Roger GlÃ¤ser

List of Publications by Year
in descending order

85 papers	2,565 citations	186265 28 h-index	206112 48 g-index
90 all docs	90 docs citations	90 times ranked	3677 citing authors

#	ARTICLE	IF	CITATIONS
1	Synergistic effect of cobalt and niobium in Co3-Nb-Ox on performance of selective catalytic reduction of NO with NH3. Rare Metals, 2022, 41, 166-178.	7.1	19
2	Promotion effect of niobium on ceria catalyst for selective catalytic reduction of NO with NH3. Journal of Rare Earths, 2022, 40, 1535-1545.	4.8	9
3	Enhanced activity of a bifunctional Pt/zeolite Y catalyst with an intracrystalline hierarchical pore system in the aqueous-phase hydrogenation of levulinic acid. Chemical Engineering Journal, 2022, 430, 132763.	12.7	14
4	Evolution of Hierarchically Porous Nickel Alumina Catalysts Studied by Xâ€Ray Ptychography. Advanced Science, 2022, 9, e2105432.	11.2	13
5	Tar induced deactivation and regeneration of a commercial V2O5-MoO3/TiO2 catalyst during selective catalytic reduction of NO with NH3. Fuel, 2022, 316, 123324.	6.4	3
6	Digitization in Catalysis Research: Towards a Holistic Description of a Ni/Al₂O₃ Reference Catalyst for CO₂ Methanation. ChemCatChem, 2022, 14, .	3.7	14
7	Micro-/mesoporous copper-containing zeolite Y applied in NH3-SCR, DeNO. Microporous and Mesoporous Materials, 2022, 334, 111793.	4.4	7
8	Synthesis of TS-1 from supported embryonic to nano-/micro-metersized crystalline particles: The impact of accessibility of Ti species on the catalytic performance. Microporous and Mesoporous Materials, 2022, 337, 111900.	4.4	5
9	Synthetic Routes to Crystalline Complex Metal Alkyl Carbonates and Hydroxycarbonates via Solâ€"Gel Chemistryâ€"Perspectives for Advanced Materials in Catalysis. Catalysts, 2022, 12, 554.	3.5	3
10	Thermally stable mesoporous tetragonal zirconia through surfactant-controlled synthesis and Si-stabilization. RSC Advances, 2022, 12, 16875-16885.	3.6	0
11	Reagent-Free Immobilization of Industrial Lipases to Develop Lipolytic Membranes with Self-Cleaning Surfaces. Membranes, 2022, 12, 599.	3.0	3
12	Influence of Framework <i>n</i>(Si)/<i>n</i>(Al) Ratio on the Nature of Cu Species in Cuâ€ZSMâ€5 for NH₃â€SCRâ€DeNO_{<i>x</i>}. ChemCatChem, 2022, 14, .	3.7	9
13	Ru/Câ€Catalyzed Hydrogenation of Aqueous Glycolic Acid from Microalgae â€" Influence of pH and Biologically Relevant Additives. ChemistryOpen, 2022, 11, .	1.9	3
14	Hydrocarbon Sorption in Flexible MOFsâ€"Part I: Thermodynamic Analysis with the Dubinin-Based Universal Adsorption Theory (D-UAT). Nanomaterials, 2022, 12, 2415.	4.1	2
15	Effects of SiO2-doping on high-surface-area Ru/TiO2 catalysts for the selective CO methanation. Applied Catalysis B: Environmental, 2021, 282, 119483.	20.2	27
16	Effect of zeolite topology on NH3-SCR activity and stability of Cu-exchanged zeolites. Applied Catalysis B: Environmental, 2021, 284, 119752.	20.2	77
17	Application of microimaging to diffusion studies in nanoporous materials. Adsorption, 2021, 27, 819-840.	3.0	6
18	Selective Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Diformylfuran by Visible Lightâ€Driven Photocatalysis over In Situ Substrateâ€Sensitized Titania. ChemSusChem, 2021, 14, 1351-1362.	6.8	53

