalysis B: Environmental*, **2009**, 93, 166-176	21.8	93
115	On the mechanism of the SCR reaction on Fe/HBEA zeolite. *Applied Catalysis B: Environmental*, **2009** , 93, 185-193	21.8	92
114	Visualizing a Catalyst at Work during the Ignition of the Catalytic Partial Oxidation of Methane. *Journal of Physical Chemistry C*, **2009**, 113, 3037-3040	3.8	55
113	Filtration of nanoparticles: Evolution of cake structure and pressure-drop. *Journal of Aerosol Science*, **2009**, 40, 965-981	4.3	36
112	Investigation of the ignition behaviour of the noble metal catalyzed catalytic partial oxidation of methane. *Journal of Physics: Conference Series*, **2009**, 190, 012162	0.3	10
111	In situ attenuated total reflection infrared spectroscopy of imidazolium-based room-temperature ionic liquids under "supercritical" CO(2). *Journal of Physical Chemistry B*, **2009**, 113, 114-22	3.4	97
110	Structural changes of noble metal catalysts during ignition and extinction of the partial oxidation of methane studied by advanced QEXAFS techniques. *Physical Chemistry Chemical Physics*, **2009**, 11, 8779-89	3.6	44

109	Operando X-ray absorption spectroscopy studies on Pd-SnO2 based sensors. *Physical Chemistry Chemical Physics*, **2009**, 11, 8620-5	3.6	99
108	Insight into the structure of Pd/ZrO2during the total oxidation of methane using combined in situ XRD, X-ray absorption and Raman spectroscopy. *Journal of Physics: Conference Series*, **2009**, 190, 012160	0.3	12
107	Shining X-rays on catalysts at work. *Journal of Physics: Conference Series*, **2009**, 190, 012151	0.3	9
106	Reduction and re-oxidation of Cu/Al2O3catalysts investigated with quick-scanning XANES and EXAFS. *Journal of Physics: Conference Series*, **2009**, 190, 012153	0.3	10
105	Ru-Doped Cobalt□irconia Nanocomposites by Flame Synthesis: Physicochemical and Catalytic Properties. *Chemistry of Materials*, **2008**, 20, 4069-4079	9.6	32
104	Heterogeneous Catalytic Hydrogenation in Supercritical Fluids: Potential and Limitations. *Industrial & Engineering Chemistry Research*, **2008**, 47, 4561-4585	3.9	65
103	Hydrothermal Formation of W/Mo-Oxides: A Multidisciplinary Study of Growth and Shape. *Chemistry of Materials*, **2008**, 20, 3022-3033	9.6	62
102	Enhancement of Activity and Self-reactivation of NSR-catalysts by Temporary Formation of BaPtO3-perovskite. *Catalysis Letters*, **2008**, 120, 1-7	2.8	7
101	Gold-Catalyzed Aerobic Oxidation of Benzyl Alcohol: Effect of Gold Particle Size on Activity and Selectivity in Different Solvents. *Catalysis Letters*, **2008**, 125, 169-176	2.8	103
100	Palladium Supported on an Acidic Resin: A Unique Bifunctional Catalyst for the Continuous Catalytic Hydrogenation of Organic Compounds in Supercritical Carbon Dioxide. *Advanced Synthesis and Catalysis*, **2008**, 350, 691-705	5.6	55
99	Comparative study of structural properties and NOx storage-reduction behavior of Pt/Ba/CeO2 and Pt/Ba/Al2O3. *Applied Catalysis B: Environmental*, **2008**, 78, 288-300	21.8	36
98	Mn(III)(salen)-catalyzed synthesis of cyclic organic carbonates from propylene and styrene oxide in □upercritical□CO2. *Journal of Molecular Catalysis A*, **2008**, 279, 94-103		110
97	Insight into the structure of supported palladium catalysts during the total oxidation of methane. *Chemical Communications*, **2007**, 4635-7	5.8	98
96	Parallel structural screening of solid materials. *Journal of Materials Chemistry*, **2007**, 17, 2603		29
95	Morphological and Kinetic Studies on Hexagonal Tungstates. *Chemistry of Materials*, **2007**, 19, 185-197	9.6	51
94	In Situ Monitoring of Ni-based Catalysts during the Synthesis of Propylene Carbonate. *AIP Conference Proceedings*, **2007**,	0	2
93	Selektive, goldkatalysierte Alkoholoxidation in □berkritischem CO2. *Chemie-Ingenieur-Technik*, **2007**, 79, 1303-1303	0.8	
