# Ueli Heiz

List of Publications by Year
in descending order



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|---|---|---|---|
| 200 papers | 11,453 citations | 46918 47 h-index | 30010 103 g-index |
| 213 all docs | 213 docs citations | 213 times ranked | 8250 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | When Gold Is Not Noble:Â Nanoscale Gold Catalysts. Journal of Physical Chemistry A, 1999, 103, 9573-9578. | 1.1 | 1,375 |
| 2 | Charging Effects on Bonding and Catalyzed Oxidation of CO on Au8 Clusters on MgO. Science, 2005, 307, 403-407. | 6.0 | 1,358 |
| 3 | Structural, Electronic, and Impurity-Doping Effects in Nanoscale Chemistry: Supported Gold Nanoclusters. Angewandte Chemie - International Edition, 2003, 42, 1297-1300. | 7.2 | 547 |
| 4 | Catalytic Oxidation of Carbon Monoxide on Monodispersed Platinum Clusters:Â Each Atom Counts. Journal of the American Chemical Society, 1999, 121, 3214-3217. | 6.6 | 467 |
| 5 | Acetylene Cyclotrimerization on Supported Size-Selected Pdn Clusters (1 â‰ n â‰ 30): One Atom Is Enough!. Journal of the American Chemical Society, 2000, 122, 3453-3457. | 6.6 | 410 |
| 6 | Catalytic CO Oxidation by Free Au2-:Â Experiment and Theory. Journal of the American Chemical Society, 2003, 125, 10437-10445. | 6.6 | 386 |
| 7 | The effect of particle proximity on the oxygen reduction rate of size-selected platinum clusters. Nature Materials, 2013, 12, 919-924. | 13.3 | 327 |
| 8 | Chemical reactivity of size-selected supported clusters: An experimental setup. Review of Scientific Instruments, 1997, 68, 1986-1994. | 0.6 | 226 |
| 9 | Control and Manipulation of Gold Nanocatalysis: Effects of Metal Oxide Support Thickness and Composition. Journal of the American Chemical Society, 2009, 131, 538-548. | 6.6 | 203 |
| 10 | Nanoassembled model catalysts. Journal Physics D: Applied Physics, 2000, 33, R85-R102. | 1.3 | 196 |
| 11 | Factors in gold nanocatalysis: oxidation of CO in the non-scalable size regime. Topics in Catalysis, 2007, 44, 145-158. | 1.3 | 190 |
| 12 | Cluster Size Effects in the Photocatalytic Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2013, 135, 13262-13265. | 6.6 | 187 |
| 13 | CO Oxidation on a Single Pd Atom Supported on Magnesia. Physical Review Letters, 2001, 86, 5950-5953. | 2.9 | 173 |
| 14 | Fundamental aspects of catalysis on supported metal clusters. Journal of Materials Chemistry, 2004, 14, 564. | 6.7 | 166 |
| 15 | Low-Temperature Cluster Catalysis. Journal of the American Chemical Society, 2004, 126, 2732-2737. | 6.6 | 162 |
| 16 | Coadsorption of CO and O2 on small free gold cluster anions at cryogenic temperatures: Model complexes for catalytic CO oxidation. Physical Chemistry Chemical Physics, 2002, 4, 1707-1709. | 1.3 | 161 |
| 17 | Size-Dependent Molecular Dissociation on Mass-Selected, Supported Metal Clusters. Journal of the American Chemical Society, 1998, 120, 9668-9671. | 6.6 | 138 |
| 18 | High Sintering Resistance of Size-Selected Platinum Cluster Catalysts by Suppressed Ostwald Ripening. Nano Letters, 2014, 14, 5803-5809. | 4.5 | 131 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Charging of Au Atoms on TiO2Thin Films from CO Vibrational Spectroscopy and DFT Calculations. Journal of Physical Chemistry B, 2005, 109, 18418-18426. | 1.2 | 126 |
| 20 | CO Combustion on Supported Gold Clusters. ChemPhysChem, 2006, 7, 1871-1879. | 1.0 | 121 |
| 21 | Structure sensitivity in the nonscalable regime explored via catalysed ethylene hydrogenation on supported platinum nanoclusters. Nature Communications, 2016, 7, 10389. | 5.8 | 115 |
| 22 | Tuning the oxidation of carbon monoxide using nanoassembled model catalysts. Chemical Physics, 2000, 262, 189-200. | 0.9 | 109 |
| 23 | Identification of Defect Sites on MgO(100) Thin Films by Decoration with Pd Atoms and Studying CO Adsorption Properties. Journal of the American Chemical Society, 2001, 123, 6172-6178. | 6.6 | 108 |
| 24 | Chiral Gold and Silver Nanoclusters: Preparation, Size Selection, and Chiroptical Properties. Chemistry of Materials, 2013, 25, 862-870. | 3.2 | 106 |