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19	Mayenite-based electride C12A7eâˆ’: an innovative synthetic method via plasma arc melting. Materials Chemistry Frontiers, 2021, 5, 1301-1314.	5.9	9
20	Improving the hydrothermal stability of zeolite Y by La³⁺ cation exchange as a catalyst for the aqueous-phase hydrogenation of levulinic acid. RSC Advances, 2021, 11, 5568-5579.	3.6	9
21	Mayenite-Based Electride C12A7eâˆ’: A Reactivity and Stability Study. Catalysts, 2021, 11, 334.	3.5	5
22	Diffusion in Nanoporous Solids in the Focus of IUPAC â€“ A Tribute to Jens Weitkamp. Chemie-Ingenieur-Technik, 2021, 93, 893-901.	0.8	5
23	Flow MAS NMR for In Situ Monitoring of Carbon Dioxide Capture and Hydrogenation Using Nanoporous Solids. Journal of Physical Chemistry C, 2021, 125, 10219-10225.	3.1	5
24	Radiation-Induced Graft Immobilization (RIGI): Covalent Binding of Non-Vinyl Compounds on Polymer Membranes. Polymers, 2021, 13, 1849.	4.5	10
25	Effect of Textural Properties and Presence of Co-Cation on NH3-SCR Activity of Cu-Exchanged ZSM-5. Catalysts, 2021, 11, 843.	3.5	13
26	Hard Xâ€Ray Nanotomography for 3D Analysis of Coking in Nickelâ€Based Catalysts. Angewandte Chemie - International Edition, 2021, 60, 21772-21777.	13.8	13
27	Harte RÃ¶ntgenâ€Nanotomographie zur 3Dâ€Analyse der Verkokung in Nickelâ€basierten Katalysatoren. Angewandte Chemie, 2021, 133, 21940-21945.	2.0	0
28	Titania/chitosanâ€“lignin nanocomposite as an efficient photocatalyst for the selective oxidation of benzyl alcohol under UV and visible light. RSC Advances, 2021, 11, 34996-35010.	3.6	7
29	Figures of Merit for Photocatalysis: Comparison of NiO/La-NaTaO3 and Synechocystis sp. PCC 6803 as a Semiconductor and a Bio-Photocatalyst for Water Splitting. Catalysts, 2021, 11, 1415.	3.5	5
30	Highly Efficient One-Step Protein Immobilization on Polymer Membranes Supported by Response Surface Methodology. Frontiers in Chemistry, 2021, 9, 804698.	3.6	6
31	Pentanoic acid from Î³-valerolactone and formic acid using bifunctional catalysis. Green Chemistry, 2020, 22, 1171-1181.	9.0	33
32	Aqueous-Phase Hydrogenation of Levulinic Acid Using Formic Acid as a Sustainable Reducing Agent Over Pt Catalysts Supported on Mesoporous Zirconia. ACS Sustainable Chemistry and Engineering, 2020, 8, 393-402.	6.7	47
33	Experimental Evaluation of a New Approach for a Two-Stage Hydrothermal Biomass Liquefaction Process. Energies, 2020, 13, 3692.	3.1	3
34	Porosity and Structure of Hierarchically Porous Ni/Al2O3 Catalysts for CO2 Methanation. Catalysts, 2020, 10, 1471.	3.5	25
35	Nanosized Cu-SSZ-13 and Its Application in NH3-SCR. Catalysts, 2020, 10, 506.	3.5	23
36	Current State of the Art of the Solid Rh-Based Catalyzed Hydroformylation of Short-Chain Olefins. Catalysts, 2020, 10, 510.	3.5	46