92	□napshots□der Katalysatorstruktur in einem Mikroreaktor w□rend der partiellen Oxidation von Methan. *Chemie-Ingenieur-Technik*, **2007**, 79, 1283-1283	0.8	

91	Synthese von Propylencarbonat in flüssigem und überkritischem Kohlendioxid an Zink-basierten Katalysatoren. *Chemie-Ingenieur-Technik*, **2007**, 79, 1302-1302	0.8	
90	Combination of flame synthesis and high-throughput experimentation: The preparation of alumina-supported noble metal particles and their application in the partial oxidation of methane. *Applied Catalysis A: General*, **2007**, 316, 226-239	5.1	60
89	Gold supported on CuMgAl and CuCe mixed oxides: An in situ XANES study on the state of Au during aerobic alcohol oxidation. *Journal of Catalysis*, **2007**, 250, 313-323	7.3	47
88	The fate of platinum in Pt/Ba/CeO2 and Pt/Ba/Al2O3 catalysts during thermal aging. *Journal of Catalysis*, **2007**, 251, 28-38	7.3	32
87	A versatile in situ spectroscopic cell for fluorescence/transmission EXAFS and X-ray diffraction of heterogeneous catalysts in gas and liquid phase. *Journal of Synchrotron Radiation*, **2007**, 14, 345-54	2.4	37
86	Combined liquid-phase ATR-IR and XAS study of the Bi-promotion in the aerobic oxidation of benzyl alcohol over Pd/Al2O3. *Journal of Catalysis*, **2007**, 252, 77-87	7.3	76
85	Flame-synthesized LaCoO3-supported Pd: 2. Catalytic behavior in the reduction of NO by H2 under lean conditions. *Journal of Catalysis*, **2007**, 252, 137-147	7.3	48
84	Flame-synthesized LaCoO3-supported Pd: 1. Structure, thermal stability and reducibility. *Journal of Catalysis*, **2007**, 252, 127-136	7.3	63
83	Thermal ageing phenomena and strategies towards reactivation of NO x - storage catalysts. *Topics in Catalysis*, **2007**, 42-43, 3-7	2.3	16
82	Gold catalysed selective oxidation of alcohols in supercritical carbon dioxide. *Topics in Catalysis*, **2007**, 44, 285-292	2.3	32
81	Distinct spatial changes of the catalyst structure inside a fixed-bed microreactor during the partial oxidation of methane over Rh/Al2O3. *Catalysis Today*, **2007**, 126, 54-63	5.3	62
80	The nature of the active site in the Fe-ZSM-5/N2O system studied by (resonant) inelastic X-ray scattering. *Catalysis Today*, **2007**, 126, 127-134	5.3	42
79	Comparative in situ XAS investigations during aerobic oxidation of alcohols over ruthenium, platinum and palladium catalysts in supercritical CO2. *Catalysis Today*, **2007**, 126, 27-36	5.3	23
78	Time-Resolved and Operando XAS Studies on Heterogeneous Catalysts From the Gas Phase Towards Reactions in Supercritical Fluids. *AIP Conference Proceedings*, **2007**,	0	3
77	Continuous catalytic "one-pot" multi-step synthesis of 2-ethylhexanal from crotonaldehyde. *Chemical Communications*, **2007**, 3562-4	5.8	32
76	Simple preparation routes towards novel Zn-based catalysts for the solventless synthesis of propylene carbonate using dense carbon dioxide. *Journal of Molecular Catalysis A*, **2006**, 258, 165-171		40
75	Continuous catalytic oxidation of solid alcohols in supercritical CO2: A parametric and spectroscopic study of the transformation of cinnamyl alcohol over Pd/Al2O3. *Journal of Catalysis*, **2006**, 240, 126-136	7.3	51
74	Formation and stability of barium aluminate and cerate in NOx storage-reduction catalysts. *Applied Catalysis B: Environmental*, **2006**, 63, 232-242	21.8	70

73	In situ extended X-ray absorption fine structure study during selective alcohol oxidation over Pd/Al2O3 in supercritical carbon dioxide. *Journal of Physical Chemistry B*, **2006**, 110, 9916-22	3.4	48
72	On the presence of Fe(IV) in Fe-ZSM-5 and FeSrO3-x --unequivocal detection of the 3d4 spin system by resonant inelastic X-ray scattering. *Journal of Physical Chemistry B*, **2006**, 110, 18104-7	3.4	33