| 25 | Cluster Size-Dependent Mechanisms of the CO + NO Reaction on Small Pdn(nâ‰ 30) Clusters on Oxide Surfaces. Journal of the American Chemical Society, 2003, 125, 7964-7970. | 6.6 | 103 |
| 26 | Tuning the Selectivity of Acetylene Polymerization Atom by Atom. Journal of Catalysis, 2001, 198, 122-127. | 3.1 | 85 |
| 27 | Size-Selected Subnanometer Cluster Catalysts on Semiconductor Nanocrystal Films for Atomic Scale Insight into Photocatalysis. Nano Letters, 2012, 12, 5903-5906. | 4.5 | 85 |
| 28 | Size-selected clusters as heterogeneous model catalysts under applied reaction conditions. Physical Chemistry Chemical Physics, 2010, 12, 10288. | 1.3 | 81 |
| 29 | Optical Absorption Spectrum of Gold Atoms Deposited onSiO2from Cavity Ringdown Spectroscopy. Physical Review Letters, 2005, 94, 213402. | 2.9 | 80 |
| 30 | Temperature Dependent CO Oxidation Mechanisms on Size-Selected Clusters. Journal of Physical Chemistry C, 2010, 114, 1651-1654. | 1.5 | 76 |
| 31 | Size-Selected Monodisperse Nanoclusters on Supported Graphene: Bonding, Isomerism, and Mobility. Nano Letters, 2012, 12, 5907-5912. | 4.5 | 76 |
| 32 | Topography and work function measurements of thin MgO(001) films on Ag(001) by nc-AFM and KPFM. Physical Chemistry Chemical Physics, 2010, 12, 3203. | 1.3 | 75 |
| 33 | Preparation and Spectroscopic Properties of Monolayer-Protected Silver Nanoclusters. Journal of Physical Chemistry C, 2012, 116, 8034-8043. | 1.5 | 71 |
| 34 | The reactivity of gold and platinum metals in their cluster phase. European Physical Journal D, 1999, 9, 35-39. | 0.6 | 70 |
| 35 | Size-Selected Clusters on Solid Surfaces. Critical Reviews in Solid State and Materials Sciences, 2001, 26, 251-290. | 6.8 | 69 |
| 36 | NaxAu and CsxAu bimetal clusters: Finite size analogs of sodiumâ€“gold and cesiumâ€“gold compounds. Journal of Chemical Physics, 1996, 105, 5574-5585. | 1.2 | 67 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Ethylene hydrogenation on supported Ni, Pd and Pt nanoparticles: Catalyst activity, deactivation and the d-band model. Journal of Catalysis, 2016, 333, 51-58. | 3.1 | 62 |
| 38 | Chemisorption and Reactivity of Methanol on MgO Thin Films. Journal of Physical Chemistry B, 2002, 106, 11961-11969. | 1.2 | 59 |
| 39 | Electrochemically induced nanocluster migration. Electrochimica Acta, 2010, 56, 810-816. | 2.6 | 59 |
| 40 | Einfluss der geometrischen und elektronischen Struktur sowie der elementaren Zusammensetzung von Clustern auf chemische Prozesse in der Nanometerskala. Angewandte Chemie, 2003, 115, 1335-1338. | 1.6 | 52 |
| 41 | Cluster Chemistry:â€‰ Size-Dependent Reactivity Induced by Reverse Spill-Over. Journal of the American Chemical Society, 2007, 129, 9635-9639. | 6.6 | 52 |
| 42 | Fundamental Insight into the Substrateâ€Ðependent Ripening of Monodisperse Clusters. ChemCatChem, 2013, 5, 3330-3341. | 1.8 | 52 |
| 43 | Synthesis of monodispersed model catalysts using softlanding cluster deposition. Pure and Applied Chemistry, 2002, 74, 1527-1535. | 0.9 | 51 |
| 44 | NO Monomers on MgO Powders and Thin Films. Journal of Physical Chemistry B, 2002, 106, 1637-1645. | 1.2 | 50 |
| 45 | Catalytic Non-Oxidative Coupling of Methane on Ta<sub>8</sub>O<sub>2</sub><sup>+</sup>. Journal of the American Chemical Society, 2020, 142, 5862-5869. | 6.6 | 49 |
| 46 | Imaging size-selected silicon clusters with a low-temperature scanning tunneling microscope. Surface Science, 2000, 465, 331-338. | 0.8 | 48 |
| 47 | Role of Surface Defects in the Activation of Supported Metals:â€‰ A Quantum-Chemical Study of Acetylene Cyclotrimerization on Pd1/MgO. Journal of Physical Chemistry B, 2000, 104, 10612-10617. | 1.2 | 48 |
| 48 | Mono- and bimetallic Ir(<scp>iii</scp>) based catalysts for the homogeneous photocatalytic reduction of CO<sub>2</sub>under visible light irradiation. New insights into catalyst deactivation. Dalton Transactions, 2014, 43, 13259. | 1.6 | 48 |
| 49 | Reaction mechanism for the oxidation of free silver dimers. Chemical Physics Letters, 2001, 340, 282-288. | 1.2 | 47 |
| 50 | Gold Atoms and Dimers on Amorphous SiO2:Â Calculation of Optical Properties and Cavity Ringdown Spectroscopy Measurements. Journal of Physical Chemistry B, 2005, 109, 19876-19884. | 1.2 | 47 |