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37	Chitosan-Based N-Doped Carbon Materials for Electrocatalytic and Photocatalytic Applications. ACS Sustainable Chemistry and Engineering, 2020, 8, 4708-4727.	6.7	123
38	Catalytic Activity Towards Hydrogen Evolution Dependent of the Degree of Conjugation and Absorption of Six Organic Chromophores. ChemistryOpen, 2020, 9, 405-408.	1.9	1
39	Suppression of N₂O formation by H₂O and SO₂ in the selective catalytic reduction of NO with NH₃ over a Mn/Tiâ€“Si catalyst. Catalysis Science and Technology, 2019, 9, 4759-4770.	4.1	37
40	Novel Polymerâ€“Silica Composite-Based Bifunctional Catalysts for Hydrodeoxygenation of 4-(2-Furyl)-3-Buten-2-One as Model Substance for Furfuralâ€“Acetone Aldol Condensation Products. Applied Sciences (Switzerland), 2019, 9, 2438.	2.5	2
41	Nature and Surface Interactions of Sulfur-Containing Deposits on V2O5-WO3/TiO2 Catalysts for SCR-DeNOx. Emission Control Science and Technology, 2019, 5, 297-306.	1.5	4
42	Synthesis of highly active ETS-10-based titanosilicate for heterogeneously catalyzed transesterification of triglycerides. Beilstein Journal of Nanotechnology, 2019, 10, 2039-2061.	2.8	2
43	Metalâ€“Organic Framework Breathing in the Electric Field: A Theoretical Study. Journal of Physical Chemistry C, 2019, 123, 10333-10338.	3.1	17
44	Stability of a highly dealuminated Y-zeolite in liquid aqueous media. Microporous and Mesoporous Materials, 2019, 281, 148-160.	4.4	7
45	Selective catalytic reduction of NOx with NH3 over Mnâ€“Zrâ€“Ti mixed oxide catalysts. Journal of Materials Science, 2019, 54, 6943-6960.	3.7	21
46	Hierarchically Structured Porous Spinels via an Epoxide-Mediated Solâ€“Gel Process Accompanied by Polymerization-Induced Phase Separation. ACS Omega, 2018, 3, 1201-1212.	3.5	14
47	Diffusion of methyl oleate in hierarchical micro-/mesoporous TS-1-based catalysts probed by PFG NMR spectroscopy. RSC Advances, 2018, 8, 38941-38944.	3.6	9
48	Oneâ€Shot Measurement of Effectiveness Factors of Chemical Conversion in Porous Catalysts. ChemCatChem, 2018, 10, 5602-5609.	3.7	17
49	One-Shot Measurement of Effectiveness Factors of Chemical Conversion in Porous Catalysts. ChemCatChem, 2018, 10, 5553-5553.	3.7	2
50	Effects of Enhanced Flexibility and Pore Size Distribution on Adsorption-Induced Deformation of Mesoporous Materials. Langmuir, 2018, 34, 7575-7584.	3.5	23
51	Continuous Separation of Light Olefin/Paraffin Mixtures on ZIF-4 by Pressure Swing Adsorption and Membrane Permeation. Molecules, 2018, 23, 889.	3.8	21
52	Lignin-Based Composite Materials for Photocatalysis and Photovoltaics. Topics in Current Chemistry, 2018, 376, 20.	5.8	53
53	Platinum Group Metal Phosphides as Heterogeneous Catalysts for the Gas-Phase Hydroformylation of Small Olefins. ACS Catalysis, 2017, 7, 3584-3590.	11.2	40
54	The role of acid/base properties in Ni/MgO-ZrO2â€“based catalysts for dry reforming of methane. Catalysis Communications, 2017, 100, 76-80.	3.3	30

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55	Surface barriers as dominant mechanism to transport limitations in hierarchically structured catalysts â€“ Application to the zeolite-catalyzed alkylation of benzene with ethylene. Chemical Engineering Journal, 2017, 329, 45-55.	12.7	47
56	Nitric Oxide Reduction of Heavy-Duty Diesel Off-Gas by NH3-SCR in Front of the Turbocharger. Emission Control Science and Technology, 2017, 3, 275-288.	1.5	15
57	Future Challenges in Heterogeneous Catalysis: Understanding Catalysts under Dynamic Reaction Conditions. ChemCatChem, 2017, 9, 17-29.	3.7	304
58	A Series of Robust Copper-Based Triazolyl Isophthalate MOFs: Impact of Linker Functionalization on Gas Sorption and Catalytic Activity â€. Materials, 2017, 10, 338.	2.9	11
59	Photocatalytic Oxidation of NO over Composites of Titanium Dioxide and Zeolite ZSM-5. Catalysts, 2016, 6, 31.	3.5	20
60	Determination of micropore volume and external surface of zeolites. Microporous and Mesoporous Materials, 2016, 236, 63-70.	4.4	19
61	Accessibility enhancement of TS-1-based catalysts for improving the epoxidation of plant oil-derived substrates. Catalysis Science and Technology, 2016, 6, 7280-7288.	4.1	39
62	Solâ€Gel and Porous Glassâ€Based Silica Monoliths with Hierarchical Pore Structure for Solidâ€Liquid Catalysis. Chemie-Ingenieur-Technik, 2016, 88, 1561-1585.	0.8	56
63	Bis(carboxyphenyl)-1,2,4-triazole Based Metalâ€“Organic Frameworks: Impact of Metal Ion Substitution on Adsorption Performance. Inorganic Chemistry, 2016, 55, 6938-6948.	4.0	16
64	Paddle Wheel Based Triazolyl Isophthalate MOFs: Impact of Linker Modification on Crystal Structure and Gas Sorption Properties. Inorganic Chemistry, 2016, 55, 3030-3039.	4.0	29
65	Insights into the selective hydrogenation of levulinic acid to Î³-valerolactone using supported mono- and bimetallic catalysts. Journal of Molecular Catalysis A, 2016, 417, 145-152.	4.8	42
66	Dry reforming of methane with carbon dioxide over NiOâ€“MgOâ€“ZrO 2. Catalysis Today, 2016, 270, 68-75.	4.4	48
67	Microimaging of Transient Concentration Profiles of Reactant and Product Molecules during Catalytic Conversion in Nanoporous Materials. Angewandte Chemie - International Edition, 2015, 54, 5060-5064.	13.8	62
68	A series of isomorphous Metal-Organic Frameworks with rtl topology â€“ Metal distribution and tunable sorption capacity via substitution of metal ions. Microporous and Mesoporous Materials, 2015, 216, 56-63.	4.4	12
69	Selective oxidation of cyclooctene over copper-containing metal-organic frameworks. Microporous and Mesoporous Materials, 2015, 216, 151-160.	4.4	36
70	Improving mass-transfer in controlled pore glasses as supports for the platinum-catalyzed aromatics hydrogenation. Catalysis Science and Technology, 2015, 5, 3137-3146.	4.1	15
71	Highly efficient nano-sized TS-1 with micro-/mesoporosity from desilication and recrystallization for the epoxidation of biodiesel with H₂O₂. Green Chemistry, 2015, 17, 3378-3389.	9.0	71
72	Mechanochemical preparation of advanced catalytically active bifunctional Pd-containing nanomaterials for aqueous phase hydrogenation. Catalysis Science and Technology, 2015, 5, 2085-2091.	4.1	12