71	Oxidic or metallic palladium: which is the active phase in pd-catalyzed aerobic alcohol oxidation?. *Journal of Physical Chemistry B*, **2006**, 110, 25586-9	3.4	107
70	2D-mapping of the catalyst structure inside a catalytic microreactor at work: partial oxidation of methane over Rh/Al2O3. *Journal of Physical Chemistry B*, **2006**, 110, 8674-80	3.4	127
69	Solvent-modified supercritical CO: A beneficial medium for heterogeneously catalyzed oxidation reactions. *Applied Catalysis A: General*, **2006**, 298, 50-56	5.1	38
68	IR spectroscopy and phase behavior studies of the catalytic synthesis of propylene carbonate: Expanded liquid versus supercritical fluid. *Applied Catalysis A: General*, **2006**, 305, 46-53	5.1	21
67	Electron microscopy and EXAFS studies on oxide-supported gold–silver nanoparticles prepared by flame spray pyrolysis. *Applied Surface Science*, **2006**, 252, 7862-7873	6.7	59
66	Decreased CO production in methanol steam reforming over Cu/ZrO2 catalysts prepared by the microemulsion technique. *Applied Catalysis A: General*, **2006**, 302, 215-223	5.1	83
65	Sensing low concentrations of CO using flame-spray-made Pt/SnO2 nanoparticles. *Journal of Nanoparticle Research*, **2006**, 8, 783-796	2.3	135
64	Monitoring a Catalyst at Work. *Chimia*, **2006**, 60, 709	1.3	2
63	In situ spectroscopic investigation of heterogeneous catalysts and reaction media at high pressure. *Physical Chemistry Chemical Physics*, **2005**, 7, 3526-39	3.6	86
62	Xray Absorption Spectroscopy on Heterogeneous Catalysts at the new XAS Beamline at ANKA. *Physica Scripta*, **2005**, 769	2.6	19
61	Monitoring of fast Transformations in Solid State Chemistry and Heterogeneous Catalysis by QEXAFS in the Second Scale. *Physica Scripta*, **2005**, 831	2.6	10
60	Supercritical carbon dioxide: an inert solvent for catalytic hydrogenation?. *Journal of Physical Chemistry B*, **2005**, 109, 16794-800	3.4	57
59	Benzyl alcohol oxidation in supercritical carbon dioxide: spectroscopic insight into phase behaviour and reaction mechanism. *Physical Chemistry Chemical Physics*, **2005**, 7, 278-85	3.6	65
58	Flame-Made Pt/Ceria/Zirconia for Low-Temperature Oxygen Exchange. *Chemistry of Materials*, **2005** , 17, 3352-3358	9.6	66
57	Xray Absorption Spectroscopy on CuZnO Catalysts Selected by HighThroughput Experimentation Techniques. *Physica Scripta*, **2005**, 819	2.6	5
56	A simple route to highly active ruthenium catalysts for formylation reactions with hydrogen and carbon dioxide. *Journal of Molecular Catalysis A*, **2005**, 226, 253-257		20

55	Solventless synthesis of propylene carbonate catalysed by chromium salen complexes: Bridging homogeneous and heterogeneous catalysis. *Journal of Molecular Catalysis A*, **2005**, 242, 32-39		42
54	Evaluation of strategies for the immobilization of bidentate ruthenium phosphine complexes used for the reductive amination of carbon dioxide. *Applied Catalysis A: General*, **2005**, 296, 238-250	5.1	14
53	Formylation with supercritical carbon dioxide over Ru/Al2O3 modified by phosphines: heterogeneous or homogeneous catalysis?. *Journal of Catalysis*, **2005**, 229, 144-153	7.3	18
52	Promoted Ru?hydroxyapatite: designed structure for the fast and highly selective oxidation of alcohols with oxygen. *Journal of Catalysis*, **2005**, 230, 406-419	7.3	90
51	Behavior of homogeneous and immobilized zinc-based catalysts in cycloaddition of CO2 to propylene oxide. *Journal of Catalysis*, **2005**, 234, 256-267	7.3	60
50	Studying the solvothermal formation of MoO3 fibers by complementary in situ EXAFS/EDXRD techniques. *Angewandte Chemie - International Edition*, **2005**, 44, 5643-7	16.4	99