| 51 | Plasmons in supported size-selected silver nanoclusters. Physical Chemistry Chemical Physics, 2015, 17, 17541-17544. | 1.3 | 47 |
| 52 | Size-effects in the acetylene cyclotrimerization on supported size-selected Pdn clusters (1â‰nâ‰30). Surface Science, 2000, 454-456, 984-989. | 0.8 | 46 |
| 53 | AFM tip characterization by Kelvin probe force microscopy. New Journal of Physics, 2010, 12, 093024. | 1.2 | 45 |
| 54 | Infra-red spectroscopy of size selected Au25, Au38 and Au144 ligand protected gold clusters. Physical Chemistry Chemical Physics, 2013, 15, 12539. | 1.3 | 44 |

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|---|---|---|---|
| 55 | Oxidation State and Symmetry of Magnesia-Supported Pd<sub>13</sub>O<sub>x</sub> Nanocatalysts Influence Activation Barriers of CO Oxidation. Journal of the American Chemical Society, 2012, 134, 7690-7699. | 6.6 | 43 |
| 56 | Ethanol photocatalysis on rutile TiO<sub>2</sub>(110): the role of defects and water. Physical Chemistry Chemical Physics, 2015, 17, 22809-22814. | 1.3 | 43 |
| 57 | Selectivity of Surface Defects for the Activation of Supported Metal Atoms:Â Acetylene Cyclotrimerization on Pd1/MgO. Journal of Physical Chemistry B, 2002, 106, 3173-3181. | 1.2 | 42 |
| 58 | Acetylene trimerization on Ag, Pd and Rh atoms deposited on MgO thin films. Physical Chemistry Chemical Physics, 2005, 7, 955-962. | 1.3 | 42 |
| 59 | Exploring the Potential of Different-Sized Supported Subnanometer Pt Clusters as Catalysts for Wet Chemical Applications. ACS Catalysis, 2017, 7, 4152-4162. | 5.5 | 41 |
| 60 | Size dependent reaction kinetics of small gold clusters with carbon monoxide: Influence of internal degrees of freedom and carbonyl complex stability. European Physical Journal D, 2003, 24, 327-330. | 0.6 | 40 |
| 61 | Oxidation of Magnesia-Supported Pd<sub>30</sub> Nanoclusters and Catalyzed CO Combustion: Size-Selected Experiments and First-Principles Theory. Journal of Physical Chemistry C, 2012, 116, 9594-9607. | 1.5 | 40 |
| 62 | Photoresponse of supramolecular self-assembled networks on grapheneâ€“diamond interfaces. Nature Communications, 2016, 7, 10700. | 5.8 | 40 |
| 63 | Acetylene polymerization on supported transition metal clusters. Journal of Molecular Catalysis A, 2003, 199, 103-113. | 4.8 | 39 |
| 64 | Rational design, characterization and catalytic application of metal clusters functionalized with hydrophilic, chiral ligands: a proof of principle study. Physical Chemistry Chemical Physics, 2013, 15, 19253. | 1.3 | 38 |
| 65 | Surface Species in Photocatalytic Methanol Reforming on Pt/TiO<sub>2</sub>(110): Learning from Surface Science Experiments for Catalytically Relevant Conditions. ACS Catalysis, 2020, 10, 4080-4091. | 5.5 | 38 |
| 66 | Size-selected, supported clusters: the interaction of carbon monoxide with nickel clusters. Applied Physics A: Materials Science and Processing, 1998, 67, 621-626. | 1.1 | 37 |
| 67 | Pd1/MgO(): a model system in nanocatalysis. Surface Science, 2002, 514, 249-255. | 0.8 | 37 |
| 68 | Interaction of Ag, Rh, and Pd Atoms with MgO Thin Films Studied by the CO Probe Molecule. Journal of Physical Chemistry B, 2003, 107, 9377-9387. | 1.2 | 37 |
| 69 | Assessing the concept of structure sensitivity or insensitivity for sub-nanometer catalyst materials. Surface Science, 2016, 652, 7-19. | 0.8 | 36 |
| 70 | Conversion of NO to N2O on MgO Thin Films. Journal of Physical Chemistry B, 2002, 106, 7666-7673. | 1.2 | 34 |
| 71 | Turn-over frequencies of catalytic reactions on nanocatalysts measured by pulsed molecular beams and quantitative mass spectrometry. International Journal of Mass Spectrometry, 2003, 229, 99-106. | 0.7 | 33 |
| 72 | Chemical and Catalytic Properties of Size-Selected Free and Supported Clusters. Nanoscience and Technology, 2007, , 1-191. | 1.5 | 32 |

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|---|---|---|---|
| 73 | Catalytic Dehydration of 2-Propanol by Size-Selected (WO3)n and (MoO3)n Metal Oxide Clusters. Journal of Physical Chemistry C, 2014, 118, 29278-29286. | 1.5 | 32 |