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73	Tuning the catalytic activity of the heteronuclear coordination polymers [CoxZn1âˆ’x(tdc)(bipy)] and [CoxZn1âˆ’x(Me2trzâ€“pba)2] in the epoxidation of cyclooctene via isomorphous substitution. Catalysis Communications, 2014, 44, 46-49.	3.3	9
74	Network Flexibility: Control of Gate Opening in an Isostructural Series of Ag-MOFs by Linker Substitution. Inorganic Chemistry, 2014, 53, 7599-7607.	4.0	32
75	Molecular basket sorbents polyethylenimineâ€“SBA-15 for CO2 capture from flue gas: Characterization and sorption properties. Microporous and Mesoporous Materials, 2013, 169, 103-111.	4.4	152
76	The Mechanism of Pseudomorphic Transformation of Spherical Silica Gel into MCM-41 Studied by PFG NMR Diffusometry. Materials, 2013, 6, 3688-3709.	2.9	26
77	Epoxidation of biodiesel with hydrogen peroxide over Ti-containing silicate catalysts. Microporous and Mesoporous Materials, 2012, 164, 182-189.	4.4	32
78	Assessment of hydrogen storage by physisorption in porous materials. Energy and Environmental Science, 2012, 5, 8294.	30.8	75
79	A novel copper-based MOF material: Synthesis, characterization and adsorption studies. Microporous and Mesoporous Materials, 2011, 142, 62-69.	4.4	53
80	A Microporous Copper Metalâ€“Organic Framework with High H₂ and CO₂ Adsorption Capacity at Ambient Pressure. Angewandte Chemie - International Edition, 2011, 50, 10344-10348.	13.8	106
81	Synthesis, Characterization and Catalytic Properties of the Novel Manganese-Containing Amorphous Mesoporous Material MnTUD-1. Journal of Physical Chemistry C, 2008, 112, 7468-7476.	3.1	46
82	The Role of Mesopores in Intracrystalline Transport in USY Zeolite:Â PFG NMR Diffusion Study on Various Length Scales. Journal of the American Chemical Society, 2005, 127, 13055-13059.	13.7	211
83	Selective Hydrogenation of Glycolic Acid to Renewable Ethylene Glycol over Supported Ruthenium Catalysts. ChemCatChem, 0, , .	3.7	3
84	Monolithic Al2O3 Xerogels with Hierarchical Mesoâ€/Macropore System as Catalyst Supports for Methanation of CO2. ChemCatChem, 0, , .	3.7	0
85	An integrated resource-efficient microfluidic device for parallelised studies of immobilised chiral catalysts in continuous flow <i>via</i> miniaturized LC/MS-analysis. Reaction Chemistry and Engineering, 0, , .	3.7	1