49	Quasi-homogeneous methanol synthesis over highly active copper nanoparticles. *Angewandte Chemie - International Edition*, **2005**, 44, 7978-81	16.4	107
48	Untersuchung der solvothermalen Bildung von MoO3-Fasern mithilfe komplementärer In-situ-EXAFS/EDXRD-Techniken. *Angewandte Chemie*, **2005**, 117, 5787-5792	3.6	23
47	Quasi-Homogeneous Methanol Synthesis Over Highly Active Copper Nanoparticles. *Angewandte Chemie*, **2005**, 117, 8192-8195	3.6	33
46	Selective oxidation of alcohols with oxygen on Ru/co-hydroxyapatite: A mechanistic study. *Journal of Molecular Catalysis A*, **2005**, 242, 224-232		41
45	Flame-made Alumina Supported Pd-Pt Nanoparticles: Structural Properties and Catalytic Behavior in Methane Combustion. *Catalysis Letters*, **2005**, 104, 9-16	2.8	100
44	High pressure in situ x-ray absorption spectroscopy cell for studying simultaneously the liquid phase and the solid/liquid interface. *Review of Scientific Instruments*, **2005**, 76, 054104	1.7	52
43	Tomographic XRay Absorption Spectroscopy. *Physica Scripta*, **2005**, 1026	2.6	2
42	An alternative preparation method for ion exchanged catalysts: Solid-state redox reaction. *Studies in Surface Science and Catalysis*, **2004**, 154, 2192-2199	1.8	
41	In situ EXAFS study on the oxidation state of Pd/Al2O3 and Bi-Pd/Al2O3 during the liquid-phase oxidation of 1-phenylethanol. *Journal of Catalysis*, **2004**, 222, 268-280	7.3	71
40	The adhesion and shape of nanosized Au particles in a Au/TiO2 catalyst. *Journal of Catalysis*, **2004**, 225, 86-94	7.3	208
39	A simple discrimination of the promoter effect in alcohol oxidation and dehydrogenation over platinum and palladium. *Journal of Catalysis*, **2004**, 225, 138-146	7.3	61
38	Selective oxidation of benzyl alcohol to benzaldehyde in supercritical carbon dioxide. *Catalysis Today*, **2004**, 91-92, 1-5	5.3	51

37	Identification of catalyst surface species during asymmetric platinum-catalysed hydrogenation in a "supercritical" solvent. *Chemical Communications*, **2004**, 744-5	5.8	20
36	Near-critical CO2 in mesoporous silica studied by in situ FTIR spectroscopy. *Langmuir*, **2004**, 20, 2890-9	4	42
35	One-Step Synthesis of Submicrometer Fibers of MoO3. *Chemistry of Materials*, **2004**, 16, 1126-1134	9.6	105
34	X-ray absorption spectroscopy under reaction conditions: suitability of different reaction cells for combined catalyst characterization and time-resolved studies. *Physical Chemistry Chemical Physics*, **2004**, 6, 3037	3.6	194
33	High pressure view-cell for simultaneous in situ infrared spectroscopy and phase behavior monitoring of multiphase chemical reactions. *Review of Scientific Instruments*, **2003**, 74, 4121-4128	1.7	55
32	Probing Active Sites During Palladium-Catalyzed Alcohol Oxidation in Supercritical Carbon Dioxide. *Catalysis Letters*, **2003**, 90, 221-229	2.8	42
31	In situ EXAFS study of Pd/Al2O3 during aerobic oxidation of cinnamyl alcohol in an organic solvent. *Journal of Catalysis*, **2003**, 213, 291-295	7.3	47
30	High-throughput screening under demanding conditions: Cu/ZnO catalysts in high pressure methanol synthesis as an example. *Journal of Catalysis*, **2003**, 216, 110-119	7.3	57
29	Liquid phase oxidation of alcohols with oxygen: in situ monitoring of the oxidation state of Bi-promoted Pd/Al2O3. *Chemical Communications*, **2003**, 2304-5	5.8	32
28	Supercritical Fluids in Catalysis: Opportunities of In Situ Spectroscopic Studies and Monitoring Phase Behavior. *Catalysis Reviews - Science and Engineering*, **2003**, 45, 1-96	12.6	123
27	In situ X-ray absorption study during methane combustion over Pd/ZrO2 catalysts. *Physical Chemistry Chemical Physics*, **2003**, 5, 1481-1488	3.6	32
26	Mapping the chemical states of an element inside a sample using tomographic x-ray absorption spectroscopy. *Applied Physics Letters*, **2003**, 82, 3360-3362	3.4	78