| 74 | Controlling Ethylene Hydrogenation Reactivity on Pt<sub>13</sub> Clusters by Varying the Stoichiometry of the Amorphous Silica Support. Angewandte Chemie - International Edition, 2016, 55, 8953-8957. | 7.2 | 32 |
| 75 | CO Chemisorption on Monodispersed Platinum Clusters on SiO2: Detection of CO Chemisorption on Single Platinum Atoms. The Journal of Physical Chemistry, 1995, 99, 8730-8735. | 2.9 | 31 |
| 76 | Unraveling Side Reactions in the Photocatalytic Reduction of CO<sub>2</sub>: Evidence for Lightâ€Induced Deactivation Processes in Homogeneous Photocatalysis. ChemCatChem, 2015, 7, 690-697. | 1.8 | 30 |
| 77 | Chemistry on single atoms: key factors for the acetylene trimerization on MgO-supported Rh, Pd, and Ag atoms. Chemical Physics Letters, 2004, 399, 266-270. | 1.2 | 29 |
| 78 | Cavity ring-down spectrometer for measuring the optical response of supported size-selected clusters and surface defects in ultrahigh vacuum. Journal of Applied Physics, 2008, 104, 124313. | 1.1 | 29 |
| 79 | Ethene to Graphene: Surface Catalyzed Chemical Pathways, Intermediates, and Assembly. Journal of Physical Chemistry C, 2017, 121, 9413-9423. | 1.5 | 29 |
| 80 | Thermal Control of Selectivity in Photocatalytic, Water-Free Alcohol Photoreforming. ACS Catalysis, 2018, 8, 11076-11084. | 5.5 | 29 |
| 81 | Conical octopole ion guide: Design, focusing, and its application to the deposition of low energetic clusters. Review of Scientific Instruments, 2006, 77, 013302. | 0.6 | 28 |
| 82 | Dual pulsed-beam controlled mole fraction studies of the catalytic oxidation of CO on supported Pd nanocatalysts. Journal of Catalysis, 2008, 255, 234-240. | 3.1 | 27 |
| 83 | Nano-assembled Pd catalysts on MgO thin films. Thin Solid Films, 2001, 400, 37-42. | 0.8 | 25 |
| 84 | Cavity ring-down spectroscopy of metallic gold nanoparticles. European Physical Journal D, 2007, 45, 501-506. | 0.6 | 24 |
| 85 | Can Support Acidity Predict Sub-Nanometer Catalyst Activity Trends?. ACS Catalysis, 2017, 7, 6738-6744. | 5.5 | 24 |
| 86 | Vibrational coupling of CO adsorbed on monodispersed Ni11 clusters supported on magnesia. Chemical Physics Letters, 1997, 277, 527-531. | 1.2 | 23 |
| 87 | Why co-catalyst-loaded rutile facilitates photocatalytic hydrogen evolution. Physical Chemistry Chemical Physics, 2019, 21, 1491-1496. | 1.3 | 23 |
| 88 | Communication: Water activation and splitting by single metal-atom anions. Journal of Chemical Physics, 2018, 149, 221101. | 1.2 | 22 |
| 89 | Orientational changes of supported chiral 2,2â€²-dihydroxy-1,1â€²binaphthyl molecules. Physical Chemistry Chemical Physics, 2014, 16, 7299-7306. | 1.3 | 21 |
| 90 | Metalâ^'Metal Coordination Chemistry:Â Free Clusters of Group 11 Elements with SodiumÂ§. The Journal of Physical Chemistry, 1996, 100, 15033-15040. | 2.9 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Introducing catalysis in photocatalysis: What can be understood from surface science studies of alcohol photoreforming on TiO<sub>2</sub>. Journal of Physics Condensed Matter, 2019, 31, 473002. | 0.7 | 19 |
| 92 | Small Supported Plasmonic Silver Clusters. Small, 2014, 10, 2340-2344. | 5.2 | 18 |
| 93 | Ostwald ripening of supported Pt nanoclusters with initial size-selected distributions. Chemical Physics Letters, 2015, 631-632, 21-25. | 1.2 | 18 |
| 94 | Electrochemical stability of subnanometer Pt clusters. Electrochimica Acta, 2018, 277, 211-217. | 2.6 | 18 |
| 95 | Device-Compatible Chiroptical Surfaces through Self-Assembly of Enantiopure Allenes. Langmuir, 2018, 34, 4548-4553. | 1.6 | 18 |
| 96 | Chirality transfer from organic ligands to silver nanostructures via chiral polarisation of the electric field. Physical Chemistry Chemical Physics, 2018, 20, 20347-20351. | 1.3 | 18 |
| 97 | Electron stimulated desorption of NO from step sites on Pt(112): The role of chemisorption site geometry on the cross section. Journal of Chemical Physics, 1994, 100, 3925-3929. | 1.2 | 17 |
| 98 | Laser Mass Spectrometry with Circularly Polarized Light: Circular Dichroism of Cold Molecules in a Supersonic Gas Beam. ChemPhysChem, 2014, 15, 2762-2767. | 1.0 | 17 |
| 99 | Very small â€œwindow of opportunityâ€•for generating CO oxidation-active Au<sub>n</sub> on TiO<sub>2</sub>. Physical Chemistry Chemical Physics, 2014, 16, 6735-6742. | 1.3 | 17 |
| 100 | Functionalization of small platinum nanoparticles with amines and phosphines: Ligand binding modes and particle stability. Journal of Colloid and Interface Science, 2016, 478, 72-80. | 5.0 | 17 |
| 101 | Circular Dichroism and Isotropy â€“ Polarity Reversal of Ellipticity in Molecular Films of 1,1â€™â€Biâ€2â€Naphtol. ChemPhysChem, 2019, 20, 62-69. | 1.0 | 17 |
| 102 | A new cluster source for the generation of binary metal clusters. Review of Scientific Instruments, 1997, 68, 3718-3722. | 0.6 | 16 |
| 103 | Cluster and Periodic DFT Calculations of MgO/Pd(CO) and MgO/Pd(CO)2Surface Complexes. Journal of Physical Chemistry B, 2005, 109, 3416-3422. | 1.2 | 16 |
| 104 | Linear and Nonlinear Laser Spectroscopy of Surface Adsorbates with Sub-Monolayer Sensitivity. Journal of Physical Chemistry C, 2012, 116, 8642-8648. | 1.5 | 16 |
| 105 | Atomic Structure Control of Silica Thin Films on Pt(111). Journal of Physical Chemistry C, 2015, 119, 13665-13669. | 1.5 | 16 |
| 106 | Size-dependent gas phase reactivity of tantalum cluster cations with small alcohols. International Journal of Mass Spectrometry, 2015, 375, 9-13. | 0.7 | 16 |
| 107 | Effect of Thiol-Ligands on the Optical Response of Supported Silver Clusters. Journal of Physical Chemistry C, 2017, 121, 9331-9336. | 1.5 | 16 |
| 108 | Thermal Dehydrogenation of Methane Enhanced by Î¼-Oxo Ligands in Tantalum Cluster Cations [TaxO]+, x = 4, 5. Journal of Physical Chemistry C, 2018, 122, 25628-25637. | 1.5 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | NO electronic desorption processes from step sites on Pt(112): A comparison between photoâ€•and electronâ€stimulated desorption. Journal of Chemical Physics, 1994, 101, 4373-4378. | 1.2 | 15 |
| 110 | Chapter 1 Size effects in the chemistry of small clusters. Chemical Physics of Solid Surfaces, 2007, , 1-51. | 0.3 | 15 |
| 111 | Microkinetic simulations of the oxidation of CO on Pd based nanocatalysis: a model including co-dependent support interactions. Physical Chemistry Chemical Physics, 2008, 10, 5875. | 1.3 | 15 |
| 112 | Size-selected Metal Clusters: New Models for Catalysis with Atomic Precision. Journal of Applied Sciences, 2011, 11, 1164-1170. | 0.1 | 15 |
| 113 | Dual reverse spill-over: Microkinetic simulations of the CO oxidation on Pd nanocatalysts. Chemical Physics Letters, 2008, 461, 235-237. | 1.2 | 14 |
| 114 | Two reaction regimes in the oxidation of larger cationic tantalum clusters (Ta<sub>n</sub><sup>+</sup>, n = 13â€“40) under multi-collision conditions. Physical Chemistry Chemical Physics, 2016, 18, 8115-8119. | 1.3 | 14 |
| 115 | Plasmonic support-mediated activation of 1 nm platinum clusters for catalysis. Physical Chemistry Chemical Physics, 2017, 19, 30570-30577. | 1.3 | 14 |
| 116 | Reactions in the Photocatalytic Conversion of Tertiary Alcohols on Rutile TiO 2 (110). Angewandte Chemie - International Edition, 2019, 58, 14255-14259. | 7.2 | 14 |
| 117 | Cluster Catalysis with Lattice Oxygen: Tracing Oxygen Transport from a Magnetite (001) Support onto Small Pt Clusters. ACS Catalysis, 2021, 11, 9519-9529. | 5.5 | 14 |
| 118 | Physical Chemistry of Supported Clusters. Springer Series in Cluster Physics, 2000, , 237-273. | 0.3 | 13 |
| 119 | Micromechanical sensor for studying heats of surface reactions, adsorption, and cluster deposition processes. Review of Scientific Instruments, 2007, 78, 054101. | 0.6 | 12 |
| 120 | Using controlled ion extraction to combine a ring electrode trap with a reflectron time-of-flight mass spectrometer. International Journal of Mass Spectrometry, 2015, 387, 8-15. | 0.7 | 12 |
| 121 | Massâ€Selected Circular Dichroism of Supersonicâ€Beamâ€Cooled [D<sub>4</sub>]â€(R)â€(+)â€3â€Methylcyclopentanone. ChemPhysChem, 2016, 17, 4052-4058. | 1.0 | 12 |
| 122 | Doping-Dependent Adsorption and Photon-Stimulated Desorption of CO on GaN(0001). Journal of Physical Chemistry C, 2017, 121, 8473-8479. | 1.5 | 12 |