25	Silicon drift detectors as a tool for time-resolved fluorescence XAFS on low-concentrated samples in catalysis. *Journal of Synchrotron Radiation*, **2002**, 9, 246-53	2.4	16
24	Combining XRD and EXAFS with on-Line Catalytic Studies for in situ Characterization of Catalysts. *Topics in Catalysis*, **2002**, 18, 37-43	2.3	137
23	Iridium Clusters for Catalytic Partial Oxidation of Methane An In Situ Transmission and Fluorescence XAFS Study. *Catalysis Letters*, **2002**, 78, 13-21	2.8	26
22	In situ XANES study on TiO2 SiO2 aerogels and flame made materials. *Physical Chemistry Chemical Physics*, **2002**, 4, 3514-3521	3.6	26
21	Fluorescence EXAFS for the in situ study on the state of promoters in catalysis. *Journal of Synchrotron Radiation*, **2001**, 8, 572-4	2.4	16
20	The State of Cu Promoter Atoms in High-Temperature Shift Catalysts An in Situ Fluorescence XAFS Study. *Journal of Catalysis*, **2001**, 198, 56-65	7.3	74

19	In Situ EXAFS Study of Rh/Al2O3 Catalysts for Catalytic Partial Oxidation of Methane. *Journal of Catalysis*, **2001**, 200, 321-329	7.3	72
18	Supported gold catalysts for CO oxidation: Effect of calcination on structure, adsorption and catalytic behaviour. *Physical Chemistry Chemical Physics*, **2001**, 3, 3846-3855	3.6	77
17	Piezo X-ray Absorption Spectroscopy for the Investigation of Solid-State Transformations in the Millisecond Range. *Journal of Physical Chemistry B*, **2001**, 105, 5161-5168	3.4	28
16	In Situ Investigations of Structural Changes in Cu/ZnO Catalysts. *Journal of Catalysis*, **2000**, 194, 452-460	7.3	457
15	Sol–gel bismuth–molybdenum–titanium mixed oxides. *Applied Catalysis A: General*, **1999**, 179, 189-202	5.1	8
14	Reduction of 4-nitrotoluene over Fe–Mg–Al lamellar double hydroxides. *Journal of Molecular Catalysis A*, **1999**, 139, 305-313		22
13	Preparation of Supported Gold Catalysts for Low-Temperature CO Oxidation via Size-Controlled Gold Colloids. *Journal of Catalysis*, **1999**, 181, 223-232	7.3	363
12	Comparative Study of Au/TiO2 and Au/ZrO2 Catalysts for Low-Temperature CO Oxidation. *Journal of Catalysis*, **1999**, 186, 458-469	7.3	269
11	Gold/Titania Interfaces and Their Role in Carbon Monoxide Oxidation. *Journal of Physical Chemistry B*, **1999**, 103, 1002-1012	3.4	229
10	Unusual Redox Properties of Bismuth in Sol–Gel Bi-Mo-Ti Mixed Oxides. *Journal of Catalysis*, **1998**, 177, 53-59	7.3	24
9	Sol–gel bismuth–molybdenum–titanium mixed oxides I. Preparation and structural properties. *Applied Catalysis A: General*, **1998**, 175, 11-19	5.1	11
8	Nonclassical 2,4-diamino-5-aryl-6-ethylpyrimidine antifolates: activity as inhibitors of dihydrofolate reductase from Pneumocystis carinii and Toxoplasma gondii and as antitumor agents. *Journal of Medicinal Chemistry*, **1997**, 40, 3040-8	8.3	25
7	Preparation and characterization of thin TiO2-films on gold/mica. *FreseniusJournal of Analytical Chemistry*, **1997**, 358, 96-100		15
6	Preparation of thin silver films on mica studied by XRD and AFM. *Applied Surface Science*, **1996**, 99, 353-359	6.7	26
5	Determination of a new titanium site in Ti:YA103. *Journal of Physics and Chemistry of Solids*, **1994**, 55, 699-705	3.9	1
4	Surface Noble Metal Concentration on Ceria as a Key Descriptor for Efficient Catalytic CO Oxidation. *ACS Catalysis*,2473-2486	13.1	3
3	Impact of the Gas Mixture and Aging Conditions on Formaldehyde Conversion over a Series of Commercial Pt-Based Catalysts		1
2	Effect of NO2 on Gas-Phase Reactions in Lean NOx/NH3/O2/H2O Mixtures at Conditions Relevant for Exhaust Gas Aftertreatment		1

1	Controlling Reaction-Induced Loss of Active Sites in ZnOx/Silicalite-1 for Durable Nonoxidative Propane Dehydrogenation. *ACS Catalysis*,4608-4617	13.1	3