| 123 | Supported sub-nanometer Ta oxide clusters as model catalysts for the selective epoxidation of cyclooctene. New Journal of Chemistry, 2018, 42, 3035-3041. | 1.4 | 12 |
| 124 | Regulating Photochemical Selectivity with Temperature: Isobutanol on TiO<sub>2</sub>(110). Journal of the American Chemical Society, 2020, 142, 13072-13080. | 6.6 | 12 |
| 125 | CO<sub>2</sub>-Activation by size-selected tantalum cluster cations (Ta<sub>1â€“16</sub><sup>+</sup>): thermalization governing reaction selectivity. Physical Chemistry Chemical Physics, 2022, 24, 2623-2629. | 1.3 | 12 |
| 126 | Improving metastable impact electron spectroscopy and ultraviolet photoelectron spectroscopy signals by means of a modified time-of-flight separation. Review of Scientific Instruments, 2012, 83, 013114. | 0.6 | 11 |

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|---|---|---|---|
| 127 | Consecutive reactions of small, free tantalum clusters with dioxygen controlled by relaxation dynamics. Physical Chemistry Chemical Physics, 2017, 19, 5985-5993. | 1.3 | 11 |
| 128 | Highâ€Resolution Absorption and Electronic Circular Dichroism Spectra of (R)â€(+)â€1â€Phenylethanol. Confident Interpretation Based on the Synergy between Experiments and Computations. ChemPhysChem, 2018, 19, 715-723. | 1.0 | 11 |
| 129 | Influence of Local Defects on the Dynamics of Oâ€“H Bond Breaking and Formation on a Magnetite Surface. Journal of Physical Chemistry C, 2019, 123, 19742-19747. | 1.5 | 11 |
| 130 | Origin of Poisoning in Methanol Photoreforming on TiO<sub>2</sub>(110): The Importance of Thermal Back-Reaction Steps in Photocatalysis. ACS Catalysis, 2020, 10, 7747-7752. | 5.5 | 11 |
| 131 | The polymerization of acetylene on supported metal clusters. Low Temperature Physics, 2006, 32, 1097-1103. | 0.2 | 10 |
| 132 | Submonolayer sensitive adsorption study of trichloroethene on single crystal surfaces by means of MIES, UPS and TPD. Surface Science, 2013, 609, 18-29. | 0.8 | 10 |
| 133 | In-line reference measurement for surface second harmonic generation spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 541. | 0.9 | 10 |
| 134 | Suppression of Deactivation Processes in Photocatalytic Reduction of CO<sub>2</sub> Using Pulsed Light. ChemCatChem, 2016, 8, 2688-2695. | 1.8 | 10 |
| 135 | From oxidative degradation to direct oxidation: size regimes in the consecutive reaction of cationic tantalum clusters with dioxygen. Physical Chemistry Chemical Physics, 2017, 19, 10863-10869. | 1.3 | 10 |
| 136 | Chiroptical inversion for isolated vibronic transitions of supersonic beam-cooled molecules. Physical Chemistry Chemical Physics, 2017, 19, 21297-21303. | 1.3 | 10 |
| 137 | Photocatalytic selectivity switch to Câ€“C scission: Î±-methyl ejection oftert-butanol on TiO2(110). Physical Chemistry Chemical Physics, 2018, 20, 7105-7111. | 1.3 | 10 |
| 138 | Enantiospecific Desorption Triggered by Circularly Polarized Light. Angewandte Chemie - International Edition, 2019, 58, 15685-15689. | 7.2 | 10 |
| 139 | Ensemble Effects in the Temperatureâ€Dependent Photoluminescence of Silicon Nanocrystals. Chemistry - A European Journal, 2019, 25, 3061-3067. | 1.7 | 10 |
| 140 | In situ Secondâ€Harmonic Generation Circular Dichroism with Submonolayer Sensitivity. ChemPhysChem, 2019, 20, 134-141. | 1.0 | 10 |
| 141 | Carbide Dihydrides: Carbonaceous Species Identified in Ta<sub>4</sub><sup>+</sup>â€Mediated Methane Dehydrogenation. Angewandte Chemie - International Edition, 2020, 59, 23631-23635. | 7.2 | 10 |
| 142 | Metalâ€Metal Coordination Chemistry: Free Clusters of Group 12 Elements with Sodium. Israel Journal of Chemistry, 1990, 30, 147-155. | 1.0 | 9 |
| 143 | Monodispersed cluster-assembled materials. Materials Today, 2006, 9, 48-49. | 8.3 | 9 |
| 144 | Characterisation and cleaning of oxide support materials for cavity ringâ€down spectroscopy. Physica Status Solidi (B): Basic Research, 2010, 247, 1147-1151. | 0.7 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Same ligand â€“ Different binding: A way to control the binding of N-acetyl-cysteine (NAC) to Pt clusters. Journal of Colloid and Interface Science, 2014, 426, 264-269. | 5.0 | 9 |
| 146 | Electrodeposition of Pt - Rare Earth Alloys as ORR Catalysts for Fuel Cells. ECS Transactions, 2016, 75, 323-332. | 0.3 | 9 |
| 147 | H<sub>2</sub>/D<sub>2</sub> exchange reaction on mono-disperse Pt clusters: enhanced activity from minute O<sub>2</sub> concentrations. Catalysis Science and Technology, 2016, 6, 6893-6900. | 2.1 | 9 |
| 148 | Anhydrous Ethanol Dehydrogenation on Metalâ€“Organic Chemical Vapor Deposition Grown GaN(0001). Journal of Physical Chemistry C, 2017, 121, 16393-16398. | 1.5 | 9 |
| 149 | High stability of thiol-protected colloidal platinum nanoparticles with reduced ligand coverages in the hydrogenation of 3-hexyne. Catalysis Communications, 2017, 100, 85-88. | 1.6 | 9 |
| 150 | Towards Sizeâ€€ontrolled Deposition of Palladium Nanoparticles from Polyoxometalate Precursors: An Electrochemical Scanning Tunneling Microscopy Study. ChemElectroChem, 2021, 8, 1280-1288. | 1.7 | 9 |
| 151 | Room-Temperature Methane Activation Mediated by Free Tantalum Cluster Cations: Size-by-Size Reactivity. Journal of Physical Chemistry A, 2021, 125, 5289-5302. | 1.1 | 9 |
| 152 | Communication: In search of four-atom chiral metal clusters. Journal of Chemical Physics, 2013, 139, 111101. | 1.2 | 8 |
| 153 | Surface Oxidation of Supported, Size-Selected Silver Clusters. Journal of Cluster Science, 2017, 28, 3185-3192. | 1.7 | 8 |
| 154 | A Microscopy Approach to Investigating the Energetics of Small Supported Metal Clusters. Journal of Physical Chemistry C, 2018, 122, 22569-22576. | 1.5 | 8 |
| 155 | Thermal Câ€“O coupling reactions of Ta methylene clusters [Ta<sub>n</sub>CH<sub>2</sub>]<sup>+</sup> (n = 1, 4) with O<sub>2</sub>. Physical Chemistry Chemical Physics, 2019, 21, 20743-20749. | 1.3 | 8 |
| 156 | Size-dependent light emission from mass-selected clusters. European Physical Journal D, 1998, 2, 79-82. | 0.6 | 7 |
| 157 | Nickel clusters on TiO<sub>2</sub>(110): thermal chemistry and photocatalytic hydrogen evolution of methanol. Catalysis Science and Technology, 2020, 10, 7630-7639. | 2.1 | 7 |
| 158 | Thermal chemistry of Mn2(CO)10 deposited on MgO thin films. Surface Science, 1997, 377-379, 780-785. | 0.8 | 6 |
| 159 | Photochemistry of Mn2(CO)10 deposited on MgO thin films. Surface Science, 1998, 414, 261-270. | 0.8 | 6 |
| 160 | Optical and morphological properties of thin films of bis-pyrenyl ï€-conjugated molecules. Physical Chemistry Chemical Physics, 2016, 18, 5299-5305. | 1.3 | 6 |
| 161 | An efficient laser vaporization source for chemically modified metal clusters characterized by thermodynamics and kinetics. Review of Scientific Instruments, 2018, 89, 023104. | 0.6 | 6 |
| 162 | Nanotuning via Local Work Function Control: Ethylene Hydrogenation on Supported Pt Nanoclusters. ACS Catalysis, 2020, 10, 1799-1809. | 5.5 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Nanocatalysis. , 2005, , 551-588. | | 5 |
| 164 | Adsorption studies of trichloroethylene (TCE) on MgO(100)/Mo(100). Surface Science, 2010, 604, 2184-2189. | 0.8 | 5 |
| 165 | Chemistry of Methanol and Ethanol on Ozone-Prepared Î±-Fe<sub>2</sub>O<sub>3</sub>(0001). Journal of Physical Chemistry C, 2018, 122, 25404-25410. | 1.5 | 5 |
| 166 | Tunable Induced Circular Dichroism in Thin Organic Films. Journal of Physical Chemistry C, 2019, 123, 9255-9261. | 1.5 | 5 |
| 167 | The reactivity of gold and platinum metals in their cluster phase. , 1999, , 35-39. | | 5 |
| 168 | Isomer-Selective Detection of Aromatic Molecules in Temperature-Programmed Desorption for Model Catalysis. Analytical Chemistry, 2016, 88, 5392-5397. | 3.2 | 4 |
| 169 | Electrodeposition of Pt and Gd from the Same Ionic Liquid. ECS Transactions, 2018, 86, 475-487. | 0.3 | 4 |
| 170 | Controlling Hydrogenation Selectivity by Size: 3-Hexyne on Supported Pt Clusters. Journal of Physical Chemistry C, 2019, 123, 5518-5524. | 1.5 | 4 |
| 171 | Enantiospecific Desorption Triggered by Circularly Polarized Light. Angewandte Chemie, 2019, 131, 15832-15836. | 1.6 | 4 |
| 172 | Atomic Undercoordination in Ag Islands on Ru(0001) Grown via Size-Selected Cluster Deposition: An Experimental and Theoretical High-Resolution Core-Level Photoemission Study. Journal of Physical Chemistry C, 2021, 125, 9556-9563. | 1.5 | 4 |
| 173 | Ethylene hydrogenation on supported Pd nanoparticles: Influence of support on catalyst activity and deactivation. Journal of Catalysis, 2021, 397, 90-97. | 3.1 | 4 |
| 174 | Tunable induced circular dichroism in gels. Chirality, 2022, 34, 550-558. | 1.3 | 4 |
| 175 | Phosphine chemistry on molybdenum (110) and oxidized molybdenum (110). The Journal of Physical Chemistry, 1993, 97, 5074-5079. | 2.9 | 3 |
| 176 | Ultrathin magnesia films as support for molecules and metal clusters: Tuning reactivity by thickness and composition. Physica Status Solidi (B): Basic Research, 2010, 247, 1001-1015. | 0.7 | 3 |
| 177 | Surface Chemistry of 1- and 3-Hexyne on Pt(111): Desorption, Decomposition, and Dehydrocyclization. Journal of Physical Chemistry C, 2018, 122, 4428-4436. | 1.5 | 3 |
| 178 | Nonvolatile Memristive Switching in Self-assembled Nanoparticle Dimers. ACS Applied Electronic Materials, 2020, 2, 1099-1105. | 2.0 | 3 |
| 179 | Water-Assisted Electron-Induced Chemistry of the Nanofabrication Precursor Iron Pentacarbonyl. Journal of Physical Chemistry A, 2021, 125, 1919-1926. | 1.1 | 3 |
| 180 | Role of Point Defects in the Catalytic Activation of Pd Atoms Supported on the MgO Surface. Progress in Theoretical Chemistry and Physics, 2001, , 183-198. | 0.2 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Surface Oxidation of Supported, Size-Selected Silver Clusters. Journal of Cluster Science, 2017, 28, 2401-2408. | 1.7 | 2 |
| 182 | Ethanol surface chemistry on MBE-grown GaN(0001), GaOx/GaN(0001), and Ga2O3(2Â¯01). Journal of Chemical Physics, 2017, 147, 124704. | 1.2 | 2 |
| 183 | Hydrogenation of small hydrocarbons on MgO supported Pd nanoparticles: The A-E-model expanded. Journal of Chemical Physics, 2019, 151, 244304. | 1.2 | 2 |
| 184 | Carbidâ€Dihydride: kohlenstoffhaltige Spezies identifiziert in der Ta 4 + â€vermittelten Methandehydrierung. Angewandte Chemie, 2020, 132, 23838-23842. | 1.6 | 2 |
| 185 | Surface second harmonic generation spectra of titania coated Au NPs. Applied Surface Science, 2022, 581, 152381. | 3.1 | 2 |
| 186 | Structural, Electronic, and Impurity-Doping Effects in Nanoscale Chemistry: Supported Gold Nanoclusters.. ChemInform, 2003, 34, no. | 0.1 | 1 |
| 187 | Catalytic CO Oxidation by Free Au2-: Experiment and Theory.. ChemInform, 2003, 34, no. | 0.1 | 1 |
| 188 | Size-Selected Platinum Clusters as Electrocatalysts for the Oxygen Reduction Reaction. ECS Transactions, 2013, 50, 1333-1338. | 0.3 | 1 |
| 189 | Controlling Ethylene Hydrogenation Reactivity on Pt<sub>13</sub> Clusters by Varying the Stoichiometry of the Amorphous Silica Support. Angewandte Chemie, 2016, 128, 9099-9103. | 1.6 | 1 |
| 190 | Au(111)-supported Platinum Nanoparticles: Ripening and Activity. MRS Advances, 2017, 2, 439-444. | 0.5 | 1 |
| 191 | Reaktionswege in der photokatalytischen Umsetzung tertiÄrer Alkohole auf Rutilâ€TiO 2 (110). Angewandte Chemie, 2019, 131, 14393-14397. | 1.6 | 1 |
| 192 | Understanding laser desorption with circularly polarized light. Chirality, 2020, 32, 1341-1353. | 1.3 | 1 |
| 193 | Chemical reactivity of free and supported metal clusters. , 2003, , 153-192. | | 1 |
| 194 | Nanoassembled Model Catalysts: Changing Efficiency and Selectivity Atom-by-Atom. Materials Research Society Symposia Proceedings, 2000, 648, 1. | 0.1 | 0 |
| 195 | Low-Temperature Cluster Catalysis.. ChemInform, 2004, 35, no. | 0.1 | 0 |
| 196 | Fundamental Aspects of Catalysis on Supported Metal Clusters. ChemInform, 2004, 35, no. | 0.1 | 0 |
| 197 | Chemical Reactivity of Free and Supported Metal Clusters. ChemInform, 2005, 36, no. | 0.1 | 0 |
| 198 | Vom GroÃŸen aufs Kleine schlieÃŸen. Nachrichten Aus Der Chemie, 2016, 64, 955-959. | 0.0 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Innentitelbild: Enantiospecific Desorption Triggered by Circularly Polarized Light (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overlock 1 | 1.6 | 0 |
| 200 | Enantio-enrichment of Racemic Films Using Circularly Polarized Femtosecond Pulses. , 2019, , . | | 0 |